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August 27, 2021

**VIA: ELECTRONIC FILING**

Mr. Adam J. Teitzman  
Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Environmental Cost Recovery Clause  
FPSC Docket No. 20210007-EI

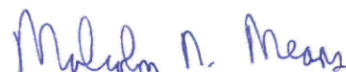
Dear Mr. Teitzman:

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

1. Petition of Tampa Electric Company.
2. Prepared Direct Testimony and Exhibit (MAS-3) of M. Ashley Sizemore regarding Environmental Cost Recovery Clause 2022 Projections.
3. Prepared Direct Testimony of Byron T. Burrows regarding Environmental Cost Recovery Clause 2022 Projections.

Thank you for your assistance in connection with this matter.

Sincerely,



Malcolm N. Means

MNM/bmp  
Attachments

cc: All Parties of Record (w/attachment)

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition, Testimony and Exhibit of M. Ashley Sizemore, and Testimony of Byron T. Burrows, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 27<sup>th</sup> day of August 2021, to the following:

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ATTORNEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost )  
Recovery Clause. )  
\_\_\_\_\_ )

DOCKET NO. 20210007-EI

FILED: August 27, 2021

**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 factors proposed for use during the period January 2022 through December 2022, and in support thereof, says:

**Environmental Cost Recovery**

1. Tampa Electric's final true-up amount for the period January 2020 through December 2020 is an over-recovery of \$4,237,191. [See Exhibit No. MAS-1, Document No. 1 (Form 42-1A).]

2. Tampa Electric projects an actual/estimated true-up amount for the January 2021 through December 2021 period, which is based on actual data for the period January 1, 2021 through June 30, 2021 and revised estimates for the period July 1, 2021 through December 31, 2021, to be an under-recovery of \$4,289,623. [See Exhibit No. MAS-2, Document No. 1 (Form 42-1E).]

3. The company's projected environmental cost recovery amount for the period January 1, 2022 through December 31, 2022, including true-up amounts and adjusted for taxes, is \$51,162,113. When spread over projected kilowatt hour sales for the period January 1, 2022 through December 31, 2022, the average environmental cost recovery factor for the new period is 0.259 cents per kWh after application of factors which adjust for variations in line losses. [See Exhibit No. MAS-3, Document No. 7 (Form 42-7P).]

4. The accompanying Prepared Direct Testimony and Exhibits of Byron T. Burrows and M. Ashley Sizemore present:

(a) A description of each of Tampa Electric's environmental compliance actions for which cost recovery is sought; and

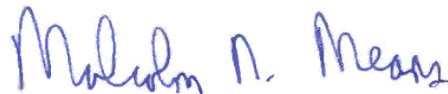
(b) The costs associated with each environmental compliance action.

5. For reasons more fully detailed in the Prepared Direct Testimony of witness M. Ashley Sizemore, 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 2022 through December 2022.

DATED this 27<sup>th</sup> day of August 2021.

Respectfully submitted,



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Ausley McMullen  
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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 27<sup>th</sup> day of August 2021 to the following:

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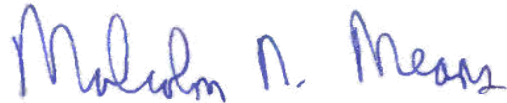
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ATTORNEY



**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20210007-EI  
IN RE: TAMPA ELECTRIC'S ENVIRONMENTAL  
COST RECOVERY**

**PROJECTION  
JANUARY 2022 THROUGH DECEMBER 2022**

**TESTIMONY AND EXHIBIT**

**OF**

**M. ASHLEY SIZEMORE**

**FILED: AUGUST 27, 2021**



1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **PREPARED DIRECT TESTIMONY**

3   **OF**

4   **M. ASHLEY SIZEMORE**

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

8  
9   **A.**   My name is M. Ashley Sizemore. My business address is 702  
10           North Franklin Street, Tampa, Florida 33602. I am employed  
11           by Tampa Electric Company ("Tampa Electric" or "company")  
12           in the position of Manager, Rates in the Regulatory  
13           Affairs Department.

14  
15   **Q.**   Have you previously filed testimony in Docket No.  
16           20210007-EI?

17  
18   **A.**   Yes, I submitted direct testimony on April 1, 2021, and  
19           July 30, 2021.

20  
21   **Q.**   Has your job description, education, or professional  
22           experience changed since you last filed testimony?

23  
24   **A.**   No, it has not.  
25

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

2

3 **A.** The purpose of my testimony is to present, for Commission  
4 review and approval, the calculation of the revenue  
5 requirements and the projected Environmental Cost  
6 Recovery Clause ("ECRC") factors for the period of January  
7 2022 through December 2022. The projected ECRC factors  
8 have been calculated based on the current allocation  
9 methodology. In support of the projected ECRC factors, my  
10 testimony identifies the capital and operating &  
11 maintenance ("O&M") costs associated with environmental  
12 compliance activities for the year 2022.

13

14 **Q.** Have you prepared an exhibit that shows the determination  
15 of recoverable environmental costs for the period of  
16 January 2022 through December 2022?

17

18 **A.** Yes. Exhibit No. MAS-3, containing eight documents, was  
19 prepared under my direction and supervision. Document  
20 Nos. 1 through 8 contain Forms 42-1P through 42-8P, which  
21 show the calculation and summary of the O&M and capital  
22 expenditures that support the development of the  
23 environmental cost recovery factors for 2022.

24

25 **Q.** Are you requesting Commission approval of the projected

1 environmental cost recovery factors for the company's  
2 various rate schedules?

3  
4 **A.** Yes, with one caveat. On August 6, 2021, Tampa Electric  
5 filed a 2021 Stipulation and Settlement Agreement ("2021  
6 Agreement") in Docket No. 20210034-EI, Petition for rate  
7 increase by Tampa Electric Company, which is currently  
8 scheduled for hearing on October 21, 2021. Among other  
9 things, the 2021 Agreement includes proposed changes to  
10 the company's existing cost allocation methodology and  
11 midpoint return on equity as well as removal of certain  
12 costs from the ECRC to the proposed Clean Energy  
13 Transition Mechanism ("CETM"). The company plans to file  
14 revised ECRC schedules that reflect the 2021 Agreement in  
15 the coming weeks and request approval of those factors  
16 for the period January through December 2022. However, if  
17 the settlement agreement is not approved by the  
18 Commission, then the company requests approval of the ECRC  
19 factors provided in Exhibit No. MAS-3, Document No. 7, on  
20 Form 42-7P for the period January 2022 until the issues  
21 in Docket No. 20210034-EI are resolved. These factors were  
22 prepared under my direction and supervision.

23  
24 **Q.** How were the environmental cost recovery clause factors  
25 calculated?

1     **A.**     The environmental cost recovery factors were calculated  
2             as shown on Schedules 42-6P and 42-7P. These factors were  
3             calculated based on the current approved cost allocation  
4             methodology, return on equity, and equity ratio as set  
5             out in the 2017 Amended and Restated Settlement Agreement  
6             approved by the Commission in Docket No. 20170271, which  
7             amended and extended the 2013 Stipulation and Settlement  
8             Agreement that resolved the company's last base rate case  
9             (Docket No. 20130040).

10  
11     **Q.**     What has Tampa Electric calculated as the net true-up to  
12             be applied in the period January 2022 to December 2022?

13  
14     **A.**     The net true-up applicable for this period is an under-  
15             recovery of \$52,432. This consists of a final true-up  
16             over-recovery of \$4,237,191 for the period of January 2020  
17             through December 2020 and an estimated true-up under-  
18             recovery of \$4,289,623 for the current period of January  
19             2021 through December 2021. The detailed calculation  
20             supporting the estimated net true-up was provided on Forms  
21             42-1E through 42-9E of Exhibit No. MAS-2 filed with the  
22             Commission on July 30, 2021.

23  
24     **Q.**     Did Tampa Electric include any new environmental  
25             compliance projects for ECRC cost recovery for the period

1 from January 2022 through December 2022?

2  
3 **A.** No, Tampa Electric did not include costs for any new  
4 environmental projects in the factors presented in this  
5 testimony. On April 21, 2021, Tampa Electric filed a  
6 petition for approval of a new environmental program  
7 related to compliance with Section 316(b) of the Clean  
8 Water Act for the company's Bayside facility in Docket  
9 No. 20210087-EI. This program is scheduled for a decision  
10 at the September 8, 2021 agenda conference. If the  
11 Commission approves this program for cost recovery, Tampa  
12 Electric will include these costs in its updated  
13 environmental cost recovery factors for January 2022  
14 through December 2022 that include the effects of the  
15 2021 Agreement terms.

16  
17 **Q.** Are there any other significant changes other than the  
18 new project just referenced?

19  
20 **A.** No.

21  
22 **Q.** What are the capital projects included in the calculation  
23 of the ECRC factors for 2022?

24  
25 **A.** Tampa Electric proposes to include for ECRC recovery costs

1 for the 29 previously approved capital projects in the  
2 calculation of the 2022 ECRC factors. These projects are  
3 listed below.

- 4 1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD")  
5 Integration
- 6 2) Big Bend Units 1 and 2 Flue Gas Conditioning
- 7 3) Big Bend Unit 4 Continuous Emissions Monitors
- 8 4) Big Bend Fuel Oil Tank No. 1 Upgrade
- 9 5) Big Bend Fuel Oil Tank No. 2 Upgrade
- 10 6) Big Bend Unit 1 Classifier Replacement
- 11 7) Big Bend Unit 2 Classifier Replacement
- 12 8) Big Bend Section 114 Mercury Testing Platform
- 13 9) Big Bend Units 1 and 2 FGD
- 14 10) Big Bend FGD Optimization and Utilization
- 15 11) Big Bend NO<sub>x</sub> Emissions Reduction
- 16 12) Big Bend Particulate Matter ("PM") Minimization and  
17 Monitoring
- 18 13) Polk NO<sub>x</sub> Emissions Reduction
- 19 14) Big Bend Unit 4 SOFA
- 20 15) Big Bend Unit 1 Pre-SCR
- 21 16) Big Bend Unit 2 Pre-SCR
- 22 17) Big Bend Unit 3 Pre-SCR
- 23 18) Big Bend Unit 1 SCR
- 24 19) Big Bend Unit 2 SCR
- 25 20) Big Bend Unit 3 SCR

- 1           21) Big Bend Unit 4 SCR
- 2           22) Big Bend FGD System Reliability
- 3           23) Mercury Air Toxics Standards ("MATS")
- 4           24) SO<sub>2</sub> Emission Allowances
- 5           25) Big Bend Gypsum Storage Facility
- 6           26) Big Bend Coal Combustion Residuals ("CCR") Rule -
- 7                 Phase I
- 8           27) Big Bend CCR Rule - Phase II
- 9           28) Big Bend Unit 1 Section 316(b) Impingement Mortality
- 10          29) Big Bend Effluent Limitations Guidelines ("ELG")
- 11                 Rule Compliance

12

13   **Q.**    Have you prepared schedules showing the calculation of

14           the recoverable capital project costs for 2022?

15

16   **A.**    Yes. Form 42-3P contained in Exhibit No. MAS-3 summarizes

17           the cost estimates for these projects. Form 42-4P, pages

18           1 through 29, provides the calculations resulting in

19           recoverable jurisdictional capital costs of \$46,658,374.

