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August 31, 2015

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Environmental Cost Recovery Clause
FPSC Docket No. 150007-EI

Dear Ms. Stauffer:

Attached for filing in the above docket, on behalf of Tampa Electric Company, are the original of each of the following:

1. Petition of Tampa Electric Company.

2. Prepared Direct Testimony and Exhibit (PAR-3) of Penelope A. Rusk.

3. Prepared Direct Testimony of Paul L. Carpinone.

Thank you for your assistance in connection with this matter.

Sincerely,

James D. Beasley

JDB/pp
Attachment

cc: All Parties of Record (w/attachment)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Petition and Testimonies, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 31st day of August 2015 to the following:

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ATTORNEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost) Recovery Clause.) _______________________)	DOCKET NO. 150007-EI FILED: August 31, 2015

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 2016 through December 2016, and in support thereof, says:

Environmental Cost Recovery

1. Tampa Electric's final true-up amount for the January 2014 through December 2014 period is an under-recovery of $3,915,636. [See Exhibit No. ____ (PAR-1), Document No. 1 (Schedule 42-1A).]

2. Tampa Electric projects an estimated/actual true-up amount for the January 2015 through December 2015 period, which is based on actual data for the period January 1, 2015 through June 30, 2015 and revised estimates for the period July 1, 2015 through December 31, 2015, to be an over-recovery of $4,535,273. [See Exhibit No. ____ (PAR-2), Document No. 1 (Schedule 42-1E), from the filing dated July 31, 2015.]

3. The company's projected environmental cost recovery amount for the period January 1, 2016 through December 31, 2016, adjusted for taxes, is $80,693,997. When spread over projected kilowatt hour sales for the period January 1, 2016 through December 31, 2016, the average environmental cost recovery factor for the new period is 0.430 cents per KWH after application of the factors which adjust for variations in line losses. [See Exhibit No. ____ (PAR-3), Document No. 7 (Schedule 42-7P).

4. The accompanying Prepared Direct Testimony and Exhibits of Paul L. Carpinone and Penelope A. Rusk 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 Penelope A. Rusk, 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, 2016 through December 31, 2016.

DATED this 31st day of August 2015.

Respectfully submitted,

JAMES D. BEASLEY
J. JEFFRY WAHLEN
ASHLEY M. DANIELS
Ausley & McMullen
Post Office Box 391
Tallahassee, FL 32302
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 31st day of August 2015 to the following:

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ATTORNEY

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 150007-EI

ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2016 THROUGH DECEMBER 2016

TESTIMONY AND EXHIBIT

OF

PENELOPE A. RUSK

FILED: AUGUST 31, 2015

BEFORE THE PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

PENELOPE A. RUSK

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

A. My name is Penelope A. Rusk. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") in the position of Manager, Rates in the Regulatory Affairs Department.

Q. Please provide a brief outline of your educational background and business experience.

A. I received a Bachelor of Arts degree in Economics from the University of New Orleans in 1995, and I received a Master of Arts degree in Economics from the University of South Florida in Tampa in 1997. I joined Tampa Electric in 1997, as an Economist in the Load Forecasting Department. In 2000, I joined the Regulatory Affairs Department, where I have assumed positions of increasing responsibility in the areas of fuel and capacity cost recovery. I have accumulated 18 years of electric utility experience working in the areas of load forecasting, cost recovery clauses, as well as project management and rate setting activities for wholesale and retail rate cases. My duties include managing cost recovery for fuel and purchased power, interchange sales, capacity payments, and FPSC-approved environmental projects.

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 2016 through December 2016. The projected ECRC factors have been calculated based on the current allocation methodology. 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 2016.

Q. Have you prepared an exhibit that shows the determination of recoverable environmental costs for the period of January 2016 through December 2016?

A. Yes. Exhibit No. ___ (PAR-3), containing eight documents, was prepared under my direction and supervision. Document Nos. 1 through 8 contain Forms 42-1P through 42-8P, which show the calculation and summary of O&M and capital expenditures that support the development of the environmental cost recovery factors for 2016.

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. ____ (PAR-3), Document No. 7, on Form 42-7P. These annualized factors will apply for the period January through December 2016.

Q. What has Tampa Electric calculated as the net true-up to be applied in the period January 2016 through December 2016?

A. The net true-up applicable for this period is an over-recovery of $619,637. This consists of the final true-up under-recovery of $3,915,636 for the period of January 2014 through December 2014 and an estimated true-up over-recovery of $4,535,273 for the current period of January 2015 through December 2015. The detailed calculation supporting the estimated net true-up was provided on Forms 42-1E through 42-9E of Exhibit No. ___ (PAR-2) filed with the Commission on July 31, 2015.

Q. Did Tampa Electric include any new environmental compliance projects for ECRC cost recovery for the period from January 2016 through December 2016?

A. No, Tampa Electric is not including any new environmental compliance projects for ECRC cost recovery during 2016.

Q. What are the existing capital projects included in the calculation of the ECRC factors for 2016?

A. Tampa Electric proposes to include for ECRC recovery the 25 previously approved capital projects and their projected costs in the calculation of the ECRC factors for 2016. These projects are:

1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD") Integration
2) Big Bend Units 1 and 2 Flue Gas Conditioning
3) Big Bend Unit 4 Continuous Emissions Monitors

4) Big Bend Fuel Oil Tank 1 Upgrade
5) Big Bend Fuel Oil Tank 2 Upgrade
6) Big Bend Unit 1 Classifier Replacement
7) Big Bend Unit 2 Classifier Replacement
8) Big Bend Section 114 Mercury Testing Platform
9) Big Bend Units 1 and 2 FGD
10) Big Bend FGD Optimization and Utilization
11) Big Bend NO_x Emissions Reduction
12) Big Bend Particulate Matter ("PM") Minimization and Monitoring
13) Polk NO_x Emissions Reduction
14) Big Bend Unit 4 SOFA
15) Big Bend Unit 1 Pre-SCR
16) Big Bend Unit 2 Pre-SCR
17) Big Bend Unit 3 Pre-SCR
18) Big Bend Unit 1 SCR
19) Big Bend Unit 2 SCR
20) Big Bend Unit 3 SCR
21) Big Bend Unit 4 SCR
22) Big Bend FGD System Reliability
23) Mercury Air Toxics Standards ("MATS")
24) SO_2 Emission Allowances
25) Big Bend Gypsum Storage Facility

Some of these projects are described in more detail in the direct testimony of Tampa Electric Witness, Paul Carpinone.

Q. Have you prepared schedules showing the calculation of the recoverable capital project costs for 2016?

A. Yes. Form 42-3P contained in Exhibit No. ___ (PAR-3) summarizes the cost estimates projected for these projects. Form 42-4P, pages 1 through 25, provides the calculations of the costs, which result in recoverable jurisdictional capital costs of $54,181,029.

Q. What are the existing O&M projects included in the calculation of the ECRC factors for 2016?

A. Tampa Electric proposes to include for ECRC recovery the 23 previously approved O&M projects and their projected costs in the calculation of the ECRC factors for 2016. These projects are:

1) Big Bend Unit 3 FGD Integration
2) Big Bend Units 1 and 2 Flue Gas Conditioning
3) SO_2 Emissions Allowances
4) Big Bend Units 1 and 2 FGD
5) Big Bend PM Minimization and Monitoring

6) Big Bend NO_x Emissions Reduction

7) NPDES Annual Surveillance Fees

8) Gannon Thermal Discharge Study

9) Polk NO_x Emissions Reduction

10) Bayside SCR and Consumables

11) Big Bend Unit 4 SOFA

12) Big Bend Unit 1 Pre-SCR

13) Big Bend Unit 2 Pre-SCR

14) Big Bend Unit 3 Pre-SCR

15) Clean Water Act Section 316(b) Phase II Study

16) Arsenic Groundwater Standard Program

17) Big Bend Unit 1 SCR

18) Big Bend Unit 2 SCR

19) Big Bend Unit 3 SCR

20) Big Bend Unit 4 SCR

21) Mercury Air Toxics Standards

22) Greenhouse Gas Reduction Program

23) Big Bend Gypsum Storage Facility

Some of these projects are described in more detail in the direct testimony of Tampa Electric Witness, Paul Carpinone.

Q. Have you prepared a schedule showing the calculation of the recoverable O&M project costs for 2016?

A. Yes. Form 42-2P contained in Exhibit No. ___ (PAR-2) summarizes the recoverable jurisdictional O&M costs for these projects which total $27,074,547 for 2016.

Q. Did you prepare a schedule providing the description and progress reports for all environmental compliance activities and projects?

A. Yes. Project descriptions and progress reports, as well as the projected recoverable cost estimates, are provided in Form 42-5P, pages 1 through 31.

Q. What are the total projected jurisdictional costs for environmental compliance in the year 2016?

A. The total jurisdictional O&M and capital expenditures to be recovered through the ECRC are calculated on Form 42-1P. These expenditures total $81,255,576.

Q. How were environmental cost recovery factors calculated?

A. The environmental cost recovery factors were calculated as shown on Schedules 42-6P and 42-7P. The demand allocation factors were calculated by determining the percentage each rate class contributes to the monthly system peaks and then adjusted for losses for each rate class. The energy allocation factors were determined by calculating the percentage that each rate class contributes to total MWH sales and then adjusted for losses for each rate class. This information was based on applying historical rate class load research to the 2016 projected forecast of system demand and energy. Form 42-7P presents the calculation of the proposed ECRC factors by rate class.

Q. What are the ECRC billing factors for the period of January through December 2016 which Tampa Electric is seeking approval?

A. The computation of the billing factors is shown in Exhibit No. ___ (PAR-3) Document No. 7, Form 42-7P. In summary, the January through December 2016 proposed ECRC billing factors are as follows:

Rate Class	**Factor by Voltage Level(¢/kWh)**
RS Secondary	0.432
GS, TS Secondary	0.431

GSD, SBF	
Secondary	0.429
Primary	0.424
Transmission	0.420
IS	
Secondary	0.423
Primary	0.419
Transmission	0.414
LS1	0.427
Average Factor	0.430

Q. When does Tampa Electric propose to begin applying these environmental cost recovery factors?

A. The environmental cost recovery factors will be effective concurrent with the first billing cycle for January 2016.

Q. What capital structure, components and cost rates did Tampa Electric rely on to calculate the revenue requirement rate of return for January 2016 through December 2016?

A. Tampa Electric used 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 2016 through December 2016 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:

1. 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.

Q. Please summarize your testimony.

A. My testimony supports the approval of a final average environmental billing factor of 0.430 cents per kWh. This includes the projected capital and O&M revenue requirements of $81,255,576 associated with a total of 31 environmental projects and a net true-up over-recovery provision of $619,637. My testimony also explains that the projected environmental expenditures for 2016 are appropriate for recovery through the ECRC.

Q. Does this conclude your testimony?

A. Yes, it does.

INDEX

ENVIRONMENTAL COST RECOVERY COMMISSION FORMS

JANUARY 2016 THROUGH DECEMBER 2016

Form 42 - 1P

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

For the Projected Period
January 2016 to December 2016

Line	Energy ($)	Demand ($)	Total ($)
1. Total Jurisdictional Revenue Requirements for the projected period			
a. Projected O&M Activities (Form 42-2P, Lines 7, 8 & 9)	$26,055,047	$1,019,500	$27,074,547
b. Projected Capital Projects (Form 42-3P, Lines 7, 8 & 9)	54,077,003	104,026	54,181,029
c. Total Jurisdictional Revenue Requirements for the projected period (Lines 1a +	80,132,050	1,123,526	81,255,576
2. True-up for Estimated Over/(Under) Recovery for the current period January 2015 to December 2015 (Form 42-2E, Line 5 + 6 + 10)	4,503,083	32,190	4,535,273
3. Final True-up for the period January 2014 to December 2014 (Form 42-1A, Line 3)	(3,863,461)	(52,175)	(3,915,636)
4. Total Jurisdictional Amount to Be Recovered/(Refunded) in the projection period January 2016 to December 2016 (Line 1 - Line 2- Line 3)	79,492,428	1,143,511	80,635,939
5. Total Projected Jurisdictional Amount Adjusted for Taxes (Line 4 x Revenue Tax Multiplier)	$79,549,663	$1,144,334	$80,693,997

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

Form 42 - 2P

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 Classification Demand	Method of Classification Energy
1.	Description of O&M Activities															
	a. Big Bend Unit 3 Flue Gas Desulfurization Integration	$480,030	$501,150	$501,150	$480,030	$480,030	$480,030	$480,030	$480,030	$480,030	$480,030	$501,150	$501,150	$5,844,840		$5,844,840
	b. Big Bend Units 1 & 2 Flue Gas Conditioning	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	c. SO_2 Emissions Allowances	728	743	757	739	732	732	721	728	730	728	720	747	8,805		8,805
	d. Big Bend Units 1 & 2 FGD	793,367	827,938	706,938	894,438	892,081	707,724	814,581	863,010	885,724	770,224	817,724	821,653	9,795,402		9,795,402
	e. Big Bend PM Minimization and Monitoring	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	77,000	924,000		924,000
	f. Big Bend NO_x Emissions Reduction	10,000	10,000	10,000	15,000	15,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	130,000		130,000
	g. NPDES Annual Surveillance Fees	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	0	0	0	0	0	0	0	
	i. Polk NO_x Emissions Reduction	1,667	1,667	1,666	1,667	1,667	1,666	1,667	1,667	1,666	1,667	1,667	1,666	20,000		20,000
	j. Bayside SCR and Consumables	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	17,000	204,000		204,000
	k. Big Bend Unit 4 SOFA	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	42,000		42,000
	l. Big Bend Unit 1 Pre-SCR	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	42,000		42,000
	m. Big Bend Unit 2 Pre-SCR	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	42,000		42,000
	n. Big Bend Unit 3 Pre-SCR	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	3,500	42,000		42,000
	o. Clean Water Act Section 316(b) Phase II Study	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	80,000	960,000	960,000	
	p. Arsenic Groundwater Standard Program	0	0	6,000	0	0	6,500	0	0	6,000	0	0	6,500	25,000	25,000	
	q. Big Bend 1 SCR	171,000	171,000	175,000	140,000	171,000	173,000	178,000	178,000	178,000	170,000	170,000	150,000	2,025,000		2,025,000
	r. Big Bend 2 SCR	148,000	148,000	145,000	50,000	50,000	138,000	165,000	165,000	168,000	148,000	148,000	140,000	1,613,000		1,613,000
	s. Big Bend 3 SCR	168,000	170,000	170,000	168,000	168,000	168,000	168,000	173,000	173,000	170,000	168,000	168,000	2,032,000		2,032,000
	t. Big Bend 4 SCR	170,000	175,000	155,000	175,000	170,000	170,000	180,000	180,000	180,000	170,000	175,000	170,000	2,070,000		2,070,000
	u. Mercury Air Toxics Standards	36,000	11,000	13,500	33,500	14,250	13,500	31,750	11,000	11,750	31,000	11,750	11,000	230,000		230,000
	v. Greenhouse Gas Reduction Program	90,000	0	0	0	0	0	0	0	0	0	0	0	90,000		90,000
	w. Big Bend Gypsum Storage Facility	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	900,000		900,000
2.	Total of O&M Activities	2,366,292	2,279,498.00	2,148,011	2,221,374	2,225,760.00	2,132,152	2,292,749	2,325,435	2,357,900	2,214,649	2,267,011	2,243,716	27,074,547	$1,019,500	$26,055,047
3.	Recoverable Costs Allocated to Energy	2,251,792	2,199,498	2,062,011	2,141,374	2,145,760	2,045,652	2,212,749	2,245,435	2,271,900	2,134,649	2,187,011	2,157,216	26,055,047		
4.	Recoverable Costs Allocated to Demand	114,500	80,000	86,000	80,000	80,000	86,500	80,000	80,000	86,000	80,000	80,000	86,500	1,019,500		
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)	2,251,792	2,199,498	2,062,011	2,141,374	2,145,760	2,045,652	2,212,749	2,245,435	2,271,900	2,134,649	2,187,011	2,157,216	26,055,047		
8.	Jurisdictional Demand Recoverable Costs (B)	114,500	80,000	86,000	80,000	80,000	86,500	80,000	80,000	86,000	80,000	80,000	86,500	1,019,500		
9.	Total Jurisdictional Recoverable Costs for O&M Activities (Lines 7 + 8)	$2,366,292	$2,279,498	$2,148,011	$2,221,374	$2,225,760	$2,132,152	$2,292,749	$2,325,435	$2,357,900	$2,214,649	$2,267,011	$2,243,716	$27,074,547		

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

DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-2P
EXHIBIT NO. ____ (PAR-3) , DOCUMENT NO. 2

Form 42-3P

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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	End of Period Total	Method of Classification Demand	Method of Classification Energy
1.	a.	Big Bend Unit 3 Flue Gas Desulfurization Integration	$96,132	$95,917	$95,702	$95,487	$95,272	$95,057	$94,842	$94,627	$94,412	$94,197	$93,982	$93,767	$1,139,394		$1,139,394
	b.	Big Bend Units 1 and 2 Flue Gas Conditioning	25,276	25,155	25,034	24,912	24,791	24,670	24,549	24,428	24,307	24,186	24,065	23,944	295,317		295,317
	c.	Big Bend Unit 4 Continuous Emissions Monitors	5,148	5,130	5,113	5,096	5,079	5,061	5,044	5,027	5,009	4,992	4,974	4,958	60,631		60,631
	d.	Big Bend Fuel Oil Tank # 1 Upgrade	3,336	3,325	3,315	3,305	3,293	3,283	3,273	3,262	3,251	3,241	3,230	3,219	39,333	$39,333	
	e.	Big Bend Fuel Oil Tank # 2 Upgrade	5,487	5,469	5,452	5,435	5,417	5,399	5,383	5,365	5,347	5,330	5,313	5,296	64,693	64,693	
	f.	Big Bend Unit 1 Classifier Replacement	8,120	8,087	8,054	8,021	7,989	7,956	7,923	7,889	7,856	7,824	7,791	7,758	95,268		95,268
	g.	Big Bend Unit 2 Classifier Replacement	5,866	5,843	5,820	5,797	5,774	5,753	5,730	5,707	5,684	5,661	5,638	5,615	68,888		68,888
	h.	Big Bend Section 114 Mercury Testing Platform	860	857	856	853	851	848	847	845	842	841	838	836	10,174		10,174
	i.	Big Bend Units 1 & 2 FGD	604,472	603,214	601,257	599,300	597,344	595,387	593,431	591,475	589,518	587,561	585,605	583,649	7,132,213		7,132,213
	j.	Big Bend FGD Optimization and Utilization	150,385	150,045	149,706	149,366	149,026	148,687	148,347	148,008	147,668	147,329	146,989	146,649	1,782,205		1,782,205
	k.	Big Bend NO_x Emissions Reduction	49,956	49,880	49,803	49,727	49,650	49,574	49,498	49,422	49,345	49,268	49,192	49,115	594,430		594,430
	l.	Big Bend PM Minimization and Monitoring	194,311	193,825	193,339	192,854	192,368	191,882	191,397	190,911	190,425	189,939	189,453	188,967	2,299,671		2,299,671
	m.	Polk NO_x Emissions Reduction	11,392	11,359	11,326	11,293	11,260	11,227	11,193	11,160	11,127	11,094	11,061	11,027	134,519		134,519
	n.	Big Bend Unit 4 SOFA	19,896	19,848	19,800	19,752	19,705	19,656	19,608	19,560	19,512	19,465	19,416	19,368	235,586		235,586
	o.	Big Bend Unit 1 Pre-SCR	13,843	13,802	13,761	13,720	13,679	13,637	13,596	13,555	13,513	13,472	13,431	13,389	163,398		163,398
	p.	Big Bend Unit 2 Pre-SCR	13,144	13,107	13,072	13,035	12,998	12,962	12,925	12,888	12,852	12,815	12,778	12,742	155,318		155,318
	q.	Big Bend Unit 3 Pre-SCR	23,414	23,355	23,295	23,236	23,176	23,116	23,056	22,997	22,937	22,877	22,817	22,759	277,035		277,035
	r.	Big Bend Unit 1 SCR	790,251	787,931	785,612	783,293	780,974	778,654	776,336	774,017	771,697	769,379	767,059	764,741	9,329,944		9,329,944
	s.	Big Bend Unit 2 SCR	844,591	842,283	839,974	837,666	835,358	833,049	830,741	828,433	826,124	823,816	821,508	819,199	9,982,742		9,982,742
	t.	Big Bend Unit 3 SCR	684,776	682,957	681,175	681,231	681,436	681,800	680,354	682,373	688,239	688,114	687,099	685,582	8,205,136		8,205,136
	u.	Big Bend Unit 4 SCR	525,940	524,567	523,193	521,820	520,446	519,072	517,699	516,325	514,952	513,579	512,205	510,832	6,220,630		6,220,630
	v.	Big Bend FGD System Reliability	208,395	208,011	207,625	207,241	206,856	206,471	206,086	205,701	205,316	204,932	204,546	204,162	2,475,342		2,475,342
	w.	Mercury Air Toxics Standards	82,564	82,400	82,234	82,069	81,904	81,739	81,574	81,408	81,244	81,079	80,913	80,748	979,876		979,876
	x.	SO_2 Emissions Allowances (B)	(264)	(263)	(263)	(263)	(263)	(262)	(262)	(261)	(260)	(260)	(260)	(259)	(3,140)		(3,140)
	y.	Big Bend Gypsum Storage Facility	205,655	205,270	204,884	204,499	204,114	203,728	203,343	202,957	202,572	202,187	201,801	201,416	2,442,426		2,442,426
2.		Total Investment Projects - Recoverable Costs	4,572,946	4,561,374	4,549,139	4,538,745	4,528,497	4,518,406	4,506,513	4,498,079	4,493,489	4,482,918	4,471,444	4,459,479	54,181,029	$104,026	$54,077,003
3.		Recoverable Costs Allocated to Energy	4,564,123	4,552,580	4,540,372	4,530,005	4,519,787	4,509,724	4,497,857	4,489,452	4,484,891	4,474,347	4,462,901	4,450,964	54,077,003		54,077,003
4.		Recoverable Costs Allocated to Demand	8,823	8,794	8,767	8,740	8,710	8,682	8,656	8,627	8,598	8,571	8,543	8,515	104,026	104,026	
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 (C)	4,564,123	4,552,580	4,540,372	4,530,005	4,519,787	4,509,724	4,497,857	4,489,452	4,484,891	4,474,347	4,462,901	4,450,964	54,077,003		
8.		Jurisdictional Demand Recoverable Costs (D)	8,823	8,794	8,767	8,740	8,710	8,682	8,656	8,627	8,598	8,571	8,543	8,515	104,026		
9.		Total Jurisdictional Recoverable Costs for Investment Projects (Lines 7 + 8)	$4,572,946	$4,561,374	$4,549,139	$4,538,745	$4,528,497	$4,518,406	$4,506,513	$4,498,079	$4,493,489	$4,482,918	$4,471,444	$4,459,479	$54,181,029		

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

DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-3P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 3

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

Return on Capital Investments, Depreciation and Taxes
For Project: Big Bend Unit 3 Flue Gas Desulfurization Integration
(in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	$13,757,409	
3.	Less: Accumulated Depreciation	(4,748,247)	(4,776,908)	(4,805,569)	(4,834,230)	(4,862,891)	(4,891,552)	(4,920,213)	(4,948,874)	(4,977,535)	(5,006,196)	(5,034,857)	(5,063,518)	(5,092,179)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$9,009,162	8,980,501	8,951,840	8,923,179	8,894,518	8,865,857	8,837,196	8,808,535	8,779,874	8,751,213	8,722,552	8,693,891	8,665,230	
6.	Average Net Investment		8,994,832	8,966,171	8,937,510	8,908,849	8,880,188	8,851,527	8,822,866	8,794,205	8,765,544	8,736,883	8,708,222	8,679,561	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$52,876	$52,708	$52,539	$52,371	$52,202	$52,034	$51,865	$51,697	$51,528	$51,360	$51,191	$51,023	$623,394
	b. Debt Component Grossed Up For Taxes (C)		14,595	14,548	14,502	14,455	14,409	14,362	14,316	14,269	14,223	14,176	14,130	14,083	172,068
8.	Investment Expenses														
	a. Depreciation (D)		28,661	28,661	28,661	28,661	28,661	28,661	28,661	28,661	28,661	28,661	28,661	28,661	$343,932
	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 (Lines 7 + 8)		96,132	95,917	95,702	95,487	95,272	95,057	94,842	94,627	94,412	94,197	93,982	93,767	1,139,394
	a. Recoverable Costs Allocated to Energy		96,132	95,917	95,702	95,487	95,272	95,057	94,842	94,627	94,412	94,197	93,982	93,767	1,139,394
	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)		96,132	95,917	95,702	95,487	95,272	95,057	94,842	94,627	94,412	94,197	93,982	93,767	1,139,394
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)		$96,132	$95,917	$95,702	$95,487	$95,272	$95,057	$94,842	$94,627	$94,412	$94,197	$93,982	$93,767	$1,139,394

Notes:
(A) Applicable depreciable base for Big Bend; account 312.45
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 2.5%
(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 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	$5,017,734	
3.	Less: Accumulated Depreciation	(3,791,894)	(3,808,035)	(3,824,176)	(3,840,317)	(3,856,458)	(3,872,599)	(3,888,740)	(3,904,881)	(3,921,022)	(3,937,163)	(3,953,304)	(3,969,445)	(3,985,586)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$1,225,840	1,209,699	1,193,558	1,177,417	1,161,276	1,145,135	1,128,994	1,112,853	1,096,712	1,080,571	1,064,430	1,048,289	1,032,148	
6.	Average Net Investment		1,217,770	1,201,629	1,185,488	1,169,347	1,153,206	1,137,065	1,120,924	1,104,783	1,088,642	1,072,501	1,056,360	1,040,219	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$7,159	$7,064	$6,969	$6,874	$6,779	$6,684	$6,589	$6,494	$6,400	$6,305	$6,210	$6,115	$79,642
	b. Debt Component Grossed Up For Taxes (C)		1,976	1,950	1,924	1,897	1,871	1,845	1,819	1,793	1,766	1,740	1,714	1,688	21,983
8.	Investment Expenses														
	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	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 (Lines 7 + 8)		25,276	25,155	25,034	24,912	24,791	24,670	24,549	24,428	24,307	24,186	24,065	23,944	295,317
	a. Recoverable Costs Allocated to Energy		25,276	25,155	25,034	24,912	24,791	24,670	24,549	24,428	24,307	24,186	24,065	23,944	295,317
	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)		25,276	25,155	25,034	24,912	24,791	24,670	24,549	24,428	24,307	24,186	24,065	23,944	295,317
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)		$25,276	$25,155	$25,034	$24,912	$24,791	$24,670	$24,549	$24,428	$24,307	$24,186	$24,065	$23,944	$295,317