20

21   **Q.**    What O&M projects are included in the calculation of the

22           ECRC factors for 2022?

23

24   **A.**    Tampa Electric proposes to include for ECRC recovery O&M

25           costs for 27 approved O&M projects in the calculation of

1 the ECRC factors for 2022. These projects are listed  
2 below.

- 3 1) Big Bend Unit 3 FGD Integration
- 4 2) Big Bend Units 1 and 2 Flue Gas Conditioning
- 5 3) SO<sub>2</sub> Emission Allowances
- 6 4) Big Bend Units 1 and 2 FGD
- 7 5) Big Bend PM Minimization and Monitoring
- 8 6) Big Bend NO<sub>x</sub> Emissions Reduction
- 9 7) National Pollutant Discharge Elimination System  
10 ("NPDES") Annual Surveillance Fees
- 11 8) Gannon Thermal Discharge Study
- 12 9) Polk NO<sub>x</sub> Emissions Reduction
- 13 10) Bayside SCR Consumables
- 14 11) Big Bend Unit 4 Separated Overfired Air ("SOFA")
- 15 12) Big Bend Unit 1 Pre-SCR
- 16 13) Big Bend Unit 2 Pre-SCR
- 17 14) Big Bend Unit 3 Pre-SCR
- 18 15) Clean Water Act Section 316(b) Phase II Study
- 19 16) Arsenic Groundwater Standard Program
- 20 17) Big Bend Unit 1 SCR
- 21 18) Big Bend Unit 2 SCR
- 22 19) Big Bend Unit 3 SCR
- 23 20) Big Bend Unit 4 SCR
- 24 21) Mercury Air Toxics Standards
- 25 22) Greenhouse Gas Reduction Program



- 1           23) Big Bend Gypsum Storage Facility
- 2           24) Big Bend CCR Rule - Phase I
- 3           25) Big Bend CCR Rule - Phase II
- 4           26) Big Bend Unit 1 Section 316(b) Impingement Mortality
- 5           27) Big Bend ELG Rule Compliance

6

7   **Q.**   Have you prepared a schedule showing the calculation of  
8           the recoverable O&M project costs for 2022?

9

10   **A.**   Yes. Form 42-2P contained in Exhibit No. MAS-3 presents  
11           the recoverable jurisdictional O&M costs for these  
12           projects, which total \$4,414,497 for 2022.

13

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

17

18   **A.**   Yes. Project descriptions and progress reports are  
19           provided in Form 42-5P, pages 1 through 34.

20

21   **Q.**   What are the total projected jurisdictional costs for  
22           environmental compliance in the year 2022?

23

24   **A.**   The total jurisdictional O&M and capital expenditures to  
25           be recovered through the ECRC are calculated on Form 42-

1 1P of Exhibit No. MAS-3. These expenditures total  
2 \$51,072,871.  
3

4 **Q.** How were environmental cost recovery factors calculated?  
5

6 **A.** The environmental cost recovery factors were calculated  
7 as shown on Schedules 42-6P and 42-7P. The demand and  
8 energy allocation factors were determined by calculating  
9 the percentage that each rate class contributes to the  
10 total demand or energy and then adjusted for line losses  
11 for each rate class. This information was calculated by  
12 applying historical rate class load research to 2022  
13 projected system demand and energy. Form 42-7P presents  
14 the calculation of the proposed ECRC factors by rate  
15 class.  
16

17 **Q.** What are the ECRC billing factors effective beginning in  
18 January 2022, if the company's 2021 Agreement is not  
19 approved, for which Tampa Electric is seeking approval?  
20

21 **A.** The computation of the billing factors is shown in Exhibit  
22 No. MAS-3, Document No. 7, Form 42-7P. The proposed ECRC  
23 billing factors are summarized below.  
24  
25

1  
2  
3  
4  
5  
6  
7  
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9  
10  
11  
12  
13  
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25

<u>Rate Class</u>	<u>Factors by Voltage Level</u>
	<u>(¢/kWh)</u>
RS Secondary	0.263
GS, CS Secondary	0.260
GSD, SBF	
Secondary	0.254
Primary	0.252
Transmission	0.249
IS	
Secondary	0.247
Primary	0.244
Transmission	0.242
LS1	0.240
Average Factor	0.259

- 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 2022.
- Q.** What capital structure components and cost rates did Tampa Electric rely on to calculate the revenue requirement rate of return for January 2022 through December 2022?

1     **A.**     To calculate the revenue requirement rate of return found  
2             on Form 42-8P, Tampa Electric used the weighted average  
3             cost of capital ("WACC") methodology approved by the  
4             Commission in Order No. PSC-2020-0165-PAA-EU, approving  
5             Amended Joint Motion Modifying Weighted Average Costs of  
6             Capital Methodology, issued on May 20, 2020.

7

8     **Q.**     Are the costs Tampa Electric is requesting for recovery  
9             through the ECRC for the period beginning in January 2022  
10            consistent with the criteria established for ECRC  
11            recovery in Order No. PSC-1994-0044-FOF-EI?

12

13    **A.**     Yes. The costs for which ECRC recovery is requested meet  
14             the following criteria:

15            1)     Such costs were prudently incurred after April 13,  
16                 1993;

17            2)     The activities are legally required to comply with  
18                 a governmentally imposed environmental regulation  
19                 enacted, became effective or whose effect was  
20                 triggered after the company's last test year upon  
21                 which rates were based; and,

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

24

25    **Q.**     Please summarize your direct testimony.

1     **A.**    My testimony supports the approval, if the company's 2021  
2            Agreement is not approved, of an average ECRC billing  
3            factor of 0.259 cents per kWh. This includes the projected  
4            capital and O&M revenue requirements of \$51,072,871  
5            associated with the company's 35 ECRC projects and a net  
6            true-up under-recovery provision of \$52,432. My testimony  
7            also explains that the projected environmental  
8            expenditure for 2022 are appropriate for recovery through  
9            the ECRC.

10

11    **Q.**    Does this conclude your testimony?

12

13    **A.**    Yes, it does.

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EXHIBIT MAS-3 TO THE TESTIMONY OF  
M. ASHLEY SIZEMORE

TAMPA ELECTRIC'S ENVIRONMENTAL  
COST RECOVERY

PROJECTION

JANUARY 2022 THROUGH DECEMBER 2022

INDEX  
ENVIRONMENTAL COST RECOVERY  
COMMISSION FORMS

JANUARY 2022 THROUGH DECEMBER 2022

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

Form 42 - 1P

For the Projected Period  
**January 2022 to December 2022**

<u>Line</u>	Energy (\$)	Demand (\$)	Total (\$)
1. Total Jurisdictional Revenue Requirements for the projected period			
a. Projected O&M Activities (Form 42-2P, Lines 7, 8 & 9)	\$4,332,767	\$81,730	\$4,414,497
b. Projected Capital Projects (Form 42-3P, Lines 7, 8 & 9)	42,433,015	4,225,359	46,658,374
c. Total Jurisdictional Revenue Requirements for the projected period (Lines 1a + 1b)	46,765,782	4,307,089	51,072,871
2. True-up for Estimated Over/(Under) Recovery for the current period January 2021 to December 2021 (Form 42-2E, Line 5 + 6 + 10)	(4,161,856)	(127,767)	(4,289,623)
3. Final True-up for the period January 2020 to December 2020 (Form 42-1A, Line 3)	4,199,464	37,727	4,237,191
4. Total Jurisdictional Amount to Be Recovered/(Refunded) in the projection period January 2022 to December 2022 (Line 1 - Line 2- Line 3)	46,728,174	4,397,129	51,125,303
5. Total Projected Jurisdictional Amount Adjusted for Taxes (Line 4 x Revenue Tax Multiplier)	\$46,761,818	\$4,400,295	\$51,162,113



**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
 January 2022 to December 2022

**O&M Activities**  
 (in Dollars)

Line	Description of O&M Activities	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	End of	Method of Classification		
		January	February	March	April	May	June	July	August	September	October	November	December	Total	Demand	Energy	
1.	Description of O&M Activities																
a.	Big Bend Unit 3 Flue Gas Desulfurization Integration	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$0
b.	Big Bend Units 1 & 2 Flue Gas Conditioning	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
c.	SO <sub>2</sub> Emissions Allowances	(5)	7	7	(5)	7	7	(5)	7	7	(5)	7	7	41			41
d.	Big Bend Units 1 & 2 FGD	0	0	0	0	0	0	0	0	0	0	0	0	0			0
e.	Big Bend PM Minimization and Monitoring	21,630	21,630	21,630	21,630	21,630	21,630	21,630	21,630	21,630	21,630	21,630	21,630	259,560			259,560
f.	Big Bend NO <sub>x</sub> Emissions Reduction	174	174	174	174	174	174	174	174	174	174	174	174	2,089			2,089
g.	NPDES Annual Surveillance Fees	0	34,500	0	0	0	0	0	0	0	0	0	0	34,500		\$34,500	0
h.	Gannon Thermal Discharge Study	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
i.	Polk NO <sub>x</sub> Emissions Reduction	0	0	0	0	0	0	0	0	0	0	0	0	0			0
j.	Bayside SCR and Ammonia	10,200	10,200	11,500	12,500	14,000	15,200	15,200	15,300	14,000	12,500	10,200	10,200	151,000			151,000
k.	Big Bend Unit 4 SOFA	0	0	0	0	0	0	0	0	0	0	0	0	0			0
l.	Big Bend Unit 1 Pre-SCR	0	0	0	0	0	0	0	0	0	0	0	0	0			0
m.	Big Bend Unit 2 Pre-SCR	0	0	0	0	0	0	0	0	0	0	0	0	0			0
n.	Big Bend Unit 3 Pre-SCR	0	0	0	0	0	0	0	0	0	0	0	0	0			0
o.	Clean Water Act Section 316(b) Phase II Study	5,000	0	0	0	2,575	2,575	0	0	0	0	0	0	10,150		10,150	0
p.	Arsenic Groundwater Standard Program	3,090	3,090	3,090	3,090	3,090	3,090	3,090	3,090	3,090	3,090	3,090	3,090	37,080		37,080	0
q.	Big Bend 1 SCR	0	0	0	0	0	0	0	0	0	0	0	0	0			0
r.	Big Bend 2 SCR	0	0	0	0	0	0	0	0	0	0	0	0	0			0
s.	Big Bend 3 SCR	20,928	9,136	43,640	9,136	35,926	25,553	26,808	30,500	33,748	64,667	43,844	28,637	372,522			372,522
t.	Big Bend 4 SCR	126,564	138,356	103,851	138,356	111,565	121,939	120,683	116,991	113,744	82,825	103,647	118,855	1,397,376			1,397,376
u.	Mercury Air Toxics Standards	0	0	2,000	0	0	0	0	0	0	0	0	0	2,000			2,000
v.	Greenhouse Gas Reduction Program	0	0	0	0	0	0	0	0	0	0	0	0	0			0
w.	Big Bend Gypsum Storage Facility (East 40)	101,103	101,103	101,103	101,103	101,103	101,103	101,103	101,103	101,103	101,103	101,103	101,103	1,213,236			1,213,236
x.	Coal Combustion Residuals (CCR) Rule - Phase I	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	77,500	930,000			930,000
y.	Big Bend ELG Compliance	412	412	412	412	412	412	412	412	412	412	412	412	4,944			4,944
z.	Coal Combustion Residuals (CCR) Rule - Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0			0
aa.	Big Bend Unit 1 Sec. 316(b) Impingement Mortality	0	0	0	0	0	0	0	0	0	0	0	0	0			0
2.	Total of O&M Activities	366,596	396,108	364,908	363,896	367,983	369,183	366,596	366,708	365,408	363,896	361,608	361,608	4,414,497		\$81,730	\$4,332,767
3.	Recoverable Costs Allocated to Energy	358,506	358,518	361,818	360,806	362,318	363,518	363,506	363,618	362,318	360,806	358,518	358,518	4,332,767			81,730
4.	Recoverable Costs Allocated to Demand	8,090	37,590	3,090	3,090	5,665	5,665	3,090	3,090	3,090	3,090	3,090	3,090	81,730			0
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	1.0000000			0
6.	Retail Demand Jurisdictional Factor	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000			0
7.	Jurisdictional Energy Recoverable Costs (A)	358,506	358,518	361,818	360,806	362,318	363,518	363,506	363,618	362,318	360,806	358,518	358,518	4,332,767			81,730
8.	Jurisdictional Demand Recoverable Costs (B)	8,090	37,590	3,090	3,090	5,665	5,665	3,090	3,090	3,090	3,090	3,090	3,090	81,730			0
9.	Total Jurisdictional Recoverable Costs for O&M Activities (Lines 7 + 8)	\$366,596	\$396,108	\$364,908	\$363,896	\$367,983	\$369,183	\$366,596	\$366,708	\$365,408	\$363,896	\$361,608	\$361,608	\$4,414,497			\$0