Notes:
(A) Applicable depreciable base for Big Bend; accounts 312.41 ($2,676,217) and 312.42 ($2,341,517)
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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

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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

Return on Capital Investments, Depreciation and Taxes
For Project: Big Bend Unit 4 Continuous Emissions Monitors
(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)	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	$866,211	
3.	Less: Accumulated Depreciation	(486,725)	(489,035)	(491,345)	(493,655)	(495,965)	(498,275)	(500,585)	(502,895)	(505,205)	(507,515)	(509,825)	(512,135)	(514,445)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$379,486	377,176	374,866	372,556	370,246	367,936	365,626	363,316	361,006	358,696	356,386	354,076	351,766	
6.	Average Net Investment		378,331	376,021	373,711	371,401	369,091	366,781	364,471	362,161	359,851	357,541	355,231	352,921	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$2,224	$2,210	$2,197	$2,183	$2,170	$2,156	$2,143	$2,129	$2,115	$2,102	$2,088	$2,075	$25,792
	b. Debt Component Grossed Up For Taxes (C)		614	610	606	603	599	595	591	588	584	580	576	573	7,119
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	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 (Lines 7 + 8)		5,148	5,130	5,113	5,096	5,079	5,061	5,044	5,027	5,009	4,992	4,974	4,958	60,631
	a. Recoverable Costs Allocated to Energy		5,148	5,130	5,113	5,096	5,079	5,061	5,044	5,027	5,009	4,992	4,974	4,958	60,631
	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)		5,148	5,130	5,113	5,096	5,079	5,061	5,044	5,027	5,009	4,992	4,974	4,958	60,631
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)		$5,148	$5,130	$5,113	$5,096	$5,079	$5,061	$5,044	$5,027	$5,009	$4,992	$4,974	$4,958	$60,631

Notes:
(A) Applicable depreciable base for Big Bend; account 315.44
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 3.2%
(E) Line 9a x Line 10
(F) Line 9b x Line 11

DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 4, PAGE 3 OF 25

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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 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)	$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	(240,112)	(241,522)	(242,932)	(244,342)	(245,752)	(247,162)	(248,572)	(249,982)	(251,392)	(252,802)	(254,212)	(255,622)	(257,032)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$257,466	256,056	254,646	253,236	251,826	250,416	249,006	247,596	246,186	244,776	243,366	241,956	240,546	
6.	Average Net Investment		256,761	255,351	253,941	252,531	251,121	249,711	248,301	246,891	245,481	244,071	242,661	241,251	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$1,509	$1,501	$1,493	$1,485	$1,476	$1,468	$1,460	$1,451	$1,443	$1,435	$1,426	$1,418	$17,565
	b. Debt Component Grossed Up For Taxes (C)		417	414	412	410	407	405	403	401	398	396	394	391	4,848
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 (Lines 7 + 8)		3,336	3,325	3,315	3,305	3,293	3,283	3,273	3,262	3,251	3,241	3,230	3,219	39,333
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		3,336	3,325	3,315	3,305	3,293	3,283	3,273	3,262	3,251	3,241	3,230	3,219	39,333
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)		0	0	0	0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (F)		3,336	3,325	3,315	3,305	3,293	3,283	3,273	3,262	3,251	3,241	3,230	3,219	39,333
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		$3,336	$3,325	$3,315	$3,305	$3,293	$3,283	$3,273	$3,262	$3,251	$3,241	$3,230	$3,219	$39,333

Notes:
(A) Applicable depreciable base for Big Bend; account 312.40
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 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 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	$818,401	
3.	Less: Accumulated Depreciation	(394,936)	(397,255)	(399,574)	(401,893)	(404,212)	(406,531)	(408,850)	(411,169)	(413,488)	(415,807)	(418,126)	(420,445)	(422,764)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$423,465	421,146	418,827	416,508	414,189	411,870	409,551	407,232	404,913	402,594	400,275	397,956	395,637	
6.	Average Net Investment		422,306	419,987	417,668	415,349	413,030	410,711	408,392	406,073	403,754	401,435	399,116	396,797	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$2,483	$2,469	$2,455	$2,442	$2,428	$2,414	$2,401	$2,387	$2,373	$2,360	$2,346	$2,333	$28,891
	b. Debt Component Grossed Up For Taxes (C)		685	681	678	674	670	666	663	659	655	651	648	644	7,974
8.	Investment Expenses														
	a. Depreciation (D)		$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$2,319	$27,828
	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 (Lines 7 + 8)		5,487	5,469	5,452	5,435	5,417	5,399	5,383	5,365	5,347	5,330	5,313	5,296	64,693
	a. Recoverable Costs Allocated to Energy		0	0	0	0	0	0	0	0	0	0	0	0	0
	b. Recoverable Costs Allocated to Demand		5,487	5,469	5,452	5,435	5,417	5,399	5,383	5,365	5,347	5,330	5,313	5,296	64,693
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)		0	0	0	0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (F)		5,487	5,469	5,452	5,435	5,417	5,399	5,383	5,365	5,347	5,330	5,313	5,296	64,693
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		$5,487	$5,469	$5,452	$5,435	$5,417	$5,399	$5,383	$5,365	$5,347	$5,330	$5,313	$5,296	$64,693

Notes:
(A) Applicable depreciable base for Big Bend; account 312.40
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 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 2016 to December 2016

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	(816,536)	(820,924)	(825,312)	(829,700)	(834,088)	(838,476)	(842,864)	(847,252)	(851,640)	(856,028)	(860,416)	(864,804)	(869,192)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$499,721	495,333	490,945	486,557	482,169	477,781	473,393	469,005	464,617	460,229	455,841	451,453	447,065	
6.	Average Net Investment		497,527	493,139	488,751	484,363	479,975	475,587	471,199	466,811	462,423	458,035	453,647	449,259	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$2,925	$2,899	$2,873	$2,847	$2,822	$2,796	$2,770	$2,744	$2,718	$2,693	$2,667	$2,641	$33,395
	b. Debt Component Grossed Up For Taxes (C)		807	800	793	786	779	772	765	757	750	743	736	729	9,217
8.	Investment Expenses														
	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	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 (Lines 7 + 8)		8,120	8,087	8,054	8,021	7,989	7,956	7,923	7,889	7,856	7,824	7,791	7,758	95,268
	a. Recoverable Costs Allocated to Energy		8,120	8,087	8,054	8,021	7,989	7,956	7,923	7,889	7,856	7,824	7,791	7,758	95,268
	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)		8,120	8,087	8,054	8,021	7,989	7,956	7,923	7,889	7,856	7,824	7,791	7,758	95,268
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)		$8,120	$8,087	$8,054	$8,021	$7,989	$7,956	$7,923	$7,889	$7,856	$7,824	$7,791	$7,758	$95,268

Notes:
(A) Applicable depreciable base for Big Bend; account 312.41
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 4.0%
(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 2016 to December 2016

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	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)	$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	(606,006)	(609,042)	(612,078)	(615,114)	(618,150)	(621,186)	(624,222)	(627,258)	(630,294)	(633,330)	(636,366)	(639,402)	(642,438)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$378,788	375,752	372,716	369,680	366,644	363,608	360,572	357,536	354,500	351,464	348,428	345,392	342,356	
6.	Average Net Investment		377,270	374,234	371,198	368,162	365,126	362,090	359,054	356,018	352,982	349,946	346,910	343,874	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$2,218	$2,200	$2,182	$2,164	$2,146	$2,129	$2,111	$2,093	$2,075	$2,057	$2,039	$2,021	$25,435
	b. Debt Component Grossed Up For Taxes (C)		612	607	602	597	592	588	583	578	573	568	563	558	7,021
8.	Investment Expenses														
	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	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		5,866	5,843	5,820	5,797	5,774	5,753	5,730	5,707	5,684	5,661	5,638	5,615	68,888
	a. Recoverable Costs Allocated to Energy		5,866	5,843	5,820	5,797	5,774	5,753	5,730	5,707	5,684	5,661	5,638	5,615	68,888
	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)		5,866	5,843	5,820	5,797	5,774	5,753	5,730	5,707	5,684	5,661	5,638	5,615	68,888
13.	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
15	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		$5,866	$5,843	$5,820	$5,797	$5,774	$5,753	$5,730	$5,707	$5,684	$5,661	$5,638	$5,615	$68,888

Notes:
(A) Applicable depreciable base for Big Bend; account 312.42
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 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 2016 to December 2016

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		$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)	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	$120,737	
3.	Less: Accumulated Depreciation	(44,899)	(45,191)	(45,483)	(45,775)	(46,067)	(46,359)	(46,651)	(46,943)	(47,235)	(47,527)	(47,819)	(48,111)	(48,403)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$75,838	75,546	75,254	74,962	74,670	74,378	74,086	73,794	73,502	73,210	72,918	72,626	72,334	
6.	Average Net Investment		75,692	75,400	75,108	74,816	74,524	74,232	73,940	73,648	73,356	73,064	72,772	72,480	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$445	$443	$442	$440	$438	$436	$435	$433	$431	$430	$428	$426	$5,227
	b. Debt Component Grossed Up For Taxes (C)		123	122	122	121	121	120	120	120	119	119	118	118	1,443
8.	Investment Expenses														
	a. Depreciation (D)		$292	$292	$292	$292	$292	$292	$292	$292	$292	$292	$292	$292	$3,504
	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 (Lines 7 + 8)		860	857	856	853	851	848	847	845	842	841	838	836	10,174
	a. Recoverable Costs Allocated to Energy		860	857	856	853	851	848	847	845	842	841	838	836	10,174
	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)		860	857	856	853	851	848	847	845	842	841	838	836	10,174
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)		$860	$857	$856	$853	$851	$848	$847	$845	$842	$841	$838	$836	$10,174

Notes:
(A) Applicable depreciable base for Big Bend; account 311.40
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 2.9%
(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 2016 to December 2016

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	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		107,274	0	0	0	0	0	0	0	0	0	0	0	107,274
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$94,740,488	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	$94,847,762	
3.	Less: Accumulated Depreciation	(48,813,133)	(49,073,669)	(49,334,500)	(49,595,331)	(49,856,162)	(50,116,993)	(50,377,824)	(50,638,655)	(50,899,486)	(51,160,317)	(51,421,148)	(51,681,979)	(51,942,810)	
4.	CWIP - Non-Interest Bearing	733	733	733	733	733	733	733	733	733	733	733	733	733	
5.	Net Investment (Lines 2 + 3 + 4)	$45,928,088	45,774,826	45,513,995	45,253,164	44,992,333	44,731,502	44,470,671	44,209,840	43,949,009	43,688,178	43,427,347	43,166,516	42,905,685	
6.	Average Net Investment		45,851,457	45,644,410	45,383,579	45,122,748	44,861,917	44,601,086	44,340,255	44,079,424	43,818,593	43,557,762	43,296,931	43,036,100	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$269,538	$268,321	$266,787	$265,254	$263,721	$262,187	$260,654	$259,121	$257,588	$256,054	$254,521	$252,988	$3,136,734
	b. Debt Component Grossed Up For Taxes (C)		74,398	74,062	73,639	73,215	72,792	72,369	71,946	71,523	71,099	70,676	70,253	69,830	865,802
8.	Investment Expenses														
	a. Depreciation (D)		$260,536	$260,831	$260,831	$260,831	$260,831	$260,831	$260,831	$260,831	$260,831	$260,831	$260,831	$260,831	$3,129,677
	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 (Lines 7 + 8)		604,472	603,214	601,257	599,300	597,344	595,387	593,431	591,475	589,518	587,561	585,605	583,649	7,132,213
	a. Recoverable Costs Allocated to Energy		604,472	603,214	601,257	599,300	597,344	595,387	593,431	591,475	589,518	587,561	585,605	583,649	7,132,213
	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)		604,472	603,214	601,257	599,300	597,344	595,387	593,431	591,475	589,518	587,561	585,605	583,649	7,132,213
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)		$604,472	$603,214	$601,257	$599,300	$597,344	$595,387	$593,431	$591,475	$589,518	$587,561	$585,605	$583,649	$7,132,213

Notes:

(A) Applicable depreciable base for Big Bend; account 312.46
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rates are 3.3%
(E) Line 9a x Line 10
(F) Line 9b x Line 11

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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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		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)	$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	(7,704,349)	(7,749,623)	(7,794,897)	(7,840,171)	(7,885,445)	(7,930,719)	(7,975,993)	(8,021,267)	(8,066,541)	(8,111,815)	(8,157,089)	(8,202,363)	(8,247,637)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$14,035,388	13,990,114	13,944,840	13,899,566	13,854,292	13,809,018	13,763,744	13,718,470	13,673,196	13,627,922	13,582,648	13,537,374	13,492,100	
6.	Average Net Investment		14,012,751	13,967,477	13,922,203	13,876,929	13,831,655	13,786,381	13,741,107	13,695,833	13,650,559	13,605,285	13,560,011	13,514,737	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$82,374	$82,108	$81,842	$81,576	$81,309	$81,043	$80,777	$80,511	$80,245	$79,979	$79,713	$79,446	$970,923
	b. Debt Component Grossed Up For Taxes (C)		22,737	22,663	22,590	22,516	22,443	22,370	22,296	22,223	22,149	22,076	22,002	21,929	267,994
8.	Investment Expenses														
	a. 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	0	0	0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		150,385	150,045	149,706	149,366	149,026	148,687	148,347	148,008	147,668	147,329	146,989	146,649	1,782,205
	a. Recoverable Costs Allocated to Energy		150,385	150,045	149,706	149,366	149,026	148,687	148,347	148,008	147,668	147,329	146,989	146,649	1,782,205
	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)		150,385	150,045	149,706	149,366	149,026	148,687	148,347	148,008	147,668	147,329	146,989	146,649	1,782,205
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)		$150,385	$150,045	$149,706	$149,366	$149,026	$148,687	$148,347	$148,008	$147,668	$147,329	$146,989	$146,649	$1,782,205