**Notes:**

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

17

**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
 January 2022 to December 2022

**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 Demand	Classification Energy	
1. a.	Big Bend Unit 3 Flue Gas Desulfurization Integration	1	\$77,338	\$77,137	\$76,935	\$76,732	\$76,530	\$76,329	\$76,126	\$75,924	\$75,723	\$75,520	\$75,318	\$75,117	\$914,729		\$914,729
b.	Big Bend Units 1 and 2 Flue Gas Conditioning	2	7,734	7,684	7,633	7,583	7,532	7,482	7,431	7,380	7,329	7,280	4,869	0	79,937		79,937
c.	Big Bend Unit 4 Continuous Emissions Monitors	3	3,795	3,779	3,763	3,746	3,730	3,714	3,698	3,682	3,666	3,650	3,633	3,617	44,473		44,473
d.	Big Bend Fuel Oil Tank # 1 Upgrade	4	0	0	0	0	0	0	0	0	0	0	0	0	0		0
e.	Big Bend Fuel Oil Tank # 2 Upgrade	5	0	0	0	0	0	0	0	0	0	0	0	0	0		0
f.	Big Bend Unit 1 Classifier Replacement	6	5,659	5,629	5,599	5,568	5,537	5,507	5,476	5,445	5,414	5,384	5,353	5,322	65,893		65,893
g.	Big Bend Unit 2 Classifier Replacement	7	4,147	4,126	4,105	4,084	4,063	4,042	4,021	3,998	3,977	3,956	3,935	3,914	48,366		48,366
h.	Big Bend Section 114 Mercury Testing Platform	8	674	673	671	668	667	665	663	661	658	657	655	652	7,964		7,964
i.	Big Bend Units 1 & 2 FGD	9	454,384	452,550	450,715	448,880	447,046	445,211	443,376	441,542	439,707	437,872	436,038	434,203	5,331,524		5,331,524
j.	Big Bend FGD Optimization and Utilization	10	128,684	128,351	128,017	127,683	127,349	127,015	126,682	126,348	126,014	125,680	125,347	125,013	1,522,184		1,522,184
k.	Big Bend NO <sub>x</sub> Emissions Reduction	11	42,186	42,114	42,044	41,973	41,901	41,830	41,758	41,687	41,615	41,544	41,472	41,402	501,526		501,526
l.	Big Bend PM Minimization and Monitoring	12	142,974	142,548	142,122	141,695	141,269	140,842	140,416	139,989	139,563	139,137	138,710	138,284	1,687,549		1,687,549
m.	Polk NO <sub>x</sub> Emissions Reduction	13	8,700	8,669	8,638	8,607	8,576	8,545	8,514	8,483	8,453	8,422	8,391	8,360	102,358		102,358
n.	Big Bend Unit 4 SOFA	14	15,776	15,731	15,686	15,642	15,597	15,552	15,507	15,463	15,418	15,373	15,328	15,283	186,356		186,356
o.	Big Bend Unit 1 Pre-SCR	15	10,518	10,479	10,441	10,402	10,364	10,325	10,287	10,249	10,210	10,172	10,133	10,095	123,675		123,675
p.	Big Bend Unit 2 Pre-SCR	16	10,137	10,104	10,069	10,035	10,001	9,966	9,933	9,898	9,864	9,830	9,796	9,761	119,394		119,394
q.	Big Bend Unit 3 Pre-SCR	17	18,380	18,324	18,268	18,212	18,157	18,101	18,046	17,990	17,934	17,878	17,822	17,766	216,878		216,878
r.	Big Bend Unit 1 SCR	18	602,472	600,307	598,140	595,975	593,810	591,644	589,479	587,314	585,148	582,982	580,817	578,652	7,086,740		7,086,740
s.	Big Bend Unit 2 SCR	19	666,864	664,676	662,488	660,300	658,112	655,924	653,736	651,548	649,360	647,172	644,984	642,796	7,857,860		7,857,860
t.	Big Bend Unit 3 SCR	20	543,457	541,691	539,925	538,159	536,394	534,628	532,863	531,097	529,332	527,566	525,801	524,035	6,404,948		6,404,948
u.	Big Bend Unit 4 SCR	21	445,135	443,773	442,412	441,050	439,688	438,326	436,965	435,604	434,242	432,880	431,519	430,157	5,251,751		5,251,751
v.	Big Bend FGD System Reliability	22	173,242	172,881	172,519	172,158	171,797	171,435	171,074	170,713	170,351	169,990	169,629	169,268	2,055,057		2,055,057
w.	Mercury Air Toxics Standards	23	67,169	67,012	66,856	66,699	66,543	66,387	66,230	66,074	65,917	65,761	65,604	65,448	795,700		795,700
x.	SO <sub>x</sub> Emissions Allowances (B)	24	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(2,880)		(2,880)
y.	Big Bend Gypsum Storage Facility	25	171,243	170,880	170,516	170,153	169,789	169,426	169,063	188,699	168,336	167,973	167,609	167,246	2,030,933		2,030,933
z.	Big Bend Coal Combustion Residual Rule (CCR Rule)	26	38,083	40,465	42,847	45,229	47,611	50,000	52,382	54,764	57,146	59,528	61,910	64,292	578,364	578,364	578,364
aa.	Coal Combustion Residuals (CCR-Phase II)	27	19,007	18,972	18,937	18,901	18,866	18,831	18,796	18,761	18,726	18,690	18,655	18,620	225,762		225,762
ab.	Big Bend ELG Compliance	28	98,581	110,209	119,912	127,618	136,200	144,782	153,364	161,946	170,528	179,110	187,692	196,274	2,221,518		2,221,518
ac.	Big Bend Unit 1 Impingement Mortality - 316(b)	29	91,850	94,769	97,157	99,710	101,574	102,057	102,084	102,102	102,103	102,103	102,103	102,103	1,199,715		1,199,715
2.	Total Investment Projects - Recoverable Costs		3,847,949	3,853,293	3,856,169	3,858,958	3,862,471	3,915,541	3,910,874	3,912,435	3,920,606	3,918,207	3,907,445	3,894,426	46,658,374	\$4,225,359	\$42,433,015
3.	Recoverable Costs Allocated to Energy		3,600,428	3,588,878	3,577,322	3,565,764	3,554,212	3,542,657	3,531,102	3,519,548	3,507,991	3,496,439	3,484,823	3,466,151	42,433,015		42,433,015
4.	Recoverable Costs Allocated to Demand		247,521	264,415	278,847	293,194	308,259	372,884	379,772	392,887	412,615	421,768	424,922	428,275	4,225,359	4,225,359	4,225,359
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)		3,600,428	3,588,878	3,577,322	3,565,764	3,554,212	3,542,657	3,531,102	3,519,548	3,507,991	3,496,439	3,484,823	3,466,151	42,433,015		42,433,015
8.	Jurisdictional Demand Recoverable Costs (D)		247,521	264,415	278,847	293,194	308,259	372,884	379,772	392,887	412,615	421,768	424,922	428,275	4,225,359		4,225,359
9.	Total Jurisdictional Recoverable Costs for Investment Projects (Lines 7 + 8)		\$3,847,949	\$3,853,293	\$3,856,169	\$3,858,958	\$3,862,471	\$3,915,541	\$3,910,874	\$3,912,435	\$3,920,606	\$3,918,207	\$3,907,445	\$3,894,426	\$46,658,374		\$46,658,374

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

**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263	\$13,763,263
3.	Less: Accumulated Depreciation	(6,824,505)	(6,853,343)	(6,882,181)	(6,911,019)	(6,939,857)	(6,968,695)	(6,997,533)	(7,026,371)	(7,055,209)	(7,084,047)	(7,112,885)	(7,141,723)	(7,170,561)	(7,170,561)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$6,938,758	6,909,920	6,881,082	6,852,244	6,823,406	6,794,568	6,765,730	6,736,892	6,708,054	6,679,216	6,650,378	6,621,540	6,592,702	
6.	Average Net Investment		6,924,339	6,895,501	6,866,663	6,837,825	6,808,987	6,780,149	6,751,311	6,722,473	6,693,635	6,664,797	6,635,959	6,607,121	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$39,064	\$38,902	\$38,739	\$38,576	\$38,413	\$38,251	\$38,088	\$37,925	\$37,763	\$37,600	\$37,437	\$37,275	\$458,033
b.	Debt Component Grossed Up For Taxes (C)		9,436	9,397	9,358	9,318	9,279	9,240	9,200	9,161	9,122	9,082	9,043	9,004	110,640
8.	Investment Expenses														
a.	Depreciation (D)		28,838	28,838	28,838	28,838	28,838	28,838	28,838	28,838	28,838	28,838	28,838	28,838	346,056
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)		77,338	77,137	76,935	76,732	76,530	76,329	76,126	75,924	75,723	75,520	75,318	75,117	914,729
a.	Recoverable Costs Allocated to Energy		77,338	77,137	76,935	76,732	76,530	76,329	76,126	75,924	75,723	75,520	75,318	75,117	914,729
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)		77,338	77,137	76,935	76,732	76,530	76,329	76,126	75,924	75,723	75,520	75,318	75,117	914,729
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)		\$77,338	\$77,137	\$76,935	\$76,732	\$76,530	\$76,329	\$76,126	\$75,924	\$75,723	\$75,520	\$75,318	\$75,117	\$914,729

**Notes:**

- (A) Applicable depreciable base for Big Bend: accounts 312.45 (\$13,435,775), 315.45 (\$327,307), and 312.40 (\$182).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 2.5%, 3.1%, and 3.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	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	(4,940,682)	(4,947,902)	(4,955,122)	(4,962,342)	(4,969,562)	(4,976,782)	(4,984,002)	(4,991,222)	(4,998,442)	(5,005,662)	(5,012,882)	(5,017,734)	(5,017,734)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$77,052	69,832	62,612	55,392	48,172	40,952	33,732	26,512	19,292	12,072	4,852	0	0	
6.	Average Net Investment		73,442	66,222	59,002	51,782	44,562	37,342	30,122	22,902	15,682	8,462	2,426	0	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$414	\$374	\$333	\$292	\$251	\$211	\$170	\$129	\$88	\$48	\$14	\$0	\$2,324
b.	Debt Component Grossed Up For Taxes (C)		100	90	80	71	61	51	41	31	21	12	3	0	561
8.	Investment Expenses														
a.	Depreciation (D)		7,220	7,220	7,220	7,220	7,220	7,220	7,220	7,220	7,220	7,220	4,852	0	77,052
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)		7,734	7,684	7,633	7,583	7,532	7,482	7,431	7,380	7,329	7,280	4,869	0	79,937
a.	Recoverable Costs Allocated to Energy		7,734	7,684	7,633	7,583	7,532	7,482	7,431	7,380	7,329	7,280	4,869	0	79,937
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)		7,734	7,684	7,633	7,583	7,532	7,482	7,431	7,380	7,329	7,280	4,869	0	79,937
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)		\$7,734	\$7,684	\$7,633	\$7,583	\$7,532	\$7,482	\$7,431	\$7,380	\$7,329	\$7,280	\$4,869	\$0	\$79,937

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$2,676,217) and 312.42 (\$2,341,517).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 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  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

Form 42-4P  
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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	0
c.	Retirements		0	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	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	(653,045)	(655,355)	(657,665)	(659,975)	(662,285)	(664,595)	(666,905)	(669,215)	(671,525)	(673,835)	(676,145)	(678,455)	(680,765)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$213,166	210,856	208,546	206,236	203,926	201,616	199,306	196,996	194,686	192,376	190,066	187,756	185,446	
6.	Average Net Investment		212,011	209,701	207,391	205,081	202,771	200,461	198,151	195,841	193,531	191,221	188,911	186,601	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$1,196	\$1,183	\$1,170	\$1,157	\$1,144	\$1,131	\$1,118	\$1,105	\$1,092	\$1,079	\$1,066	\$1,053	\$13,494
b.	Debt Component Grossed Up For Taxes (C)		289	286	283	279	276	273	270	267	264	261	257	254	3,259
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)		3,795	3,779	3,763	3,746	3,730	3,714	3,698	3,682	3,666	3,650	3,633	3,617	44,473
a.	Recoverable Costs Allocated to Energy		3,795	3,779	3,763	3,746	3,730	3,714	3,698	3,682	3,666	3,650	3,633	3,617	44,473
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)		3,795	3,779	3,763	3,746	3,730	3,714	3,698	3,682	3,666	3,650	3,633	3,617	44,473
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)		\$3,795	\$3,779	\$3,763	\$3,746	\$3,730	\$3,714	\$3,698	\$3,682	\$3,666	\$3,650	\$3,633	\$3,617	\$44,473

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 315.44
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 3.2%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	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	\$497,578
3.	Less: Accumulated Depreciation	(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)	(497,578)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.	Average Net Investment		0	0	0	0	0	0	0	0	0	0	0	0	0
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Debt Component Grossed Up For Taxes (C)		0	0	0	0	0	0	0	0	0	0	0	0	0
8.	Investment Expenses														
a.	Depreciation (D)		0	0	0	0	0	0	0	0	0	0	0	0	0
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)		0	0	0	0	0	0	0	0	0	0	0	0	0
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		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)		0	0	0	0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.40
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 12.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	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	\$818,401
3.	Less: Accumulated Depreciation	(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)	(818,401)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.	Average Net Investment		0	0	0	0	0	0	0	0	0	0	0	0	0
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Debt Component Grossed Up For Taxes (C)		0	0	0	0	0	0	0	0	0	0	0	0	0
8.	Investment Expenses														
a.	Depreciation (D)		0	0	0	0	0	0	0	0	0	0	0	0	0
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)		0	0	0	0	0	0	0	0	0	0	0	0	0
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		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)		0	0	0	0	0	0	0	0	0	0	0	0	0
13.	Retail Demand-Related Recoverable Costs (F)		0	0	0	0	0	0	0	0	0	0	0	0	0
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.40
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 12.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
 January 2022 to December 2022

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	0
c.	Retirements		0	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	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	(1,132,472)	(1,136,860)	(1,141,248)	(1,145,636)	(1,150,024)	(1,154,412)	(1,158,800)	(1,163,188)	(1,167,576)	(1,171,964)	(1,176,352)	(1,180,740)	(1,185,128)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$183,785	179,397	175,009	170,621	166,233	161,845	157,457	153,069	148,681	144,293	139,905	135,517	131,129	
6.	Average Net Investment		181,591	177,203	172,815	168,427	164,039	159,651	155,263	150,875	146,487	142,099	137,711	133,323	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$1,024	\$1,000	\$975	\$950	\$925	\$901	\$876	\$851	\$826	\$802	\$777	\$752	\$10,659
b.	Debt Component Grossed Up For Taxes (C)		247	241	236	230	224	218	212	206	200	194	188	182	2,578
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)		5,659	5,629	5,599	5,568	5,537	5,507	5,476	5,445	5,414	5,384	5,353	5,322	65,893
a.	Recoverable Costs Allocated to Energy		5,659	5,629	5,599	5,568	5,537	5,507	5,476	5,445	5,414	5,384	5,353	5,322	65,893
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)		5,659	5,629	5,599	5,568	5,537	5,507	5,476	5,445	5,414	5,384	5,353	5,322	65,893
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)		\$5,659	\$5,629	\$5,599	\$5,568	\$5,537	\$5,507	\$5,476	\$5,445	\$5,414	\$5,384	\$5,353	\$5,322	\$65,893

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.41
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 4.0%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

Form 42-4P  
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Return on Capital Investments, Depreciation and Taxes  
For Project: Big Bend Unit 2 Classifier Replacement  
(in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	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	0
d.	Other		0	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	\$984,794
3.	Less: Accumulated Depreciation	(824,598)	(827,634)	(830,670)	(833,706)	(836,742)	(839,778)	(842,814)	(845,850)	(848,886)	(851,922)	(854,958)	(857,994)	(861,030)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$160,196	157,160	154,124	151,088	148,052	145,016	141,980	138,944	135,908	132,872	129,836	126,800	123,764	
6.	Average Net Investment		158,678	155,642	152,606	149,570	146,534	143,498	140,462	137,426	134,390	131,354	128,318	125,282	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$895	\$878	\$861	\$844	\$827	\$810	\$792	\$775	\$758	\$741	\$724	\$707	\$9,612
b.	Debt Component Grossed Up For Taxes (C)		216	212	208	204	200	196	191	187	183	179	175	171	2,322
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)		4,147	4,126	4,105	4,084	4,063	4,042	4,019	3,998	3,977	3,956	3,935	3,914	48,366
a.	Recoverable Costs Allocated to Energy		4,147	4,126	4,105	4,084	4,063	4,042	4,019	3,998	3,977	3,956	3,935	3,914	48,366
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)		4,147	4,126	4,105	4,084	4,063	4,042	4,019	3,998	3,977	3,956	3,935	3,914	48,366
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)		\$4,147	\$4,126	\$4,105	\$4,084	\$4,063	\$4,042	\$4,019	\$3,998	\$3,977	\$3,956	\$3,935	\$3,914	\$48,366

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.42
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% 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  
Calculation of the Projected Period Amount  
January 2022 to December 2022

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	0
	c. Retirements		0	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	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	(65,923)	(66,215)	(66,507)	(66,799)	(67,091)	(67,383)	(67,675)	(67,967)	(68,259)	(68,551)	(68,843)	(69,135)	(69,427)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$54,814	54,522	54,230	53,938	53,646	53,354	53,062	52,770	52,478	52,186	51,894	51,602	51,310	
6.	Average Net Investment		54,668	54,376	54,084	53,792	53,500	53,208	52,916	52,624	52,332	52,040	51,748	51,456	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		\$308	\$307	\$305	\$303	\$302	\$300	\$299	\$297	\$295	\$294	\$292	\$290	\$3,592
	b. Debt Component Grossed Up For Taxes (C)		74	74	74	73	73	73	72	72	71	71	71	70	868
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)		674	673	671	668	667	665	663	661	658	657	655	652	7,964
	a. Recoverable Costs Allocated to Energy		674	673	671	668	667	665	663	661	658	657	655	652	7,964
	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)		674	673	671	668	667	665	663	661	658	657	655	652	7,964
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)		\$674	\$673	\$671	\$668	\$667	\$665	\$663	\$661	\$658	\$657	\$655	\$652	\$7,964

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 311.40
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 2.9%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Plant-in-Service/Depreciation Base (A)	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	\$95,255,242	
3.	Less: Accumulated Depreciation	(67,646,321)	(67,908,240)	(68,170,159)	(68,432,078)	(68,693,997)	(68,955,916)	(69,217,835)	(69,479,754)	(69,741,673)	(70,003,592)	(70,265,511)	(70,527,430)	(70,789,349)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$27,608,921	27,347,002	27,085,083	26,823,164	26,561,245	26,299,326	26,037,407	25,775,488	25,513,569	25,251,650	24,989,731	24,727,812	24,465,893	
6.	Average Net Investment		27,477,961	27,216,042	26,954,123	26,692,204	26,430,285	26,168,366	25,906,447	25,644,528	25,382,609	25,120,690	24,858,771	24,596,852	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$155,019	\$153,542	\$152,064	\$150,586	\$149,109	\$147,631	\$146,153	\$144,676	\$143,198	\$141,720	\$140,243	\$138,765	\$1,762,706
b.	Debt Component Grossed Up For Taxes (C)		37,446	37,089	36,732	36,375	36,018	35,661	35,304	34,947	34,590	34,233	33,876	33,519	425,790
8.	Investment Expenses														
a.	Depreciation (D)		261,919	261,919	261,919	261,919	261,919	261,919	261,919	261,919	261,919	261,919	261,919	261,919	3,143,028
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)		454,384	452,550	450,715	448,880	447,046	445,211	443,376	441,542	439,707	437,872	436,038	434,203	5,331,524
a.	Recoverable Costs Allocated to Energy		454,384	452,550	450,715	448,880	447,046	445,211	443,376	441,542	439,707	437,872	436,038	434,203	5,331,524
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)		454,384	452,550	450,715	448,880	447,046	445,211	443,376	441,542	439,707	437,872	436,038	434,203	5,331,524
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)		\$454,384	\$452,550	\$450,715	\$448,880	\$447,046	\$445,211	\$443,376	\$441,542	\$439,707	\$437,872	\$436,038	\$434,203	\$5,331,524