Notes:
(A) Applicable depreciable base for Big Bend; accounts 312.45 ($21,699,919)and 311.45 ($39,818)
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rates are 2.5% and 2.0%
(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 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$3,190,852	$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	2,116,395	2,106,211	2,096,027	2,085,843	2,075,659	2,065,475	2,055,291	2,045,107	2,034,923	2,024,739	2,014,555	2,004,371	1,994,187	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$5,307,247	5,297,063	5,286,879	5,276,695	5,266,511	5,256,327	5,246,143	5,235,959	5,225,775	5,215,591	5,205,407	5,195,223	5,185,039	
6.	Average Net Investment		5,302,155	5,291,971	5,281,787	5,271,603	5,261,419	5,251,235	5,241,051	5,230,867	5,220,683	5,210,499	5,200,315	5,190,131	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$31,169	$31,109	$31,049	$30,989	$30,929	$30,869	$30,810	$30,750	$30,690	$30,630	$30,570	$30,510	$370,074
	b. Debt Component Grossed Up For Taxes (C)		8,603	8,587	8,570	8,554	8,537	8,521	8,504	8,488	8,471	8,454	8,438	8,421	102,148
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	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		49,956	49,880	49,803	49,727	49,650	49,574	49,498	49,422	49,345	49,268	49,192	49,115	594,430
	a. Recoverable Costs Allocated to Energy		49,956	49,880	49,803	49,727	49,650	49,574	49,498	49,422	49,345	49,268	49,192	49,115	594,430
	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)		49,956	49,880	49,803	49,727	49,650	49,574	49,498	49,422	49,345	49,268	49,192	49,115	594,430
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)		$49,956	$49,880	$49,803	$49,727	$49,650	$49,574	$49,498	$49,422	$49,345	$49,268	$49,192	$49,115	$594,430

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 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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		$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)	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	$20,924,650	
3.	Less: Accumulated Depreciation	(3,621,563)	(3,686,325)	(3,751,087)	(3,815,849)	(3,880,611)	(3,945,373)	(4,010,135)	(4,074,897)	(4,139,659)	(4,204,421)	(4,269,183)	(4,333,945)	(4,398,707)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$17,303,087	17,238,325	17,173,563	17,108,801	17,044,039	16,979,277	16,914,515	16,849,753	16,784,991	16,720,229	16,655,467	16,590,705	16,525,943	
6.	Average Net Investment		17,270,706	17,205,944	17,141,182	17,076,420	17,011,658	16,946,896	16,882,134	16,817,372	16,752,610	16,687,848	16,623,086	16,558,324	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$101,526	$101,145	$100,764	$100,384	$100,003	$99,622	$99,242	$98,861	$98,480	$98,100	$97,719	$97,338	$1,193,184
	b. Debt Component Grossed Up For Taxes (C)		28,023	27,918	27,813	27,708	27,603	27,498	27,393	27,288	27,183	27,077	26,972	26,867	329,343
8.	Investment Expenses														
	a. Depreciation (D)		$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$64,762	$777,144
	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 (Lines 7 + 8)		194,311	193,825	193,339	192,854	192,368	191,882	191,397	190,911	190,425	189,939	189,453	188,967	2,299,671
	a. Recoverable Costs Allocated to Energy		194,311	193,825	193,339	192,854	192,368	191,882	191,397	190,911	190,425	189,939	189,453	188,967	2,299,671
	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)		194,311	193,825	193,339	192,854	192,368	191,882	191,397	190,911	190,425	189,939	189,453	188,967	2,299,671
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)		$194,311	$193,825	$193,339	$192,854	$192,368	$191,882	$191,397	$190,911	$190,425	$189,939	$189,453	$188,967	$2,299,671

Notes:
(A) Applicable depreciable base for Big Bend; accounts 312.41 ($6,998,365), 312.42 ($5,153,072), 312.43 ($7,875,560), 315.41 ($17,504), 315.44 ($351,594), and 315.43 ($528,554)
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rates are 4.0%, 3.7%, 3.5%, 3.5%, 3.2%, 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)
Calculation of the Projected Period Amount
January 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	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)	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	$1,561,473	
3.	Less: Accumulated Depreciation	(630,234)	(634,658)	(639,082)	(643,506)	(647,930)	(652,354)	(656,778)	(661,202)	(665,626)	(670,050)	(674,474)	(678,898)	(683,322)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$931,239	926,815	922,391	917,967	913,543	909,119	904,695	900,271	895,847	891,423	886,999	882,575	878,151	
6.	Average Net Investment		929,027	924,603	920,179	915,755	911,331	906,907	902,483	898,059	893,635	889,211	884,787	880,363	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$5,461	$5,435	$5,409	$5,383	$5,357	$5,331	$5,305	$5,279	$5,253	$5,227	$5,201	$5,175	$63,816
	b. Debt Component Grossed Up For Taxes (C)		1,507	1,500	1,493	1,486	1,479	1,472	1,464	1,457	1,450	1,443	1,436	1,428	17,615
8.	Investment Expenses														
	a. Depreciation (D)		$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$4,424	$53,088
	b. Amortization		0	0	0	0	0	0	0	0	0	0	0	0	0
	c. Dismantlement		0	0	0	0	0	0	0	0	0	0	0	0	0
	d. Property Taxes		0	0	0	0	0	0	0	0	0	0	0	0	0
	e. Other		0	0	0	0	0	0	0	0	0	0	0	0	0
9.	Total System Recoverable Expenses (Lines 7 + 8)		11,392	11,359	11,326	11,293	11,260	11,227	11,193	11,160	11,127	11,094	11,061	11,027	134,519
	a. Recoverable Costs Allocated to Energy		11,392	11,359	11,326	11,293	11,260	11,227	11,193	11,160	11,127	11,094	11,061	11,027	134,519
	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)		11,392	11,359	11,326	11,293	11,260	11,227	11,193	11,160	11,127	11,094	11,061	11,027	134,519
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)		$11,392	$11,359	$11,326	$11,293	$11,260	$11,227	$11,193	$11,160	$11,127	$11,094	$11,061	$11,027	$134,519

<u>Notes:</u>
(A) Applicable depreciable base for Polk; account 342.81
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 4, PAGE 13 OF 25

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	a. Expenditures/Additions		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	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	(755,906)	(762,303)	(768,700)	(775,097)	(781,494)	(787,891)	(794,288)	(800,685)	(807,082)	(813,479)	(819,876)	(826,273)	(832,670)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$1,802,824	1,796,427	1,790,030	1,783,633	1,777,236	1,770,839	1,764,442	1,758,045	1,751,648	1,745,251	1,738,854	1,732,457	1,726,060	
6.	Average Net Investment		1,799,626	1,793,229	1,786,832	1,780,435	1,774,038	1,767,641	1,761,244	1,754,847	1,748,450	1,742,053	1,735,656	1,729,259	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$10,579	$10,541	$10,504	$10,466	$10,429	$10,391	$10,353	$10,316	$10,278	$10,241	$10,203	$10,165	$124,466
	b. Debt Component Grossed Up For Taxes (C)		2,920	2,910	2,899	2,889	2,879	2,868	2,858	2,847	2,837	2,827	2,816	2,806	34,356
8.	Investment Expenses														
	a. Depreciation (D)		$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
	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 (Lines 7 + 8)		19,896	19,848	19,800	19,752	19,705	19,656	19,608	19,560	19,512	19,465	19,416	19,368	235,586
	a. Recoverable Costs Allocated to Energy		19,896	19,848	19,800	19,752	19,705	19,656	19,608	19,560	19,512	19,465	19,416	19,368	235,586
	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)		19,896	19,848	19,800	19,752	19,705	19,656	19,608	19,560	19,512	19,465	19,416	19,368	235,586
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)		$19,896	$19,848	$19,800	$19,752	$19,705	$19,656	$19,608	$19,560	$19,512	$19,465	$19,416	$19,368	$235,586

Notes:

(A) Applicable depreciable base for Big Bend; account 312.44
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 3.0%
(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 2016 to December 2016

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	
	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	(533,701)	(539,198)	(544,695)	(550,192)	(555,689)	(561,186)	(566,683)	(572,180)	(577,677)	(583,174)	(588,671)	(594,168)	(599,665)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$1,115,420	1,109,923	1,104,426	1,098,929	1,093,432	1,087,935	1,082,438	1,076,941	1,071,444	1,065,947	1,060,450	1,054,953	1,049,456	
6.	Average Net Investment		1,112,672	1,107,175	1,101,678	1,096,181	1,090,684	1,085,187	1,079,690	1,074,193	1,068,696	1,063,199	1,057,702	1,052,205	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$6,541	$6,509	$6,476	$6,444	$6,412	$6,379	$6,347	$6,315	$6,282	$6,250	$6,218	$6,185	$76,358
	b. Debt Component Grossed Up For Taxes (C)		1,805	1,796	1,788	1,779	1,770	1,761	1,752	1,743	1,734	1,725	1,716	1,707	21,076
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	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 (Lines 7 + 8)		13,843	13,802	13,761	13,720	13,679	13,637	13,596	13,555	13,513	13,472	13,431	13,389	163,398
	a. Recoverable Costs Allocated to Energy		13,843	13,802	13,761	13,720	13,679	13,637	13,596	13,555	13,513	13,472	13,431	13,389	163,398
	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)		13,843	13,802	13,761	13,720	13,679	13,637	13,596	13,555	13,513	13,472	13,431	13,389	163,398
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)		$13,843	$13,802	$13,761	$13,720	$13,679	$13,637	$13,596	$13,555	$13,513	$13,472	$13,431	$13,389	$163,398

Notes:

(A) Applicable depreciable base for Big Bend; account 312.41
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 4.0%
(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 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	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)	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	$1,581,887	
3.	Less: Accumulated Depreciation	(477,272)	(482,149)	(487,026)	(491,903)	(496,780)	(501,657)	(506,534)	(511,411)	(516,288)	(521,165)	(526,042)	(530,919)	(535,796)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$1,104,615	1,099,738	1,094,861	1,089,984	1,085,107	1,080,230	1,075,353	1,070,476	1,065,599	1,060,722	1,055,845	1,050,968	1,046,091	
6.	Average Net Investment		1,102,177	1,097,300	1,092,423	1,087,546	1,082,669	1,077,792	1,072,915	1,068,038	1,063,161	1,058,284	1,053,407	1,048,530	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$6,479	$6,450	$6,422	$6,393	$6,364	$6,336	$6,307	$6,278	$6,250	$6,221	$6,192	$6,164	$75,856
	b. Debt Component Grossed Up For Taxes (C)		1,788	1,780	1,773	1,765	1,757	1,749	1,741	1,733	1,725	1,717	1,709	1,701	20,938
8.	Investment Expenses														
	a. Depreciation (D)		$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$4,877	$58,524
	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 (Lines 7 + 8)		13,144	13,107	13,072	13,035	12,998	12,962	12,925	12,888	12,852	12,815	12,778	12,742	155,318
	a. Recoverable Costs Allocated to Energy		13,144	13,107	13,072	13,035	12,998	12,962	12,925	12,888	12,852	12,815	12,778	12,742	155,318
	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)		13,144	13,107	13,072	13,035	12,998	12,962	12,925	12,888	12,852	12,815	12,778	12,742	155,318
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)		$13,144	$13,107	$13,072	$13,035	$12,998	$12,962	$12,925	$12,888	$12,852	$12,815	$12,778	$12,742	$155,318

Notes:
(A) Applicable depreciable base for Big Bend; account 312.42
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
	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)	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	$2,706,507	
3.	Less: Accumulated Depreciation	(641,330)	(649,283)	(657,236)	(665,189)	(673,142)	(681,095)	(689,048)	(697,001)	(704,954)	(712,907)	(720,860)	(728,813)	(736,766)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$2,065,177	2,057,224	2,049,271	2,041,318	2,033,365	2,025,412	2,017,459	2,009,506	2,001,553	1,993,600	1,985,647	1,977,694	1,969,741	
6.	Average Net Investment		2,061,201	2,053,248	2,045,295	2,037,342	2,029,389	2,021,436	2,013,483	2,005,530	1,997,577	1,989,624	1,981,671	1,973,718	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$12,117	$12,070	$12,023	$11,977	$11,930	$11,883	$11,836	$11,790	$11,743	$11,696	$11,649	$11,603	$142,317
	b. Debt Component Grossed Up For Taxes (C)		3,344	3,332	3,319	3,306	3,293	3,280	3,267	3,254	3,241	3,228	3,215	3,203	39,282
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	$95,436
	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 (Lines 7 + 8)		23,414	23,355	23,295	23,236	23,176	23,116	23,056	22,997	22,937	22,877	22,817	22,759	277,035
	a. Recoverable Costs Allocated to Energy		23,414	23,355	23,295	23,236	23,176	23,116	23,056	22,997	22,937	22,877	22,817	22,759	277,035
	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)		23,414	23,355	23,295	23,236	23,176	23,116	23,056	22,997	22,937	22,877	22,817	22,759	277,035
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)		$23,414	$23,355	$23,295	$23,236	$23,176	$23,116	$23,056	$22,997	$22,937	$22,877	$22,817	$22,759	$277,035