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.46 (\$94,929,061), 312.45 (\$105,398), and 315.46 (\$220,782).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 3.3%, 2.5%, and 3.5%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929	\$22,653,929
3.	Less: Accumulated Depreciation	(11,060,534)	(11,108,181)	(11,155,828)	(11,203,475)	(11,251,122)	(11,298,769)	(11,346,416)	(11,394,063)	(11,441,710)	(11,489,357)	(11,537,004)	(11,584,651)	(11,632,298)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$11,593,395	\$11,545,748	\$11,498,101	\$11,450,454	\$11,402,807	\$11,355,160	\$11,307,513	\$11,259,866	\$11,212,219	\$11,164,572	\$11,116,925	\$11,069,278	\$11,021,631	
6.	Average Net Investment		11,569,572	11,521,925	11,474,278	11,426,631	11,378,984	11,331,337	11,283,690	11,236,043	11,188,396	11,140,749	11,093,102	11,045,455	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$65,271	\$65,002	\$64,733	\$64,464	\$64,195	\$63,927	\$63,658	\$63,389	\$63,120	\$62,851	\$62,583	\$62,314	\$765,507
b.	Debt Component Grossed Up For Taxes (C)		15,766	15,702	15,637	15,572	15,507	15,442	15,377	15,312	15,247	15,182	15,117	15,052	184,913
8.	Investment Expenses														
a.	Depreciation (D)		47,647	47,647	47,647	47,647	47,647	47,647	47,647	47,647	47,647	47,647	47,647	47,647	571,764
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)		128,684	128,351	128,017	127,683	127,349	127,016	126,682	126,348	126,014	125,680	125,347	125,013	1,522,184
a.	Recoverable Costs Allocated to Energy		128,684	128,351	128,017	127,683	127,349	127,016	126,682	126,348	126,014	125,680	125,347	125,013	1,522,184
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)		128,684	128,351	128,017	127,683	127,349	127,016	126,682	126,348	126,014	125,680	125,347	125,013	1,522,184
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)		\$128,684	\$128,351	\$128,017	\$127,683	\$127,349	\$127,016	\$126,682	\$126,348	\$126,014	\$125,680	\$125,347	\$125,013	\$1,522,184

**Notes:**

- (A) Applicable depreciable base for Big Bend: accounts 312.45 (\$21,855,886), 311.45 (\$40,016), 316.40 (\$71,401), 315.45 (\$594,901), 312.42 (\$1,637), and 312.40 (\$90,088).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 2.5%, 2.0%, 4.2%, 3.1%, 3.7%, and 3.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
 January 2022 to December 2022

Return on Capital Investments, Depreciation and Taxes  
 For Project: Big Bend NO<sub>x</sub> Emissions Reduction  
 (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other		0	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	1,383,147	1,372,963	1,362,779	1,352,595	1,342,411	1,332,227	1,322,043	1,311,859	1,301,675	1,291,491	1,281,307	1,271,123	1,260,939	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$4,573,999	4,563,815	4,553,631	4,543,447	4,533,263	4,523,079	4,512,895	4,502,711	4,492,527	4,482,343	4,472,159	4,461,975	4,451,791	
6.	Average Net Investment		4,568,907	4,558,723	4,548,539	4,538,355	4,528,171	4,517,987	4,507,803	4,497,619	4,487,435	4,477,251	4,467,067	4,456,883	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$25,776	\$25,718	\$25,661	\$25,604	\$25,546	\$25,489	\$25,431	\$25,374	\$25,316	\$25,259	\$25,201	\$25,144	\$305,519
b.	Debt Component Grossed Up For Taxes (C)		6,226	6,212	6,199	6,185	6,171	6,157	6,143	6,129	6,115	6,101	6,087	6,074	73,799
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)		42,186	42,114	42,044	41,973	41,901	41,830	41,758	41,687	41,615	41,544	41,472	41,402	501,526
a.	Recoverable Costs Allocated to Energy		42,186	42,114	42,044	41,973	41,901	41,830	41,758	41,687	41,615	41,544	41,472	41,402	501,526
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)		42,186	42,114	42,044	41,973	41,901	41,830	41,758	41,687	41,615	41,544	41,472	41,402	501,526
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)		\$42,186	\$42,114	\$42,044	\$41,973	\$41,901	\$41,830	\$41,758	\$41,687	\$41,615	\$41,544	\$41,472	\$41,402	\$501,526

**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 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 4.0%, 3.7%, and 3.5%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750	\$19,757,750
3.	Less: Accumulated Depreciation	(8,005,714)	(8,066,586)	(8,127,458)	(8,188,330)	(8,249,202)	(8,310,074)	(8,370,946)	(8,431,818)	(8,492,690)	(8,553,562)	(8,614,434)	(8,675,306)	(8,736,178)	(8,797,050)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$11,752,036	\$11,691,164	\$11,630,292	\$11,569,420	\$11,508,548	\$11,447,676	\$11,386,804	\$11,325,932	\$11,265,060	\$11,204,188	\$11,143,316	\$11,082,444	\$11,021,572	\$11,021,572
6.	Average Net Investment		11,721,600	11,660,728	11,599,856	11,538,984	11,478,112	11,417,240	11,356,368	11,295,496	11,234,624	11,173,752	11,112,880	11,052,008	11,052,008
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$66,128	\$65,785	\$65,442	\$65,098	\$64,755	\$64,411	\$64,068	\$63,724	\$63,381	\$63,038	\$62,694	\$62,351	\$770,875
b.	Debt Component Grossed Up For Taxes (C)		15,974	15,891	15,808	15,725	15,642	15,559	15,476	15,393	15,310	15,227	15,144	15,061	186,210
8.	Investment Expenses														
a.	Depreciation (D)		60,872	60,872	60,872	60,872	60,872	60,872	60,872	60,872	60,872	60,872	60,872	60,872	730,464
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)		142,974	142,548	142,122	141,695	141,269	140,842	140,416	139,989	139,563	139,137	138,710	138,284	1,687,549
a.	Recoverable Costs Allocated to Energy		142,974	142,548	142,122	141,695	141,269	140,842	140,416	139,989	139,563	139,137	138,710	138,284	1,687,549
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	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	1.0000000
12.	Retail Energy-Related Recoverable Costs (E)		142,974	142,548	142,122	141,695	141,269	140,842	140,416	139,989	139,563	139,137	138,710	138,284	1,687,549
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)		\$142,974	\$142,548	\$142,122	\$141,695	\$141,269	\$140,842	\$140,416	\$139,989	\$139,563	\$139,137	\$138,710	\$138,284	\$1,687,549

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.41 (\$5,831,465), 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 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 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

**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
January 2022 to December 2022

Return on Capital Investments, Depreciation and Taxes  
For Project: Polk NO<sub>x</sub> Emissions Reduction  
(in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other		0	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	(948,762)	(953,186)	(957,610)	(962,034)	(966,458)	(970,882)	(975,306)	(979,730)	(984,154)	(988,578)	(993,002)	(997,426)	(1,001,850)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$612,711	608,287	603,863	599,439	595,015	590,591	586,167	581,743	577,319	572,895	568,471	564,047	559,623	
6.	Average Net Investment		610,499	606,075	601,651	597,227	592,803	588,379	583,955	579,531	575,107	570,683	566,259	561,835	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$3,444	\$3,419	\$3,394	\$3,369	\$3,344	\$3,319	\$3,294	\$3,269	\$3,245	\$3,220	\$3,195	\$3,170	\$39,682
b.	Debt Component Grossed Up For Taxes (C)		832	826	820	814	808	802	796	790	784	778	772	766	9,588
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)		8,700	8,669	8,638	8,607	8,576	8,545	8,514	8,483	8,453	8,422	8,391	8,360	102,358
a.	Recoverable Costs Allocated to Energy		8,700	8,669	8,638	8,607	8,576	8,545	8,514	8,483	8,453	8,422	8,391	8,360	102,358
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)		8,700	8,669	8,638	8,607	8,576	8,545	8,514	8,483	8,453	8,422	8,391	8,360	102,358
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)		\$8,700	\$8,669	\$8,638	\$8,607	\$8,576	\$8,545	\$8,514	\$8,483	\$8,453	\$8,422	\$8,391	\$8,360	\$102,358

**Notes:**

- (A) Applicable depreciable base for Polk; account 342.81
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% 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  
 Calculation of the Projected Period Amount  
 January 2022 to December 2022

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	0
c.	Retirements		0	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	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	\$2,558,730
3.	Less: Accumulated Depreciation	(1,216,490)	(1,222,887)	(1,229,284)	(1,235,681)	(1,242,078)	(1,248,475)	(1,254,872)	(1,261,269)	(1,267,666)	(1,274,063)	(1,280,460)	(1,286,857)	(1,293,254)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$1,342,240	1,335,843	1,329,446	1,323,049	1,316,652	1,310,255	1,303,858	1,297,461	1,291,064	1,284,667	1,278,270	1,271,873	1,265,476	
6.	Average Net Investment		1,339,042	1,332,645	1,326,248	1,319,851	1,313,454	1,307,057	1,300,660	1,294,263	1,287,866	1,281,469	1,275,072	1,268,675	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$7,554	\$7,518	\$7,482	\$7,446	\$7,410	\$7,374	\$7,338	\$7,302	\$7,266	\$7,230	\$7,193	\$7,157	\$88,270
b.	Debt Component Grossed Up For Taxes (C)		1,825	1,816	1,807	1,799	1,790	1,781	1,772	1,764	1,755	1,746	1,738	1,729	21,322
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)		15,776	15,731	15,686	15,642	15,597	15,552	15,507	15,463	15,418	15,373	15,328	15,283	186,356
a.	Recoverable Costs Allocated to Energy		15,776	15,731	15,686	15,642	15,597	15,552	15,507	15,463	15,418	15,373	15,328	15,283	186,356
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)		15,776	15,731	15,686	15,642	15,597	15,552	15,507	15,463	15,418	15,373	15,328	15,283	186,356
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)		\$15,776	\$15,731	\$15,686	\$15,642	\$15,597	\$15,552	\$15,507	\$15,463	\$15,418	\$15,373	\$15,328	\$15,283	\$186,356

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.44
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 3.0%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other		0	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	\$1,649,121
3.	Less: Accumulated Depreciation	(929,485)	(934,982)	(940,479)	(945,976)	(951,473)	(956,970)	(962,467)	(967,964)	(973,461)	(978,958)	(984,455)	(989,952)	(995,449)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$719,636	714,139	708,642	703,145	697,648	692,151	686,654	681,157	675,660	670,163	664,666	659,169	653,672	
6.	Average Net Investment		716,888	711,391	705,894	700,397	694,900	689,403	683,906	678,409	672,912	667,415	661,918	656,421	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$4,044	\$4,013	\$3,982	\$3,951	\$3,920	\$3,889	\$3,858	\$3,827	\$3,796	\$3,765	\$3,734	\$3,703	\$46,482
b.	Debt Component Grossed Up For Taxes (C)		977	969	962	954	947	939	932	925	917	910	902	895	11,229
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)		10,518	10,479	10,441	10,402	10,364	10,325	10,287	10,249	10,210	10,172	10,133	10,095	123,675
a.	Recoverable Costs Allocated to Energy		10,518	10,479	10,441	10,402	10,364	10,325	10,287	10,249	10,210	10,172	10,133	10,095	123,675
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)		10,518	10,479	10,441	10,402	10,364	10,325	10,287	10,249	10,210	10,172	10,133	10,095	123,675
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)		\$10,518	\$10,479	\$10,441	\$10,402	\$10,364	\$10,325	\$10,287	\$10,249	\$10,210	\$10,172	\$10,133	\$10,095	\$123,675

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.41
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 4.0%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
	c. Retirements		0	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	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	(828,416)	(833,293)	(838,170)	(843,047)	(847,924)	(852,801)	(857,678)	(862,555)	(867,432)	(872,309)	(877,186)	(882,063)	(886,940)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$753,471	748,594	743,717	738,840	733,963	729,086	724,209	719,332	714,455	709,578	704,701	699,824	694,947	
6.	Average Net Investment		751,033	746,156	741,279	736,402	731,525	726,648	721,771	716,894	712,017	707,140	702,263	697,386	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		\$4,237	\$4,210	\$4,182	\$4,154	\$4,127	\$4,099	\$4,072	\$4,044	\$4,017	\$3,989	\$3,962	\$3,934	\$49,027
	b. Debt Component Grossed Up For Taxes (C)		1,023	1,017	1,010	1,004	997	990	984	977	970	964	957	950	11,843
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)		10,137	10,104	10,069	10,035	10,001	9,966	9,933	9,898	9,864	9,830	9,796	9,761	119,394
	a. Recoverable Costs Allocated to Energy		10,137	10,104	10,069	10,035	10,001	9,966	9,933	9,898	9,864	9,830	9,796	9,761	119,394
	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)		10,137	10,104	10,069	10,035	10,001	9,966	9,933	9,898	9,864	9,830	9,796	9,761	119,394
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)		\$10,137	\$10,104	\$10,069	\$10,035	\$10,001	\$9,966	\$9,933	\$9,898	\$9,864	\$9,830	\$9,796	\$9,761	\$119,394

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 312.42
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% 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  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
	c. Retirements		0	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	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	\$2,706,507
3.	Less: Accumulated Depreciation	(1,213,946)	(1,221,899)	(1,229,852)	(1,237,805)	(1,245,758)	(1,253,711)	(1,261,664)	(1,269,617)	(1,277,570)	(1,285,523)	(1,293,476)	(1,301,429)	(1,309,382)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	<u>\$1,492,561</u>	<u>1,484,608</u>	<u>1,476,655</u>	<u>1,468,702</u>	<u>1,460,749</u>	<u>1,452,796</u>	<u>1,444,843</u>	<u>1,436,890</u>	<u>1,428,937</u>	<u>1,420,984</u>	<u>1,413,031</u>	<u>1,405,078</u>	<u>1,397,125</u>	
6.	Average Net Investment		1,488,585	1,480,632	1,472,679	1,464,726	1,456,773	1,448,820	1,440,867	1,432,914	1,424,961	1,417,008	1,409,055	1,401,102	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		\$8,398	\$8,353	\$8,308	\$8,263	\$8,219	\$8,174	\$8,129	\$8,084	\$8,039	\$7,994	\$7,949	\$7,904	\$97,814
	b. Debt Component Grossed Up For Taxes (C)		2,029	2,018	2,007	1,996	1,985	1,974	1,964	1,953	1,942	1,931	1,920	1,909	23,628
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)		18,380	18,324	18,268	18,212	18,157	18,101	18,046	17,990	17,934	17,878	17,822	17,766	216,878
	a. Recoverable Costs Allocated to Energy		18,380	18,324	18,268	18,212	18,157	18,101	18,046	17,990	17,934	17,878	17,822	17,766	216,878
	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)		18,380	18,324	18,268	18,212	18,157	18,101	18,046	17,990	17,934	17,878	17,822	17,766	216,878
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)		<u>\$18,380</u>	<u>\$18,324</u>	<u>\$18,268</u>	<u>\$18,212</u>	<u>\$18,157</u>	<u>\$18,101</u>	<u>\$18,046</u>	<u>\$17,990</u>	<u>\$17,934</u>	<u>\$17,878</u>	<u>\$17,822</u>	<u>\$17,766</u>	<u>\$216,878</u>

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.43 (\$1,995,677) and 315.43 (\$710,830).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% 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  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102	\$85,719,102
3.	Less: Accumulated Depreciation	(43,689,606)	(43,998,772)	(44,307,938)	(44,617,104)	(44,926,270)	(45,235,436)	(45,544,602)	(45,853,768)	(46,162,934)	(46,472,100)	(46,781,266)	(47,090,432)	(47,399,598)	(47,708,764)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$42,029,496	41,720,330	41,411,164	41,101,998	40,792,832	40,483,666	40,174,500	39,865,334	39,556,168	39,247,002	38,937,836	38,628,670	38,319,504	
6.	Average Net Investment		41,874,913	41,565,747	41,256,581	40,947,415	40,638,249	40,329,083	40,019,917	39,710,751	39,401,585	39,092,419	38,783,253	38,474,087	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$236,241	\$234,497	\$232,752	\$231,008	\$229,264	\$227,520	\$225,776	\$224,032	\$222,287	\$220,543	\$218,799	\$217,055	\$2,719,774
b.	Debt Component Grossed Up For Taxes (C)		57,065	56,644	56,222	55,801	55,380	54,958	54,537	54,116	53,695	53,273	52,852	52,431	656,974
8.	Investment Expenses														
a.	Depreciation (D)		309,166	309,166	309,166	309,166	309,166	309,166	309,166	309,166	309,166	309,166	309,166	309,166	3,709,992
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)		602,472	600,307	598,140	595,975	593,810	591,644	589,479	587,314	585,148	582,982	580,817	578,652	7,086,740
a.	Recoverable Costs Allocated to Energy		602,472	600,307	598,140	595,975	593,810	591,644	589,479	587,314	585,148	582,982	580,817	578,652	7,086,740
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)		602,472	600,307	598,140	595,975	593,810	591,644	589,479	587,314	585,148	582,982	580,817	578,652	7,086,740
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)		\$602,472	\$600,307	\$598,140	\$595,975	\$593,810	\$591,644	\$589,479	\$587,314	\$585,148	\$582,982	\$580,817	\$578,652	\$7,086,740

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 311.51 (\$22,278,982), 312.51 (\$48,529,672), 315.51 (\$14,063,245), and 316.51 (\$847,203).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% 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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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
	c. Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133	\$96,538,133
3.	Less: Accumulated Depreciation	(45,772,284)	(46,084,661)	(46,397,038)	(46,709,415)	(47,021,792)	(47,334,169)	(47,646,546)	(47,958,923)	(48,271,300)	(48,583,677)	(48,896,054)	(49,208,431)	(49,520,808)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$50,765,849	50,453,472	50,141,095	49,828,718	49,516,341	49,203,964	48,891,587	48,579,210	48,266,833	47,954,456	47,642,079	47,329,702	47,017,325	
6.	Average Net Investment		50,609,660	50,297,283	49,984,906	49,672,529	49,360,152	49,047,775	48,735,398	48,423,021	48,110,644	47,798,267	47,485,890	47,173,513	
7.	Return on Average Net Investment														
	a. Equity Component Grossed Up For Taxes (B)		\$285,519	\$283,756	\$281,994	\$280,232	\$278,469	\$276,707	\$274,945	\$273,183	\$271,420	\$269,658	\$267,896	\$266,133	\$3,309,912
	b. Debt Component Grossed Up For Taxes (C)		68,968	68,543	68,117	67,691	67,266	66,840	66,414	65,988	65,563	65,137	64,711	64,286	799,524
8.	Investment Expenses														
	a. Depreciation (D)		312,377	312,377	312,377	312,377	312,377	312,377	312,377	312,377	312,377	312,377	312,377	312,377	3,748,524
	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)		666,864	664,676	662,488	660,300	658,112	655,924	653,736	651,548	649,360	647,172	644,984	642,796	7,857,960
	a. Recoverable Costs Allocated to Energy		666,864	664,676	662,488	660,300	658,112	655,924	653,736	651,548	649,360	647,172	644,984	642,796	7,857,960
	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)		666,864	664,676	662,488	660,300	658,112	655,924	653,736	651,548	649,360	647,172	644,984	642,796	7,857,960
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)		\$666,864	\$664,676	\$662,488	\$660,300	\$658,112	\$655,924	\$653,736	\$651,548	\$649,360	\$647,172	\$644,984	\$642,796	\$7,857,960

**Notes:**

- (A) Applicable depreciable base for Big Bend; account 311.52 (\$25,208,869), 312.52 (\$54,456,221), 315.52 (\$15,914,427), and 316.52 (\$958,616).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rates are 3.5%, 4.0%, 4.1% and 3.7%.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other		0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Plant-in-Service/Depreciation Base (A)	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602	\$81,764,602
3.	Less: Accumulated Depreciation	(40,038,249)	(40,290,323)	(40,542,397)	(40,794,471)	(41,046,545)	(41,298,619)	(41,550,693)	(41,802,767)	(42,054,841)	(42,306,915)	(42,558,989)	(42,811,063)	(43,063,137)	(43,063,137)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$41,726,353	41,474,279	41,222,205	40,970,131	40,718,057	40,465,983	40,213,909	39,961,835	39,709,761	39,457,687	39,205,613	38,953,539	38,701,465	
6.	Average Net Investment		41,600,316	41,348,242	41,096,168	40,844,094	40,592,020	40,339,946	40,087,872	39,835,798	39,583,724	39,331,650	39,079,576	38,827,502	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$234,692	\$233,270	\$231,847	\$230,425	\$229,003	\$227,581	\$226,159	\$224,737	\$223,315	\$221,893	\$220,471	\$219,049	\$2,722,442
b.	Debt Component Grossed Up For Taxes (C)		56,691	56,347	56,004	55,660	55,317	54,973	54,630	54,286	53,943	53,599	53,256	52,912	657,618
8.	Investment Expenses														
a.	Depreciation (D)		252,074	252,074	252,074	252,074	252,074	252,074	252,074	252,074	252,074	252,074	252,074	252,074	3,024,888
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)		543,457	541,691	539,925	538,159	536,394	534,628	532,863	531,097	529,332	527,566	525,801	524,035	6,404,948
a.	Recoverable Costs Allocated to Energy		543,457	541,691	539,925	538,159	536,394	534,628	532,863	531,097	529,332	527,566	525,801	524,035	6,404,948
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	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	1.0000000	1.0000000
12.	Retail Energy-Related Recoverable Costs (E)		543,457	541,691	539,925	538,159	536,394	534,628	532,863	531,097	529,332	527,566	525,801	524,035	6,404,948
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)		\$543,457	\$541,691	\$539,925	\$538,159	\$536,394	\$534,628	\$532,863	\$531,097	\$529,332	\$527,566	\$525,801	\$524,035	\$6,404,948

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 311.53 (\$21,689,422), 312.53 (\$45,559,543), 315.53 (\$13,690,954), and 316.53 (\$824,684).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 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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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833	\$67,588,833
3.	Less: Accumulated Depreciation (31,694,919)	(31,694,919)	(31,889,322)	(32,083,725)	(32,278,128)	(32,472,531)	(32,666,934)	(32,861,337)	(33,055,740)	(33,250,143)	(33,444,546)	(33,638,949)	(33,833,352)	(34,027,755)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$35,893,914	\$35,699,511	\$35,505,108	\$35,310,705	\$35,116,302	\$34,921,899	\$34,727,496	\$34,533,093	\$34,338,690	\$34,144,287	\$33,949,884	\$33,755,481	\$33,561,078	
6.	Average Net Investment		35,796,713	35,602,310	35,407,907	35,213,504	35,019,101	34,824,698	34,630,295	34,435,892	34,241,489	34,047,086	33,852,683	33,658,280	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$201,950	\$200,853	\$199,757	\$198,660	\$197,563	\$196,466	\$195,370	\$194,273	\$193,176	\$192,079	\$190,983	\$189,886	\$2,351,016
b.	Debt Component Grossed Up For Taxes (C)		48,782	48,517	48,252	47,987	47,722	47,457	47,192	46,928	46,663	46,398	46,133	45,868	567,899
8.	Investment Expenses														
a.	Depreciation (D)		194,403	194,403	194,403	194,403	194,403	194,403	194,403	194,403	194,403	194,403	194,403	194,403	2,332,836
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)		445,135	443,773	442,412	441,050	439,688	438,326	436,965	435,604	434,242	432,880	431,519	430,157	5,251,751
a.	Recoverable Costs Allocated to Energy		445,135	443,773	442,412	441,050	439,688	438,326	436,965	435,604	434,242	432,880	431,519	430,157	5,251,751
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)		445,135	443,773	442,412	441,050	439,688	438,326	436,965	435,604	434,242	432,880	431,519	430,157	5,251,751
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)		\$445,135	\$443,773	\$442,412	\$441,050	\$439,688	\$438,326	\$436,965	\$435,604	\$434,242	\$432,880	\$431,519	\$430,157	\$5,251,751