Notes:
(A) Applicable depreciable base for Big Bend; account 312.43 ($1,995,677) and 315.43 ($710,830)
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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

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Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

Return on Capital Investments, Depreciation and Taxes
For Project: Big Bend Unit 1 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	
	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)	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	$85,719,423	
3.	Less: Accumulated Depreciation	(21,429,656)	(21,738,823)	(22,047,990)	(22,357,157)	(22,666,324)	(22,975,491)	(23,284,658)	(23,593,825)	(23,902,992)	(24,212,159)	(24,521,326)	(24,830,493)	(25,139,660)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$64,289,767	63,980,600	63,671,433	63,362,266	63,053,099	62,743,932	62,434,765	62,125,598	61,816,431	61,507,264	61,198,097	60,888,930	60,579,763	
6.	Average Net Investment		64,135,184	63,826,017	63,516,850	63,207,683	62,898,516	62,589,349	62,280,182	61,971,015	61,661,848	61,352,681	61,043,514	60,734,347	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$377,019	$375,201	$373,384	$371,566	$369,749	$367,931	$366,114	$364,297	$362,479	$360,662	$358,844	$357,027	$4,404,273
	b. Debt Component Grossed Up For Taxes (C)		104,065	103,563	103,061	102,560	102,058	101,556	101,055	100,553	100,051	99,550	99,048	98,547	1,215,667
8.	Investment Expenses														
	a. Depreciation (D)		$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$309,167	$3,710,004
	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 (Lines 7 + 8)		790,251	787,931	785,612	783,293	780,974	778,654	776,336	774,017	771,697	769,379	767,059	764,741	9,329,944
	a. Recoverable Costs Allocated to Energy		790,251	787,931	785,612	783,293	780,974	778,654	776,336	774,017	771,697	769,379	767,059	764,741	9,329,944
	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)		790,251	787,931	785,612	783,293	780,974	778,654	776,336	774,017	771,697	769,379	767,059	764,741	9,329,944
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)		$790,251	$787,931	$785,612	$783,293	$780,974	$778,654	$776,336	$774,017	$771,697	$769,379	$767,059	$764,741	$9,329,944

Notes:
(A) Applicable depreciable base for Big Bend; account 311.51 ($22,278,982), 312.51 ($48,529,993), 315.51 ($14,063,245), and 316.51 ($847,203).
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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

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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 4,PAGE 18 OF 25

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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		$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)	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	$95,145,874	
3.	Less: Accumulated Depreciation	(23,421,656)	(23,729,392)	(24,037,128)	(24,344,864)	(24,652,600)	(24,960,336)	(25,268,072)	(25,575,808)	(25,883,544)	(26,191,280)	(26,499,016)	(26,806,752)	(27,114,488)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$71,724,218	71,416,482	71,108,746	70,801,010	70,493,274	70,185,538	69,877,802	69,570,066	69,262,330	68,954,594	68,646,858	68,339,122	68,031,386	
6.	Average Net Investment		71,570,350	71,262,614	70,954,878	70,647,142	70,339,406	70,031,670	69,723,934	69,416,198	69,108,462	68,800,726	68,492,990	68,185,254	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$420,726	$418,917	$417,108	$415,299	$413,490	$411,681	$409,872	$408,063	$406,254	$404,445	$402,636	$400,827	$4,929,318
	b. Debt Component Grossed Up For Taxes (C)		116,129	115,630	115,130	114,631	114,132	113,632	113,133	112,634	112,134	111,635	111,136	110,636	1,360,592
8.	Investment Expenses														
	a. Depreciation (D)		$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$307,736	$3,692,832
	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 (Lines 7 + 8)		844,591	842,283	839,974	837,666	835,358	833,049	830,741	828,433	826,124	823,816	821,508	819,199	9,982,742
	a. Recoverable Costs Allocated to Energy		844,591	842,283	839,974	837,666	835,358	833,049	830,741	828,433	826,124	823,816	821,508	819,199	9,982,742
	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)		844,591	842,283	839,974	837,666	835,358	833,049	830,741	828,433	826,124	823,816	821,508	819,199	9,982,742
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)		$844,591	$842,283	$839,974	$837,666	$835,358	$833,049	$830,741	$828,433	$826,124	$823,816	$821,508	$819,199	$9,982,742

Notes:
(A) Applicable depreciable base for Big Bend; account 311.52 ($25,208,869), 312.52 ($53,063,962), 315.52 ($15,914,427), and 316.52 ($958,616).
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 4,PAGE 19 OF 25

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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	$10,000	$10,000	$500,000	$50,000	$50,000	$20,000	$1,000,000	$200,000	$100,000	$50,000	$10,000	$2,000,000
	b. Clearings to Plant		0	0	0	0	570,000	50,000	20,000	1,000,000	200,000	100,000	50,000	10,000	2,000,000
	c. Retirements		0	0	0	0	0	0	0	0	0	0	0	0	
	d. Other		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$80,369,887	$80,369,887	$80,369,887	$80,369,887	$80,369,887	$80,939,887	$80,989,887	$81,009,887	$82,009,887	$82,209,887	$82,309,887	$82,359,887	$82,369,887	
3.	Less: Accumulated Depreciation	(21,956,533)	(22,204,074)	(22,451,615)	(22,699,156)	(22,946,697)	(23,194,238)	(23,443,631)	(23,693,187)	(23,942,808)	(24,195,679)	(24,449,200)	(24,703,046)	(24,957,054)	
4.	CWIP - Non-Interest Bearing	-	-	10,000	20,000	520,000	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$58,413,354	58,165,813	57,928,272	57,690,731	57,943,190	57,745,649	57,546,256	57,316,700	58,067,079	58,014,208	57,860,687	57,656,841	57,412,833	
6.	Average Net Investment		58,289,583	58,047,042	57,809,501	57,816,960	57,844,419	57,645,952	57,431,478	57,691,889	58,040,643	57,937,447	57,758,764	57,534,837	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$342,655	$341,230	$339,833	$339,877	$340,038	$338,872	$337,611	$339,142	$341,192	$340,585	$339,535	$338,219	$4,078,789
	b. Debt Component Grossed Up For Taxes (C)		94,580	94,186	93,801	93,813	93,857	93,535	93,187	93,610	94,176	94,008	93,718	93,355	1,125,826
8.	Investment Expenses														
	a. Depreciation (D)		$247,541	$247,541	$247,541	$247,541	$247,541	$249,393	$249,556	$249,621	$252,871	$253,521	$253,846	$254,008	$3,000,521
	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 (Lines 7 + 8)		684,776	682,957	681,175	681,231	681,436	681,800	680,354	682,373	688,239	688,114	687,099	685,582	8,205,136
	a. Recoverable Costs Allocated to Energy		684,776	682,957	681,175	681,231	681,436	681,800	680,354	682,373	688,239	688,114	687,099	685,582	8,205,136
	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)		684,776	682,957	681,175	681,231	681,436	681,800	680,354	682,373	688,239	688,114	687,099	685,582	8,205,136
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)		$684,776	$682,957	$681,175	$681,231	$681,436	$681,800	$680,354	$682,373	$688,239	$688,114	$687,099	$685,582	$8,205,136

Notes:
(A) Applicable depreciable base for Big Bend; account 311.53 ($21,689,422), 312.53 ($44,164,828), 315.53 ($13,690,954), and 316.53 ($824,684).
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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

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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 4,PAGE 20 OF 25

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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		$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)	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	$63,828,803	
3.	Less: Accumulated Depreciation	(18,032,411)	(18,215,515)	(18,398,619)	(18,581,723)	(18,764,827)	(18,947,931)	(19,131,035)	(19,314,139)	(19,497,243)	(19,680,347)	(19,863,451)	(20,046,555)	(20,229,659)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$45,796,392	45,613,288	45,430,184	45,247,080	45,063,976	44,880,872	44,697,768	44,514,664	44,331,560	44,148,456	43,965,352	43,782,248	43,599,144	
6.	Average Net Investment		45,704,840	45,521,736	45,338,632	45,155,528	44,972,424	44,789,320	44,606,216	44,423,112	44,240,008	44,056,904	43,873,800	43,690,696	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$268,676	$267,600	$266,523	$265,447	$264,370	$263,294	$262,218	$261,141	$260,065	$258,989	$257,912	$256,836	$3,153,071
	b. Debt Component Grossed Up For Taxes (C)		74,160	73,863	73,566	73,269	72,972	72,674	72,377	72,080	71,783	71,486	71,189	70,892	870,311
8.	Investment Expenses														
	a. Depreciation (D)		$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$183,104	$2,197,248
	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 (Lines 7 + 8)		525,940	524,567	523,193	521,820	520,446	519,072	517,699	516,325	514,952	513,579	512,205	510,832	6,220,630
	a. Recoverable Costs Allocated to Energy		525,940	524,567	523,193	521,820	520,446	519,072	517,699	516,325	514,952	513,579	512,205	510,832	6,220,630
	b. Recoverable Costs Allocated to Demand		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)		525,940	524,567	523,193	521,820	520,446	519,072	517,699	516,325	514,952	513,579	512,205	510,832	6,220,630
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)		$525,940	$524,567	$523,193	$521,820	$520,446	$519,072	$517,699	$516,325	$514,952	$513,579	$512,205	$510,832	$6,220,630

Notes:
(A) Applicable depreciable base for Big Bend; account 311.54 ($16,857,250), 312.54 ($35,086,425), 315.54 ($11,197,193), and 316.54 ($687,934).
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% 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

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

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	
	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)	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	$24,336,707	
3.	Less: Accumulated Depreciation	(3,369,246)	(3,420,555)	(3,471,864)	(3,523,173)	(3,574,482)	(3,625,791)	(3,677,100)	(3,728,409)	(3,779,718)	(3,831,027)	(3,882,336)	(3,933,645)	(3,984,954)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$20,967,461	20,916,152	20,864,843	20,813,534	20,762,225	20,710,916	20,659,607	20,608,298	20,556,989	20,505,680	20,454,371	20,403,062	20,351,753	
6.	Average Net Investment		20,941,807	20,890,498	20,839,189	20,787,880	20,736,571	20,685,262	20,633,953	20,582,644	20,531,335	20,480,026	20,428,717	20,377,408	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$123,106	$122,805	$122,503	$122,202	$121,900	$121,598	$121,297	$120,995	$120,693	$120,392	$120,090	$119,789	$1,457,370
	b. Debt Component Grossed Up For Taxes (C)		33,980	33,897	33,813	33,730	33,647	33,564	33,480	33,397	33,314	33,231	33,147	33,064	402,264
8.	Investment Expenses														
	a. Depreciation (D)		$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$51,309	$615,708
	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 (Lines 7 + 8)		208,395	208,011	207,625	207,241	206,856	206,471	206,086	205,701	205,316	204,932	204,546	204,162	2,475,342
	a. Recoverable Costs Allocated to Energy		208,395	208,011	207,625	207,241	206,856	206,471	206,086	205,701	205,316	204,932	204,546	204,162	2,475,342
	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)		208,395	208,011	207,625	207,241	206,856	206,471	206,086	205,701	205,316	204,932	204,546	204,162	2,475,342
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)		$208,395	$208,011	$207,625	$207,241	$206,856	$206,471	$206,086	$205,701	$205,316	$204,932	$204,546	$204,162	$2,475,342

Notes:

(A) Applicable depreciable base for Big Bend; account 312.45 ($22,880,499) and 312.44 ($1,456,209).
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 2.5% and 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 2016 to December 2016

Return on Capital Investments, Depreciation and Taxes
For Project: Mercury Air Toxics Standards (MATS)
(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 - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	$8,713,288	
3.	Less: Accumulated Depreciation	(629,778)	(651,790)	(673,802)	(695,814)	(717,826)	(739,838)	(761,850)	(783,862)	(805,874)	(827,886)	(849,898)	(871,910)	(893,922)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$8,083,510	8,061,498	8,039,486	8,017,474	7,995,462	7,973,450	7,951,438	7,929,426	7,907,414	7,885,402	7,863,390	7,841,378	7,819,366	
6.	Average Net Investment		8,072,504	8,050,492	8,028,480	8,006,468	7,984,456	7,962,444	7,940,432	7,918,420	7,896,408	7,874,396	7,852,384	7,830,372	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$47,454	$47,325	$47,195	$47,066	$46,937	$46,807	$46,678	$46,548	$46,419	$46,290	$46,160	$46,031	$560,910
	b. Debt Component Grossed Up For Taxes (C)		13,098	13,063	13,027	12,991	12,955	12,920	12,884	12,848	12,813	12,777	12,741	12,705	154,822
8.	Investment Expenses														
	a. Depreciation (D)		$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$22,012	$264,144
	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 (Lines 7 + 8)		82,564	82,400	82,234	82,069	81,904	81,739	81,574	81,408	81,244	81,079	80,913	80,748	979,876
	a. Recoverable Costs Allocated to Energy		82,564	82,400	82,234	82,069	81,904	81,739	81,574	81,408	81,244	81,079	80,913	80,748	979,876
	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)		82,564	82,400	82,234	82,069	81,904	81,739	81,574	81,408	81,244	81,079	80,913	80,748	979,876
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)		$82,564	$82,400	$82,234	$82,069	$81,904	$81,739	$81,574	$81,408	$81,244	$81,079	$80,913	$80,748	$979,876

Notes:

(A) Applicable depreciable base for Big Bend and Polk; accounts 315.43 ($40,000), 315.44 ($40,000), 312.44 ($3,426,581), 341.80($26,150), 315.40 ($1,226,949), 315.41($138,853), 315.42($138,853), 312.45 ($2,262,901), 312.46 ($1,242,315), 315.45 ($40,217) and 315.46 ($75,022), 311.40 ($13,216), and 345.81 ($42,232)

(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).

(C) Line 6 x 1.9471% x 1/12.

(D) Applicable depreciation rate is 3.6%, 3.2%, 3.0%, 2.2%, 3.7%, 3.5%, 3.3%, 2.5%, 3.3%, 3.1%, 3.5%, 2.9% and 3.3%

(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 2016 to December 2016

For Project: SO_2 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. Purchases/Transfers		$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
	b. Sales/Transfers		0	0	0	0	0	0	0	0	0	0	0	0	
	c. Auction Proceeds/Other		0	0	0	0	0	0	0	0	0	0	0	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 Allowances 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	(35,207)	(35,145)	(35,098)	(35,055)	(35,014)	(34,966)	(34,908)	(34,849)	(34,788)	(34,728)	(34,666)	(34,616)	(34,563)	
3.	Total Working Capital Balance	($35,207)	(35,145)	(35,098)	(35,055)	(35,014)	(34,966)	(34,908)	(34,849)	(34,788)	(34,728)	(34,666)	(34,616)	(34,563)	
4.	Average Net Working Capital Balance		($35,176)	($35,122)	($35,077)	($35,034)	($34,990)	($34,937)	($34,879)	($34,819)	($34,758)	($34,697)	($34,641)	($34,589)	
5.	Return on Average Net Working Capital Balance														
	a. Equity Component Grossed Up For Taxes (A)		(207)	(206)	(206)	(206)	(206)	(205)	(205)	(205)	(204)	(204)	(204)	(203)	(2,461)
	b. Debt Component Grossed Up For Taxes (B)		(57)	(57)	(57)	(57)	(57)	(57)	(57)	(56)	(56)	(56)	(56)	(56)	(679)
6.	Total Return Component		(264)	(263)	(263)	(263)	(263)	(262)	(262)	(261)	(260)	(260)	(260)	(259)	(3,140)
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		728	743	757	739	732	732	721	728	730	728	720	747	8,805
8.	Net Expenses (D)		728	743	757	739	732	732	721	728	730	728	720	747	8,805
9.	Total System Recoverable Expenses (Lines 6 + 8)		464	480	494	476	469	470	459	467	470	468	460	488	5,665
	a. Recoverable Costs Allocated to Energy		464	480	494	476	469	470	459	467	470	468	460	488	5,665
	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)		464	480	494	476	469	470	459	467	470	468	460	488	5,665
13.	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Juris. Recoverable Costs (Lines 12 + 13)		$464	$480	$494	$476	$469	$470	$459	$467	$470	$468	$460	$488	$5,665

Notes:

(A) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(B) Line 6 x 1.9471% x 1/12.
(C) Line 6 is reported on Schedule 7E.
(D) Line 8 is reported on Schedule 5E.
(E) Line 9a x Line 10
(F) Line 9b x Line 11

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

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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-4P
EXHIBIT NO. ____ (PAR-3), DOCUMENT NO. 4,PAGE 24 OF 25

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

Return on Capital Investments, Depreciation and Taxes
For Project: Big Bend Gypsum Storage Facility
(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 - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	
2.	Plant-in-Service/Depreciation Base (A)	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	21,258,302	
3.	Less: Accumulated Depreciation	(664,819)	(716,193)	(767,567)	(818,941)	(870,315)	(921,689)	(973,063)	(1,024,437)	(1,075,811)	(1,127,185)	(1,178,559)	(1,229,933)	(1,281,307)	
4.	CWIP - Non-Interest Bearing	-	-	-	-	-	-	-	-	-	-	-	-	-	
5.	Net Investment (Lines 2 + 3 + 4)	$20,593,483	20,542,109	20,490,735	20,439,361	20,387,987	20,336,613	20,285,239	20,233,865	20,182,491	20,131,117	20,079,743	20,028,369	19,976,995	
6.	Average Net Investment		20,567,796	20,516,422	20,465,048	20,413,674	20,362,300	20,310,926	20,259,552	20,208,178	20,156,804	20,105,430	20,054,056	20,002,682	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		$120,908	$120,606	$120,304	$120,002	$119,700	$119,398	$119,096	$118,794	$118,492	$118,190	$117,888	$117,586	$1,430,964
	b. Debt Component Grossed Up For Taxes (C)		33,373	33,290	33,206	33,123	33,040	32,956	32,873	32,789	32,706	32,623	32,539	32,456	394,974
8.	Investment Expenses														
	a. Depreciation (D)		51,374	51,374	51,374	51,374	51,374	51,374	51,374	51,374	51,374	51,374	51,374	51,374	$616,488
	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 (Lines 7 + 8)		205,655	205,270	204,884	204,499	204,114	203,728	203,343	202,957	202,572	202,187	201,801	201,416	2,442,426
	a. Recoverable Costs Allocated to Energy		205,655	205,270	204,884	204,499	204,114	203,728	203,343	202,957	202,572	202,187	201,801	201,416	2,442,426
	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)		205,655	205,270	204,884	204,499	204,114	203,728	203,343	202,957	202,572	202,187	201,801	201,416	2,442,426
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)		$205,655	$205,270	$204,884	$204,499	$204,114	$203,728	$203,343	$202,957	$202,572	$202,187	$201,801	$201,416	$2,442,426

Notes:
(A) Applicable depreciable base for Big Bend; accounts 311.40
(B) Line 6 x 7.0542% x 1/12. Based on ROE of 10.25% and weighted income tax rate of 38.575% (expansion factor of 1.632200).
(C) Line 6 x 1.9471% x 1/12.
(D) Applicable depreciation rate is 2.9%
(E) Line 9a x Line 10
(F) Line 9b x Line 11

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

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 2015 through December 2015, is $1,164,812 compared to the original projection of $1,163,997, resulting in an insignificant variance.

The actual/estimated O&M expense for the period January 2015 through December 2015 is $5,607,172 compared to the original projection of $6,245,680, resulting in a variance of 10.2 percent. This variance is due to a forced outage at Big Bend Unit 3 that resulted in a decrease in chemical consumption.

Progress Summary: This project was approved by the Commission in Docket No. 960688-EI, Order No. PSC-96-1048-FOF-EI, issued August 14, 1996. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016, is expected to be $1,139,394.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $5,844,840.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

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 SO_2 is converted to SO_3. 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 2015 through December 2015 is $313,558 compared to the original projection of $314,305, resulting in an insignificant variance.

The actual/estimated O&M expense for this project for the period January 2015 through December 2015 is $0 and did not vary from the original projection.

Progress Summary: This project was approved by the Commission in Docket No. 960688-EI, Order No. PSC-96-1048-FOF-EI, issued August 14, 1996. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $295,317.

There are no estimated O&M costs projected for the period of January 2016 through December 2016.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

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 SO_2, 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 2015 through December 2015 is $63,363 compared to the original projection of $63,588, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 960688-EI, Order No. PSC-96-1048-FOF-EI, issued August 14, 1996. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $60,631.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

Project Title: Big Bend Unit 1 Classifier Replacement

Project Description:

The boiler modifications at Big Bend Unit 1 are part of Tampa Electric's NO_X compliance strategy for Phase II of the CAAA. The classifier replacements optimize coal fineness by providing a uniform particle size. This finer classification, combined with the equalized distribution of coal to outlet pipes and furnaces, enables a uniform, staged combustion. As a result, firing systems operate at lower NO_X levels.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $100,325 compared to the original projection of $100,625, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 980007-EI, Order No. PSC-98-1764-FOF-EI, issued December 31, 1998. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $95,268.

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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 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, enables a uniform, staged combustion. As a result, firing systems operate at lower NO_X levels.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $72,408 compared to the original projection of $72,634, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 980007-EI, Order No. PSC-98-1764-FOF-EI, issued December 31, 1998. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $68,888

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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.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $7,284,957 compared to the original projection of $7,503,897, resulting in an insignificant variance.

The actual/estimated O&M expense for the period January 2015 through December 2015 is $8,789,921 compared to the original estimate of $10,189,162, resulting in a variance of 13.7 percent. This variance is due to a forced outage on Big Bend Unit 2, resulting in a decrease in chemical consumption.

Progress Summary: This project was approved by the Commission in Docket No. 980693-EI, Order No. PSC-99-0075-FOF-EI, issued January 11, 1999. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is expected to be $7,132,213.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $9,795,402.

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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 2015 through December 2015, is $10,535 compared to the original projection of $10,579, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 990976-EI, Order No. PSC-99-2103-PAA-EI, issued October 25, 1999. The project was placed in-service in December 1999 and completed in May 2000.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is expected to be $10,174.

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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 SO_2 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 2015 through December 2015 is $1,839,605 compared to the original projection of $1,847,903, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 000685-EI, Order No. PSC-00-1906-PAA-EI, issued October 18, 2000. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is expected to be $1,782,205.

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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 identified improvements that were 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 incurred costs associated with the recommendations of the BOP study and the BACT analysis in 2001 and continues to experience O&M and capital expenditures.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $1,846,455 compared to the original projection of $1,792,308, resulting in an insignificant variance. .

The actual/estimated O&M expense the period January 2015 through December 2015 is $904,608 compared to the original projection of $840,000 resulting in a variance of 7.7 percent. This variance is due to an increase in price for routine monthly inspections.

Progress Summary: This project was approved by the Commission in Docket No. 001186-EI, Order No. PSC-00-2104-PAA-EI, issued November 6, 2000. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is expected to be $2,299,671.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $924,000.

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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 was required to spend up to $3 million with the goal to reduce NO_x emissions at Big Bend Station. By 2002, the Consent Decree required the company to achieve at least a 30 percent reduction beyond 1998 NO_x emission 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 identified and completed projects that were 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 2015 through December 2015 is $608,606 compared to the original projection of $611,733, resulting in an insignificant variance.

The actual/estimated O&M expense the period January 2015 through December 2015 is $109,491 compared to the original projection of $120,000, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 001186-EI, Order No. PSC-00-2104-PAA-EI, issued November 6, 2000. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is expected to be $594,430.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $130,000.

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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 AEl 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 2015 through December 2015 is $41,016 compared to the original projection of $41,168, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 980007-EI, Order No. PSC-98-0408-FOF-EI, issued March 18, 1998. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $39,333.

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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 AEl 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 2015 through December 2015 is $67,457 compared to the original projection of $67,712, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 980007-EI, Order No. PSC-98-0408-FOF-EI, issued March 18, 1998. The project is complete and in-service

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $64,693.

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Project Title: SO_2 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 SO_2 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 SO_2 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 SO_2) equal to the number of tons of SO_2 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 2015 through December 2015 is ($3,214) compared to the original projection of ($3,226), resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $15,198 compared to the original projection of $26,128, resulting in a variance of 41.8 percent. The variance is driven by less cogeneration purchases than expected and the application of a lower emission allowance rate than originally projected.

Progress Summary: SO_2 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 2016 through December 2016 is projected to be ($3,140).

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $8,805.

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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, Polk Power and Bayside Stations are affected by this rule.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M expense for the period January 2015 through December 2015 is $34,500 and did not vary from the original projection.

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

Projections: Estimated O&M costs for the period January 2016 through December 2016 are projected to be $34,500.

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Project Title: Gannon Thermal Discharge Study

Project Description:

This project was 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 was 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 had two facets: 1) developing a plan of study and identified the thermal plume, and 2) implemented 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 2015 through December 2015 is $0 and did not vary from the original projection.

Progress Summary: This project was approved by the Commission in Docket No. 010593-EI, Order No. PSC-01-1847-PAA-EI on September 4, 2001. The project is complete and in-service.

Projections: There are no estimated O&M costs projected for the period of January 2016 through December 2016.

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Project Title: Polk NO_x Emissions Reduction

Project Description:

This project was 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 consisted 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 2015 through December 2015 is $139,869 compared to the original projection of $140,423, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $10,321 compared to the original projection of $20,000, which represents a variance of 48.4 percent. This variance is due to an extended outage for Polk Unit 1, resulting in minimal maintenance associated with this project.

Progress Summary: This project was approved by the Commission in Docket No. 020726-EI, Order No. PSC-02-1445-PAA-EI on October 21, 2002. The project is complete and in-service.

Project Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $134,519.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $20,000.

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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 was 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 2015 through December 2015 is $150,590, compared to the original projection of $145,000, 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 2016 through December 2016 are projected to be $204,000.

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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 entailed capital expenditures for equipment installation and subsequent annual maintenance.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $243,592 compared to the original projection of $244,659, resulting in an insignificant variance.

The actual/estimated O&M expense for this project for the period January 2015 through December 2015 is $24,000, compared to the original projection of $48,000, resulting in a variance of 50 percent. The actual/estimated maintenance cost associated with this project is less than the work that was originally projected because less work was needed than originally projected.

Progress Summary: This project was approved by the Commission in Docket No. 030226-EI, Order No. PSC-03-0684-PAA-EI, issued June 6, 2003. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $235,586.

Estimated O&M costs for the period of January 2016 through December 2016 are projected to be $42,000.

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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 was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. Therefore, this project was 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 included a neural network system, secondary air controls and windbox modifications.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $170,018 compared to the original projection of $170,683, resulting in an insignificant variance.

The actual/estimated O&M expense for this project for the period January 2015 through December 2015 is $128,649, compared to the original projection of $138,000, resulting in an insignificant 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. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $163,398.