**Notes:**

- (A) Applicable depreciable base for Big Bend: accounts 311.54 (\$16,857,250), 312.54 (\$38,069,546), 315.54 (\$10,642,027), 316.54 (\$687,934), 315.40 (\$558,103).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 2.4%, 3.8%, 3.9%, 3.3%, 3.7%, 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  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other		0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Plant-in-Service/Depreciation Base (A)	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806	\$24,467,806
3.	Less: Accumulated Depreciation	(7,072,849)	(7,124,431)	(7,176,013)	(7,227,595)	(7,279,177)	(7,330,759)	(7,382,341)	(7,433,923)	(7,485,505)	(7,537,087)	(7,588,669)	(7,640,251)	(7,691,833)	(7,691,833)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$17,394,957	17,343,375	17,291,793	17,240,211	17,188,629	17,137,047	17,085,465	17,033,883	16,982,301	16,930,719	16,879,137	16,827,555	16,775,973	
6.	Average Net Investment		17,369,166	17,317,584	17,266,002	17,214,420	17,162,838	17,111,256	17,059,674	17,008,092	16,956,510	16,904,928	16,853,346	16,801,764	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$97,990	\$97,699	\$97,408	\$97,117	\$96,826	\$96,535	\$96,244	\$95,953	\$95,662	\$95,371	\$95,080	\$94,789	\$1,156,674
b.	Debt Component Grossed Up For Taxes (C)		23,670	23,600	23,529	23,459	23,389	23,318	23,248	23,178	23,107	23,037	22,967	22,897	279,399
8.	Investment Expenses														
a.	Depreciation (D)		51,582	51,582	51,582	51,582	51,582	51,582	51,582	51,582	51,582	51,582	51,582	51,582	618,984
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)		173,242	172,881	172,519	172,158	171,797	171,435	171,074	170,713	170,351	169,990	169,629	169,268	2,055,057
a.	Recoverable Costs Allocated to Energy		173,242	172,881	172,519	172,158	171,797	171,435	171,074	170,713	170,351	169,990	169,629	169,268	2,055,057
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	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	1.0000000	1.0000000
12.	Retail Energy-Related Recoverable Costs (E)		173,242	172,881	172,519	172,158	171,797	171,435	171,074	170,713	170,351	169,990	169,629	169,268	2,055,057
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)		\$173,242	\$172,881	\$172,519	\$172,158	\$171,797	\$171,435	\$171,074	\$170,713	\$170,351	\$169,990	\$169,629	\$169,268	\$2,055,057

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.45 (\$23,011,597) and 312.44 (\$1,456,209).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% 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  
 Calculation of the Projected Period Amount  
 January 2022 to December 2022

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	\$8,635,028	
3.	Less: Accumulated Depreciation	(2,223,006)	(2,245,341)	(2,267,676)	(2,290,011)	(2,312,346)	(2,334,681)	(2,357,016)	(2,379,351)	(2,401,686)	(2,424,021)	(2,446,356)	(2,468,691)	(2,491,026)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$6,412,022	6,389,687	6,367,352	6,345,017	6,322,682	6,300,347	6,278,012	6,255,677	6,233,342	6,211,007	6,188,672	6,166,337	6,144,002	
6.	Average Net Investment		6,400,854	6,378,519	6,356,184	6,333,849	6,311,514	6,289,179	6,266,844	6,244,509	6,222,174	6,199,839	6,177,504	6,155,169	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$36,111	\$35,985	\$35,859	\$35,733	\$35,607	\$35,481	\$35,355	\$35,229	\$35,103	\$34,977	\$34,851	\$34,725	\$425,016
b.	Debt Component Grossed Up For Taxes (C)		8,723	8,692	8,662	8,631	8,601	8,571	8,540	8,510	8,479	8,449	8,418	8,388	102,664
8.	Investment Expenses														
a.	Depreciation (D)		22,335	22,335	22,335	22,335	22,335	22,335	22,335	22,335	22,335	22,335	22,335	22,335	268,020
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)		67,169	67,012	66,856	66,699	66,543	66,387	66,230	66,074	65,917	65,761	65,604	65,448	795,700
a.	Recoverable Costs Allocated to Energy		67,169	67,012	66,856	66,699	66,543	66,387	66,230	66,074	65,917	65,761	65,604	65,448	795,700
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)		67,169	67,012	66,856	66,699	66,543	66,387	66,230	66,074	65,917	65,761	65,604	65,448	795,700
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)		\$67,169	\$67,012	\$66,856	\$66,699	\$66,543	\$66,387	\$66,230	\$66,074	\$65,917	\$65,761	\$65,604	\$65,448	\$795,700

**Notes:**

- (A) Applicable depreciable base for Big Bend and Polk; accounts 312.44 (\$3,427,481), 341.80 (\$26,150), 315.40 (\$1,226,949), 315.41 (\$138,853), 315.42 (\$138,853), 312.45 (\$2,053,017), 312.46 (\$1,242,315), 315.44 (\$16,035), 315.45 (\$40,217), 315.46 (\$50,784), 311.40 (\$13,216), 345.81 (\$2,232), 312.54 (\$210,295), 312.40 (\$13,614), and 395.00 (\$35,018).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 3.0%, 2.2%, 3.7%, 3.5%, 3.3%, 2.5%, 3.3%, 3.2%, 3.1%, 3.5%, 2.9%, 3.3%, 3.8%, 3.4%, and 14.3%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

For Project: SO<sub>2</sub> 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	0
	c. Auction Proceeds/Other		0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Working Capital Balance														0
	a. FERC 158.1 Allowance Inventory	\$0	\$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	0
	c. FERC 182.3 Other Regl. Assets - Losses	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	d. FERC 254.01 Regulatory Liabilities - Gains	(34,201)	(34,189)	(34,189)	(34,189)	(34,177)	(34,177)	(34,177)	(34,164)	(34,164)	(34,164)	(34,152)	(34,152)	(34,152)	(34,152)
3.	Total Working Capital Balance	(\$34,201)	(34,189)	(34,189)	(34,189)	(34,177)	(34,177)	(34,177)	(34,164)	(34,164)	(34,164)	(34,152)	(34,152)	(34,152)	(34,152)
4.	Average Net Working Capital Balance		(\$34,195)	(\$34,189)	(\$34,189)	(\$34,183)	(\$34,177)	(\$34,177)	(\$34,171)	(\$34,164)	(\$34,164)	(\$34,158)	(\$34,152)	(\$34,152)	
5.	Return on Average Net Working Capital Balance														
	a. Equity Component Grossed Up For Taxes (A)		(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(\$193)	(2,316)
	b. Debt Component Grossed Up For Taxes (B)		(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(47)	(564)
6.	Total Return Component		(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(240)	(2,880)
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 <sub>2</sub> Allowance Expense		(5)	7	7	(5)	7	7	(5)	7	7	(5)	7	7	41
8.	Net Expenses (D)		(5)	7	7	(5)	7	7	(5)	7	7	(5)	7	7	41
9.	Total System Recoverable Expenses (Lines 6 + 8)		(245)	(233)	(233)	(245)	(233)	(233)	(245)	(233)	(233)	(245)	(233)	(233)	(2,839)
	a. Recoverable Costs Allocated to Energy		(245)	(233)	(233)	(245)	(233)	(233)	(245)	(233)	(233)	(245)	(233)	(233)	(2,839)
	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)		(245)	(233)	(233)	(245)	(233)	(233)	(245)	(233)	(233)	(245)	(233)	(233)	(2,844)
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)		(\$245)	(\$233)	(\$233)	(\$245)	(\$233)	(\$233)	(\$245)	(\$233)	(\$233)	(\$245)	(\$233)	(\$233)	(\$2,844)

**Notes:**

- (A) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (B) Line 6 x 1.6353% 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

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

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	0
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359	\$21,467,359
3.	Less: Accumulated Depreciation	(4,399,971)	(4,451,850)	(4,503,729)	(4,555,608)	(4,607,487)	(4,659,366)	(4,711,245)	(4,763,124)	(4,815,003)	(4,866,882)	(4,918,761)	(4,970,640)	(5,022,519)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$17,067,388	17,015,509	16,963,630	16,911,751	16,859,872	16,807,993	16,756,114	16,704,235	16,652,356	16,600,477	16,548,598	16,496,719	16,444,840	
6.	Average Net Investment		17,041,449	16,989,570	16,937,691	16,885,812	16,833,933	16,782,054	16,730,175	16,678,296	16,626,417	16,574,538	16,522,659	16,470,780	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$96,141	\$95,848	\$95,555	\$95,263	\$94,970	\$94,677	\$94,385	\$94,092	\$93,799	\$93,507	\$93,214	\$92,921	\$1,134,372
b.	Debt Component Grossed Up For Taxes (C)		23,223	23,153	23,082	23,011	22,940	22,870	22,799	22,728	22,658	22,587	22,516	22,446	274,013
8.	Investment Expenses														
a.	Depreciation (D)		51,879	51,879	51,879	51,879	51,879	51,879	51,879	51,879	51,879	51,879	51,879	51,879	622,548
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)		171,243	170,880	170,516	170,153	169,789	169,426	169,063	168,699	168,336	167,973	167,609	167,246	2,030,933
a.	Recoverable Costs Allocated to Energy		171,243	170,880	170,516	170,153	169,789	169,426	169,063	168,699	168,336	167,973	167,609	167,246	2,030,933
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)		171,243	170,880	170,516	170,153	169,789	169,426	169,063	168,699	168,336	167,973	167,609	167,246	2,030,933
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)		\$171,243	\$170,880	\$170,516	\$170,153	\$169,789	\$169,426	\$169,063	\$168,699	\$168,336	\$167,973	\$167,609	\$167,246	\$2,030,933

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 311.40
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 2.9%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
Environmental Cost Recovery Clause  
Calculation of the Projected Period Amount  
**January 2022 to December 2022**