Estimated O&M costs for the period of January 2016 through December 2016 is are projected to be $42,000.

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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 was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. Therefore, this project was 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 included secondary air controls and windbox modifications.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $161,262 compared to the original projection of $161,919, resulting in an insignificant variance.

The actual/estimated O&M expense for this project for the period January 2015 through December 2015 is $52,505, compared to the original projection of $48,000, resulting in an insignificant 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. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $155,318.

Estimated O&M costs for the period of January 2016 through December 2016 is are projected to be $42,000.

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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 was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric has declared the future fuel for Big Bend Station to be coal, which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements. Therefore, this project was 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 included 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 2015 through December 2015 is $286,881 compared to the original projection of $288,104, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $24,000 compared to the original projection of $48,000, resulting in a variance of 50 percent. The actual/estimated maintenance cost associated with this project is less than the work that was originally projected as less work was needed.

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. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $277,035.

Estimated O&M costs for the period of January 2016 through December 2016 is are projected to be $42,000

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Project Title: Clean Water Act Section 316(b) Phase II Study

Project Description:

This project was 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 2015 through December 2015 is $370,652 compared to the original projection of $960,000 resulting, resulting in a variance of 61.4 percent. This variance is due to ongoing negotiations regarding the use of existing 316(b) data. As a result, there is a delay in the timing of the work to be done to meet the requirements of the May 2014 rule.

Progress Summary: This project was approved by the Commission in Docket No. 041300-EI, Order No. PSC-05-0164-PAA-EI, issued February 10, 2005. The project is complete and in-service.

Projections: Estimated O&M costs for the period January 2016 through December 2016 are projected to be $960,000.

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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 was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric declared the future fuel for Big Bend Station to be coal, which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $9,703,343 compared to the original projection of $9,741,516, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $2,347,505 compared to the original projection of $2,164,529, resulting in a variance of 8.5 percent. This variance is due to the actual/estimated consumption of ammonia being greater than originally projected. Greater ammonia consumption is expected because Big Bend Unit 1 is expected to operate for a greater number of hours than originally projected.

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. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $9,329,944.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $2,025,000.

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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 was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric declared the future fuel for Big Bend Station to be coal, which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $10,278,852 compared to the original projection of $10,220,155, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $1,878,619 compared to the original projection of $2,499,555, resulting in a variance of 24.8 percent. This variance is due to an extended outage that decreased the amount of ammonia consumed.

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. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $9,982,742.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $1,613,000.

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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 was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric declared the future fuel for Big Bend Station to be coal which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $8,397,829 compared to the original projection of $8,546,448, resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $2,230,792 compared to the original projection of $2,023,711, resulting in a variance of 10.2 percent. Greater ammonia consumption is expected because Big Bend Unit 3 is expected to operate for a greater number of hours than originally projected.

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. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $8,205,136.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $2,032,000.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

Project Title: Big Bend Unit 4 SCR

Project Description:

In order to meet the requirements of the FDEP Consent Final Judgment and the EPA Consent Decree, Tampa Electric was required to make additional reductions of NO_x emissions at Big Bend Station on a per unit basis at prescribed times from 2015 through 2016. Based on a comprehensive study, Tampa Electric declared the future fuel for Big Bend Station to be coal which necessitated the installation of cost-effective SCR technology on the generating units to meet NO_x emissions requirements.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $6,392,540 compared to the original projection of $6,404,385, resulting in an insignificant variance.

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The actual/estimated O&M for the period January 2015 through December 2015 is $1,172,664 compared to the original projection of $1,111,949, resulting in a variance of 5.5 percent. The actual/estimated consumption of ammonia is expected to be greater than originally projected because of Big Bend Unit 4 is expected to operate for a greater number of hours than originally projected.

Progress Summary: This project was approved by the Commission in Docket No. 040750-EI, Order No. PSC-04-0986-PAA-EI, issued October 11, 2004. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $6,220,630.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $2,070,000.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

Project Title: Arsenic Groundwater Standard Program

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

Project Accomplishments:

Fiscal Expenditures: The actual/estimated O&M for the period January 2015 through December 2015 is $57,560 compared to the original projection of $300,000, resulting in a variance of 80.8 percent. This variance is due to ongoing negotiations with the FDEP regarding ground water treatment at Bayside Station.

Progress Summary: This project was approved by the Commission in Docket No. 050683-EI, Order No. PSC-06-0138-PAA-EI, issued February 23, 2006. The project is complete and in-service.

Projections: Estimated O&M costs for the period January 2016 through December 2016 are projected to be $25,000.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

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

Project Description:
The Big Bend FGD Reliability project is necessary to maintain the FGD system operations that are required by the Consent Decree. Tampa Electric is required to operate the FGD systems at Big Bend Station whenever coal is combusted in the units with few exceptions. The compliance dates for the strictest operational characteristics were January 1, 2011 for Big Bend Unit 3 and January 1, 2014 for Big Bend Units 1 and 2.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $2,543,372 compared to the original projection of $2,555,739, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 050598-EI, Order No. PSC-06-0602-PAA-EI, issued July 10, 2006. The project is complete and in-service.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $2,475,342.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

Project Title: Mercury Air Toxics Standards ("MATS")

Project Description:
In March 2005, the Environmental Protection Agency ("EPA") promulgated the Clean Air Mercury Rule ("CAMR") and was later challenged in court. On February 8, 2008, the Circuit Court of Appeals for the District of Columbia vacated CAMR and ordered a new rule by March 2011. On December 11, 2011, the EPA issued a final version of the rule that applies to all coal and oil-fired electric generating units with a capacity of 25 MW or more and with a compliance deadline is April 16, 2015. The rule sets forth hazardous air pollutant standards ("HAP") for mercury, non-mercury metal HAPs and acid gasses.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $981,575 compared to the original projection of $971,990 resulting in an insignificant variance.

The actual/estimated O&M for the period January 2015 through December 2015 is $183,392 compared to the original projection of $230,000, resulting in a variance of 20.3 percent. This variance is due to Tampa Electric using internal labor resources for stack testing. The original projection included costs for contract labor to complete testing.

Progress Summary: This project was approved by the Commission in Docket No. 120302-EI, Order No. PSC-13-0191-PAA-EI, issued May 6, 2013. This project, in total, is expected to be placed in-service by April 2015.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $979,876.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $230,000.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

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 began 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 2015 through December 2015 is $97,411 compared to the original projection of $90,000, resulting in an insignificant variance.

Progress Summary: This project was approved by the Commission in Docket No. 090508-EI, Order No. PSC-10-0157-PAA-EI, issued March 22, 2010. The project is complete and in-service.

Projections: Estimated O&M costs for the period January 2016 through December 2016 are projected to be $90,000.

Tampa Electric Company
Environmental Cost Recovery Clause
January 2016 through December 2016
Description and Progress Report for
Environmental Compliance Activities and Projects

Project Title: Big Bend Gypsum Storage Facility

Project Description:

The Big Bend New Gypsum Storage Facility is necessary to maintain the FGD system operations that are required by the Consent Decree. Tampa Electric is required to operate the FGD systems in order to comply with the CAAA. Gypsum is a by-product of the FGD operations and Tampa Electric had been managing its gypsum inventory through marketing efforts to sell gypsum an existing storage facility. However, the existing storage facility is no longer sufficient to hold the entire gypsum inventory. As such, Tampa Electric needed an additional storage facility that will allow the company to continue managing its gypsum inventory while continuing its marketing efforts to sell the gypsum. The new storage facility will cover approximately 27 acres and will hold approximately 870,000 tons of gypsum.

Project Accomplishments:

Fiscal Expenditures: The actual/estimated depreciation plus return for the period January 2015 through December 2015 is $2,503,343 compared to the original projection of $2,807,047, resulting in a variance of 10.8 percent. The depreciation rate used to project depreciation amounts for this project, in the original projection, was inaccurate. The company assigned the correct depreciation rate, reducing the amount of cost recovery for this project for the actual/estimated period.

The actual/estimated O&M for the period January 2015 through December 2015 is $1,072,105 compared to the original projection of $1,284,000, resulting in a variance of 16.5 percent. This variance is due to extended use of the old storage facility, resulting in less utilization that originally projected.

Progress Summary: This project was approved by the Commission in Docket No. 110262-EI, Order No. PSC-12-0493-PAA-EI, issued September 26, 2012. The project was placed in-service in November 2014.

Projections: Estimated depreciation plus return for the period January 2016 through December 2016 is projected to be $2,442,426.

Estimated O&M costs for the period January 2016 through December 2016 are projected to be $900,000.

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Energy & Demand Allocation % By Rate Class
January 2016 to December 2016

Rate Class	(1) Average 12 CP Load Factor at Meter (%)	(2) Projected Sales at Meter (MWh)	(3) Effective Sales at Secondary Level (MWh)	(4) Projected Avg 12 CP at Meter (MW)	(5) Demand Loss Expansion Factor	(6) Energy Loss Expansion Factor	(7) Projected Sales at Generation (MWh)	(8) Projected Avg 12 CP at Generation (MW)	(9) Percentage of MWh Sales at Generation (%)	(10) Percentage of 12 CP Demand at Generation (%)	(11) 12 CP & 1/13 Allocation Factor (%)
RS	53.76%	8,914,762	8,914,762	1,893	1.07778	1.05339	9,390,726	2,040	47.58%	56.84%	56.13%
GS, CS	58.00%	1,014,240	1,014,240	200	1.07778	1.05338	1,068,375	216	5.41%	6.02%	5.97%
GSD, SBF	79.07%	7,907,036	7,893,311	1,142	1.07348	1.04958	8,299,087	1,226	42.04%	34.16%	34.77%
IS	83.49%	739,587	726,559	101	1.02887	1.01847	753,250	104	3.82%	2.90%	2.97%
LS1	864.97%	214,899	214,899	3	1.07778	1.05339	226,373	3	1.15%	0.08%	0.16%
TOTAL *		18,790,524	18,763,771	3,339			19,737,811	3,589	100.00%	100.00%	100.00%

Notes:
(1) Average 12 CP load factor based on 2016 projected calendar data
(2) Projected MWh sales for the period January 2016 to December 2016
(3) Effective sales at secondary level for the period January 2016 to December 2016
(4) Column 2 / (Column 1 x 8760)
(5) Based on 2014 projected demand losses
(6) Based on 2014 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 x1/13 + Column 10 x 12/13

* Totals on this schedule may not foot due to rounding

Form 42 - 7P

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Energy & Demand Allocation % By Rate Class
January 2016 to December 2016

Rate Class	(1) Percentage of MWh Sales at Generation (%)	(2) 12 CP & 1/13 Allocation Factor (%)	(3) Energy-Related Costs ($)	(4) Demand-Related Costs ($)	(5) Total Environmental Costs ($)	(6) Projected Sales at Meter (MWh)	(7) Effective Sales at Secondary Level (MWh)	**(8) Environmental Cost Recovery Factors (¢/kWh)**
RS	47.58%	56.13%	37,849,730	642,315	38,492,045	8,914,762	8,914,762	**0.432**
GS, CS	5.41%	5.97%	4,303,637	68,317	4,371,954	1,014,240	1,014,240	**0.431**
GSD, SBF	42.04%	34.77%	33,442,678	397,885	33,840,563	7,907,036	7,893,311	
Secondary								**0.429**
Primary								**0.424**
Transmission								**0.420**
IS	3.82%	2.97%	3,038,797	33,987	3,072,784	739,587	726,559	
Secondary								**0.423**
Primary								**0.419**
Transmission								**0.414**
LS1	1.15%	0.16%	914,821	1,831	916,652	214,899	214,899	**0.427**
TOTAL *	100.00%	100.00%	79,549,663	1,144,334	80,693,997	18,790,524	18,763,771	**0.430**

* 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

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DOCKET NO. 150007-EI
ECRC 2016 PROJECTION, FORM 42-7P
EXHIBIT NO. ___ (PAR-3), DOCUMENT NO. 7

Form 42 - 8P

Tampa Electric Company
Environmental Cost Recovery Clause (ECRC)
Calculation of the Projected Period Amount
January 2016 to December 2016

Calculation of Revenue Requirement Rate of Return
(In Dollars)

	(1) Jurisdictional Rate Base *Actual May 2015* Capital Structure ($000)	(2) Ratio %	(3) Cost Rate %	(4) Weighted Cost Rate %
Long Term Debt	$ 1,500,445	35.24%	5.33%	1.8783%
Short Term Debt	25,918	0.61%	0.71%	0.0043%
Preferred Stock	0	0.00%	0.00%	0.0000%
Customer Deposits	108,557	2.55%	2.27%	0.0579%
Common Equity	1,791,818	42.09%	10.25%	4.3142%
Deferred ITC - Weighted Cost	7,573	0.18%	7.96%	0.0143%
Accumulated Deferred Income Taxes Zero Cost ITCs	823,006	19.33%	0.00%	0.0000%
Total	$ 4,257,317	100.00%		6.27%

ITC split between Debt and Equity:

Long Term Debt	$ 1,500,445	Long Term Debt	45.22%
Short Term Debt	25,918	Short Term Debt	0.78%
Equity - Preferred	0	Equity - Preferred	0.00%
Equity - Common	1,791,818	Equity - Common	54.00%
Total	$ 3,318,181	Total	100.00%

Deferred ITC - Weighted Cost:

Debt = .0143% * 46.00%	0.0066%
Equity = .0143% * 54.00%	0.0077%
Weighted Cost	0.0143%

Total Equity Cost Rate:

Preferred Stock	0.0000%
Common Equity	4.3142%
Deferred ITC - Weighted Cost	0.0077%
	4.3219%
Times Tax Multiplier	1.632200
Total Equity Component	7.0542%

Total Debt Cost Rate:

Long Term Debt	1.8783%
Short Term Debt	0.0043%
Customer Deposits	0.0579%
Deferred ITC - Weighted Cost	0.0066%
Total Debt Component	1.9471%
	9.0013%

Notes:

Column (1) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2013 Base Rates Settlement Agreement Dated September 6, 2013
Column (2) - Column (1) / Total Column (1)
Column (3) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2013 Base Rates Settlement Agreement Dated September 6, 2013
Column (4) - Column (2) x Column (3)

TECO
TAMPA ELECTRIC

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 150007-EI

ENVIRONMENTAL COST RECOVERY FACTORS

PROJECTIONS

JANUARY 2016 THROUGH DECEMBER 2016

TESTIMONY

OF

PAUL L. CARPINONE

FILED: AUGUST 31, 2015

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

PAUL CARPINONE

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

A. My name is Paul L. Carpinone. My business address is 702 North Franklin Street, Tampa, Florida 33602. I am employed by Tampa Electric Company ("Tampa Electric" or "company") as Director, Environmental Health & Safety in the Environmental Health and Safety Department.

Q. Please provide a brief outline of your educational background and business experience.

A. I received a Bachelor of Science degree in Water Resources Engineering Technology from the Pennsylvania State University in 1978. I have been a Registered Professional Engineer in the states of Florida and Pennsylvania since 1984. Prior to joining Tampa Electric, I worked for Seminole Electric Cooperative as a Civil Engineer in various positions and in environmental consulting. In February 1988, I joined Tampa Electric as a Principal Engineer, and I have primarily worked in the area of Environmental Health and Safety. In 2006, I became Director of 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 meet 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.

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

A. The purpose of my testimony is to demonstrate that the activities for which Tampa Electric seeks cost recovery through the Environmental Cost Recovery Clause ("ECRC") for the January 2016 through December 2016 projection period are activities necessary for the company to comply with various environmental requirements. Specifically, I will describe the ongoing activities related to programs previously approved by the Commission for recovery through the ECRC.

Q. Please provide an overview of the environmental compliance requirements that are the result of the Consent Final

Judgment ("CFJ") entered into with the Florida Department of Environmental Protection ("FDEP") and the Consent Decree ("CD") lodged with the U.S. Environmental Protection Agency ("EPA") and the Department of Justice ("the Orders").

A. The general 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. Tampa Electric has implemented the requirements of the Orders, and now these agreements have been terminated by the corresponding court systems. The ongoing requirements of these projects, which are further described later in my testimony, are now part of the Big Bend Title V operating permit (0570039-072-AV). The projects that are now required under the operating permit are listed below.

- Big Bend Minimization Program
- Big Bend NOx Emission Reduction Program
- Big Bend Units 1 – 3 Pre–SCR Projects
- Big Bend Units 1 – 4 SCR Projects

Q. Does the termination of the Orders change any of the environmental compliance requirements applicable to the company's generating units?

A. No, the termination of the Orders does not change any of the environmental compliance requirements applicable to the company's generating units. They are now part of the Title V operating permit.

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 2016 through December 2016.

A. The Big Bend PM Minimization and Monitoring program was approved by the Commission in Docket No. 001186-EI, Order No. PSC-00-2104-PAA-EI, issued November 6, 2000. In the Order, the Commission found that the program met the requirements for recovery through the ECRC. Tampa Electric had previously identified various projects to improve precipitator performance and reduce PM emissions as required by the Orders. Tampa Electric does not anticipate any capital expenditures for this program during 2016; however, the O&M expenses associated with existing and recently installed BOP and BACT equipment and continued implementation of the BOP procedures are expected to be $924,000.

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 2016 through December 2016.

A. The Big Bend NO_x Emission Reduction program was approved by the Commission in Docket No. 001186-EI, Order No. PSC-00-2104-PAA-EI, issued November 6, 2000. In the Order, the Commission found that the program met the requirements for recovery through the ECRC. Tampa Electric does not anticipate any capital expenditures in 2016; however, the company will perform maintenance on the previously approved and installed NO_x reduction equipment. This activity is expected to result in approximately $130,000 of O&M expenses during 2016.

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 2016 through December 2016.

A. In Docket No. 040750-EI, Order No. PSC-04-0986-PAA-EI, issued October 11, 2004, the Commission approved cost recovery of the Big Bend Units 1 through 3 Pre-SCR and the Big Bend Unit 4 SCR projects. The Big Bend Units 1 through

3 SCR projects were approved by the Commission in Docket No. 041376-EI, Order No. PSC-05-0502-PAA-EI, issued May 9, 2005. The purpose of the Pre-SCR technologies is 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. The SCR projects at Big Bend Units 1 through 4 encompass the design, procurement, installation and annual O&M expenses associated with an SCR system for each unit. 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 2016 through December 2016, there are not any capital expenditures anticipated for the Big Bend Units 1 through 3 Pre-SCR projects. The O&M expenditures for Big Bend Pre-SCR projects are projected to be $42,000 for Big Bend Unit 1 Pre-SCR, $42,000 for Big Bend Unit 2 Pre-SCR and $42,000 for Big Bend Unit 3 Pre-SCR for equipment maintenance. Additionally, there are not any anticipated capital expenditures for Big Bend Units 1, 2, and 4 SCRs. However, the capital expenditures for the Big Bend Unit 3 SCR are projected to be $2,000,000 for a catalyst replacement. Additionally, the 2016 SCR O&M

expenses are projected to be $2,025,000 for Big Bend Unit 1 SCR, $1,613,000 for Big Bend Unit 2 SCR, $2,032,000 for Big Bend Unit 3 SCR and $2,070,000 for Big Bend Unit 4 SCR. These expenses are primarily associated with 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 the following projects:

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) Mercury and Air Toxics Standards ("MATS")
9) Greenhouse Gas ("GHG") Reduction Program
10) Big Bend Gypsum Storage Facility

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 2016 through December 2016.

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 SO_2 emission requirements of the Phase I and II Clean Air Act Amendments ("CAAA") of 1990.

The company does not anticipate any capital expenditures during January 2016 through December 2016 for the Big Bend Unit 3 FGD Integration project; however, O&M expenses are projected to be $5,844,840 for consumables, primarily anhydrous ammonia, and ongoing maintenance. There are not any anticipated capital expenditures for the Big Bend Units 1 & 2 FGD project during January 2016 through December 2016. O&M expenses are projected to be $9,795,402 for consumables, primarily anhydrous ammonia, and ongoing maintenance.

Q. Please describe the Gannon Thermal Discharge Study program activities and provide the estimated O&M expenditures for the period of January 2016 through December 2016.

A. The Gannon Thermal Discharge Study program was approved by the Commission in Docket No. 010593-EI, Order No. PSC-01-1847-PAA-EI, issued September 14, 2001. In that Order, the Commission found that the program met the requirements for recovery through the ECRC. For the period of January 2016 through December 2016, there are not any projected O&M expenditures for this program. In the intent to issue the permit renewal, dated August 9, 2013, FDEP indicated that the proposed NPDES permit authorizes a thermal variance under 316(a) for the permit period. The company anticipates that an additional study will not be required.

Q. Please describe the Bayside SCR Consumables program activities and provide the estimated O&M expenditures for the period of January 2016 through December 2016.

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 2016 through December 2016, Tampa Electric projects O&M expenses associated with the consumable goods (primarily anhydrous ammonia) to be approximately $204,000 for the period.

Q. Please describe the Clean Water Act Section 316(b) Phase II Study program activities and provide the estimated O&M expenditures for the period of January 2016 through December 2016.

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. The final rule adopted under Section 316(b), the Cooling Water Intake Structures ("CWIS") Rule, became effective October 14, 2014. Tampa Electric is currently finalizing its compliance strategy for the CWIS Rule and is working with the regulating authority to determine the need and scheduling for biological, financial and technical study elements necessary to comply with the rule. These elements will ultimately be used by the regulating authority to determine the necessity of cooling water system retrofits for Big Bend and Bayside Power Stations. Retrofits could include the installation of cooling towers or screening facilities. Tampa Electric projects O&M expenditures to be $960,000 for the period January 2016 through December 2016 for engineering studies.

Q. Please describe the Big Bend FGD System Reliability program activities and provide the estimated capital expenses for the period of January 2016 through December 2016.

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 2016 through December 2016, there are not any anticipated capital expenditures for this project.

Q. Please describe the Arsenic Groundwater Standard program activities and provide the estimated O&M expenditures for the period of January 2016 through December 2016.

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.

For the period of January 2016 through December 2016, Tampa Electric projects O&M expenses associated with the sampling activities to be approximately $25,000.

Q. Please describe the MATS program activities.

A. The MATS program was approved by the Commission in Docket No. 120302-EI, Order No. PSC-13-0191-PAA-EI, issued May 6, 2013. 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. Additionally, the Commission granted the subsumption of the previously approved CAMR program into the MATS program.

On February 8, 2008, the Washington D.C. Circuit Court vacated EPA's rule removing power plants from the Clean Air Act list of regulated sources of hazardous air pollutants under section 112. At the same time, the Court vacated the Clean Air Mercury Rule. On May 3, 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 EPA published the final rule for MATS. The rule revised the mercury limits and provided more flexible monitoring and recordkeeping requirements. Additionally, monitoring of acid gases and particulate matter will be required. Existing sources will have through October 16, 2015 to show full compliance 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.

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 SO_2 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 EPA and Tampa Electric (the requirements now included in the Big Bend operating permit); therefore, the company anticipates continuing its efforts to complete and maintain the projects. The completed ECRC projects support compliance with CSAPR.

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.

On May 3, 2011, the EPA proposed a new rule under National Emission Standards for Hazardous Air Pollutants pursuant to a court order referred to as the MATS rule. The proposed rules replace CAMR and are expected to reduce not only mercury but acid gas, organics and certain non-mercury metals emissions. The final MATS rule was released in February 2012 and required implementation by April 2015. Tampa Electric continues to utilize the resources already secured to establish a 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. The company’s compliance with these standards for mercury, acid gases, and non–mercury metals began on April 16, 2015 at Big Bend Station and Polk Power Station. Full compliance with the rule is required by October 16, 2015, and Tampa Electric is on course to fully comply with the MATS rules by the compliance date.

Q. Please provide the MATS program estimated capital and O&M expenditures for the period January 2016 through December 2016.

A. For 2016, Tampa Electric does not anticipate any capital expenditures under the MATS program; however, O&M expenditures are projected to be $230,000 for testing requirements and maintenance of equipment.

Q. Please describe the GHG Reduction Program activities and provide the estimated capital and O&M expenditures for the period of January 2016 through December 2016.

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 was required to report greenhouse gas emissions to the EPA for the first time in 2011. Reporting for the EPA's Greenhouse Gas Mandatory Reporting Rule will continue in 2016. For 2016, this activity projected to result in approximately $90,000 of O&M expenditures.

Q. Please describe the Big Bend Gypsum Storage Facility activities and provide the estimated capital and O&M expenditures for the period of January 2016 through December 2016.

A. The Big Bend Gypsum Storage Facility program was approved by the Commission in Docket No. 110262-EI, Order No. 12-0493-PAA-EI, issued September 26, 2012. In that Order, the Commission found that the program meets the requirements for recovery through ECRC. The project was placed in-service in November 2014. For 2016, Tampa Electric does not anticipate any capital expenditures; however, projected O&M expenses for this program during 2016 are $900,000.

Q. Please describe your company’s plans for compliance with the recently finalized EPA Coal Combustion Residuals (“CCR”) Rule and provide estimated expenses if available.

A. On April 17, 2015, EPA issued a final rule to regulate coal combustion residuals (“CCRs”) as nonhazardous waste under Subtitle D of the Resource Conservation and Recovery Act (“RCRA”). The rule, which becomes effective on October 19, 2015, covers all operational CCR disposal facilities, as well as inactive impoundments which contain CCRs and liquids. The Big Bend Unit 4 Economizer Ash Ponds and the East Coalfield Stormwater Pond (converted former slag fines pond), will be regulated under the rule, at a minimum. The applicability of the rule to other CCR management units at Big Bend is also being evaluated at this time. Initial compliance costs for structural integrity evaluations, groundwater monitoring well installation, dike inspections and other administrative requirements of this rule may be incurred during 2016. Tampa Electric did not project and include costs for this program in its 2016 ECRC factor due to the uncertainty surrounding the requirements. The company is continuing its evaluation and plans to petition the Commission for cost recovery for this program. Potential Commission-approved costs for this project will be proposed for cost recovery in Tampa Electric’s 2016 actual-estimate filing.

Q. Please summarize your testimony.

A. Tampa Electric’s settlement agreements with FDEP and EPA required significant reductions in emissions from Tampa Electric’s Big Bend and Gannon Stations have been terminated due to the company having satisfied all requirements as set forth by the CFJ and CD. Ongoing requirements for projects originating with the Orders are included in the Big Bend operating permit and discussed throughout my testimony. I described the progress Tampa Electric has made to achieve the more stringent environmental standards. I identified estimated costs, by project, which the company expects to incur in 2016. The on-going requirements of these of the CFJ and CD have been incorporated into Big Bend’s Title V Operating Permit (1050233 – 072 – AV). Additionally, my testimony identified other projects that are required for Tampa

Electric to meet environmental requirements, and I provided the associated 2016 activities and projected expenditures.

Q. Does this conclude your testimony?

A. Yes.