Return on Capital Investments, Depreciation and Taxes  
For Project: Big Bend Coal Combustion Residual Rule (CCR Rule)  
(in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$250,000	\$250,000	\$250,000	\$750,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000
b.	Clearings to Plant		250,000	250,000	250,000	750,000	0	0	0	0	0	0	0	0	1,500,000
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$3,903,531	\$4,153,531	\$4,403,531	\$4,653,531	\$5,403,531	\$5,403,531	\$5,403,531	\$5,403,531	\$5,403,531	\$5,403,531	\$5,403,531	\$5,403,531	\$5,403,531	
3.	Less: Accumulated Depreciation	(117,761)	(128,489)	(139,925)	(152,070)	(164,923)	(179,901)	(194,879)	(209,857)	(224,835)	(239,813)	(254,791)	(269,769)	(284,747)	
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$3,785,770	4,025,042	4,263,606	4,501,461	5,238,608	5,223,630	5,208,652	5,193,674	5,178,696	5,163,718	5,148,740	5,133,762	5,118,784	
6.	Average Net Investment		3,905,406	4,144,324	4,382,534	4,870,035	5,231,119	5,216,141	5,201,163	5,186,185	5,171,207	5,156,229	5,141,251	5,126,273	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$22,033	\$23,381	\$24,724	\$27,475	\$29,512	\$29,427	\$29,343	\$29,258	\$29,174	\$29,089	\$29,005	\$28,920	\$331,341
b.	Debt Component Grossed Up For Taxes (C)		5,322	5,648	5,972	6,637	7,129	7,108	7,088	7,067	7,047	7,027	7,006	6,986	80,037
8.	Investment Expenses														
a.	Depreciation (D)		10,728	11,436	12,145	12,853	14,978	14,978	14,978	14,978	14,978	14,978	14,978	14,978	166,986
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)		38,083	40,465	42,841	46,965	51,619	51,513	51,409	51,303	51,199	51,094	50,989	50,884	578,364
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		38,083	40,465	42,841	46,965	51,619	51,513	51,409	51,303	51,199	51,094	50,989	50,884	578,364
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)		38,083	40,465	42,841	46,965	51,619	51,513	51,409	51,303	51,199	51,094	50,989	50,884	578,364
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$38,083	\$40,465	\$42,841	\$46,965	\$51,619	\$51,513	\$51,409	\$51,303	\$51,199	\$51,094	\$50,989	\$50,884	\$578,364

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 311.40 (\$261,568), 312.44 (\$668,735) and 312.40 (\$4,473,228).
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 2.9%, 3.0% and 3.4%
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

Return on Capital Investments, Depreciation and Taxes  
 For Project: Coal Combustion Residuals (CCR Rule - Phase II)  
 (in Dollars)

Line	Description	Beginning of Period Amount	Projected January	Projected February	Projected March	Projected April	Projected May	Projected June	Projected July	Projected August	Projected September	Projected October	Projected November	Projected December	End of Period Total
1.	Investments														
a.	Expenditures/Additions		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Plant-in-Service/Depreciation Base (A)	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031	\$2,009,031
3.	Less: Accumulated Depreciation	(10,046)	(15,069)	(20,092)	(25,115)	(30,138)	(35,161)	(40,184)	(45,207)	(50,230)	(55,253)	(60,276)	(65,299)	(70,322)	(70,322)
4.	CWIP - Non-Interest Bearing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.	Net Investment (Lines 2 + 3 + 4)	\$1,998,985	1,993,962	1,988,939	1,983,916	1,978,893	1,973,870	1,968,847	1,963,824	1,958,801	1,953,778	1,948,755	1,943,732	1,938,709	1,938,709
6.	Average Net Investment		1,996,474	1,991,451	1,986,428	1,981,405	1,976,382	1,971,359	1,966,336	1,961,313	1,956,290	1,951,267	1,946,244	1,941,221	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$11,263	\$11,235	\$11,207	\$11,178	\$11,150	\$11,122	\$11,093	\$11,065	\$11,037	\$11,008	\$10,980	\$10,952	\$133,290
b.	Debt Component Grossed Up For Taxes (C)		2,721	2,714	2,707	2,700	2,693	2,686	2,680	2,673	2,666	2,659	2,652	2,645	32,196
8.	Investment Expenses														
a.	Depreciation (D)		5,023	5,023	5,023	5,023	5,023	5,023	5,023	5,023	5,023	5,023	5,023	5,023	60,276
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)		19,007	18,972	18,937	18,901	18,866	18,831	18,796	18,761	18,726	18,690	18,655	18,620	225,762
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		19,007	18,972	18,937	18,901	18,866	18,831	18,796	18,761	18,726	18,690	18,655	18,620	225,762
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)		19,007	18,972	18,937	18,901	18,866	18,831	18,796	18,761	18,726	18,690	18,655	18,620	225,762
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$19,007	\$18,972	\$18,937	\$18,901	\$18,866	\$18,831	\$18,796	\$18,761	\$18,726	\$18,690	\$18,655	\$18,620	\$225,762

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.44.
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate 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  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

Return on Capital Investments, Depreciation and Taxes  
 For Project: Big Bend ELG Compliance  
 (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		\$1,685,199	\$1,635,199	\$1,135,199	\$1,065,199	\$1,385,199	\$735,199	\$785,199	\$2,480,199	\$1,315,199	\$415,199	\$335,199	\$538,245	\$13,510,436
b.	Clearings to Plant		0	0	0	0	20,137,642	735,199	785,199	2,480,199	1,315,199	415,199	335,199	538,245	26,742,082
c.	Retirements		0	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	0
2.	Plant-in-Service/Depreciation Base (A)	\$0	\$0	\$0	\$0	\$0	\$20,137,642	\$20,872,842	\$21,658,041	\$24,138,240	\$25,453,439	\$25,868,639	\$26,203,838	\$26,742,082	
3.	Less: Accumulated Depreciation	0	0	0	0	0	0	(57,057)	(116,197)	(177,561)	(245,953)	(318,071)	(391,365)	(465,609)	
4.	CWIP - Non-Interest Bearing	13,231,646	14,916,846	16,552,045	17,687,244	18,752,443	0	0	0	0	0	0	0	0	
5.	Net Investment (Lines 2 + 3 + 4)	\$13,231,646	14,916,846	16,552,045	17,687,244	18,752,443	20,137,642	20,815,785	21,541,844	23,960,679	25,207,486	25,550,568	25,812,473	26,276,473	
6.	Average Net Investment		14,074,246	15,734,445	17,119,644	18,219,844	19,445,043	20,476,714	21,178,814	22,751,261	24,584,083	25,379,027	25,681,520	26,044,473	
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$79,401	\$88,767	\$96,582	\$102,789	\$109,701	\$115,521	\$119,482	\$128,353	\$138,693	\$143,178	\$144,884	\$146,932	\$1,414,283
b.	Debt Component Grossed Up For Taxes (C)		19,180	21,442	23,330	24,829	26,499	27,905	28,861	31,004	33,502	34,585	34,997	35,492	341,626
8.	Investment Expenses														
a.	Depreciation (D)		0	0	0	0	0	57,057	59,140	61,364	68,392	72,118	73,294	74,244	465,609
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)		98,581	110,209	119,912	127,618	136,200	200,483	207,483	220,721	240,587	249,881	253,175	256,668	2,221,518
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		98,581	110,209	119,912	127,618	136,200	200,483	207,483	220,721	240,587	249,881	253,175	256,668	2,221,518
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	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	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)		98,581	110,209	119,912	127,618	136,200	200,483	207,483	220,721	240,587	249,881	253,175	256,668	2,221,518
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$98,581	\$110,209	\$119,912	\$127,618	\$136,200	\$200,483	\$207,483	\$220,721	\$240,587	\$249,881	\$253,175	\$256,668	\$2,221,518

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts 312.40
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is 3.4%.
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
**January 2022 to December 2022**

Return on Capital Investments, Depreciation and Taxes  
 For Project: Big Bend Unit 1 Section 316(b) Impingement Mortality  
 (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		\$483,000	\$350,572	\$331,138	\$398,007	\$134,000	\$4,000	\$4,000	\$657	\$0	\$0	\$0	\$0	\$1,705,374
b.	Clearings to Plant		0	0	0	0	0	0	0	0	0	0	0	0	0
c.	Retirements		0	0	0	0	0	0	0	0	0	0	0	0	0
d.	Other - AFUDC (excl from CWIP)		0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Plant-in-Service/Depreciation Base (A)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3.	Less: Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.	CWIP - Non-Interest Bearing	12,871,825	13,354,825	13,705,397	14,036,535	14,434,542	14,568,542	14,572,542	14,576,542	14,577,199	14,577,199	14,577,199	14,577,199	14,577,199	14,577,199
5.	Net Investment (Lines 2 + 3 + 4)	\$12,871,825	13,354,825	13,705,397	14,036,535	14,434,542	14,568,542	14,572,542	14,576,542	14,577,199	14,577,199	14,577,199	14,577,199	14,577,199	14,577,199
6.	Average Net Investment		13,113,325	13,530,111	13,870,966	14,235,539	14,501,542	14,570,542	14,574,542	14,576,871	14,577,199	14,577,199	14,577,199	14,577,199	14,577,199
7.	Return on Average Net Investment														
a.	Equity Component Grossed Up For Taxes (B)		\$73,980	\$76,331	\$78,254	\$80,311	\$81,812	\$82,201	\$82,223	\$82,237	\$82,238	\$82,238	\$82,238	\$82,238	\$966,301
b.	Debt Component Grossed Up For Taxes (C)		17,870	18,438	18,903	19,399	19,762	19,856	19,861	19,865	19,865	19,865	19,865	19,865	233,414
8.	Investment Expenses														
a.	Depreciation (D)		0	0	0	0	0	0	0	0	0	0	0	0	0
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)		91,850	94,769	97,157	99,710	101,574	102,057	102,084	102,102	102,103	102,103	102,103	102,103	1,199,715
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		91,850	94,769	97,157	99,710	101,574	102,057	102,084	102,102	102,103	102,103	102,103	102,103	1,199,715
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	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	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)		91,850	94,769	97,157	99,710	101,574	102,057	102,084	102,102	102,103	102,103	102,103	102,103	1,199,715
14.	Total Jurisdictional Recoverable Costs (Lines 12 + 13)		\$91,850	\$94,769	\$97,157	\$99,710	\$101,574	\$102,057	\$102,084	\$102,102	\$102,103	\$102,103	\$102,103	\$102,103	\$1,199,715

**Notes:**

- (A) Applicable depreciable base for Big Bend; accounts TBD depending on type of plant added
- (B) Line 6 x 6.7699% x 1/12. Based on ROE of 10.75% and weighted income tax rate of 25.345% (expansion factor of 1.34315)
- (C) Line 6 x 1.6353% x 1/12
- (D) Applicable depreciation rate is TBD depending on type of plant added
- (E) Line 9a x Line 10
- (F) Line 9b x Line 11

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**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 2021 through December 2021, is \$903,783 compared to the original projection of \$906,095.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 19960688-EI, Order No. PSC-1996-1048-FOF-EI, issued August 14, 1996. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$914,729.

There are not any projected O&M costs for the period January 2022 through December 2022.



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**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<sub>2</sub> is converted to SO<sub>3</sub>. 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 2021 through December 2021 is \$192,990 compared to the original projection of \$193,042.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 19960688-EI, Order No. PSC-1996-1048-FOF-EI, issued August 14, 1996. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$79,937.

There are not any O&M costs projected for the period of January 2022 through December 2022.

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**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<sub>2</sub>, NO<sub>x</sub> 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 2021 through December 2021 is \$45,522 compared to the original projection of \$45,598.

**Progress Summary:** This project was approved by the Commission in Docket No. 19960688-EI, Order No. PSC-1996-1048-FOF-EI, issued August 14, 1996. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$44,473.

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**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<sub>x</sub> 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<sub>x</sub> levels.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$69,128 compared to the original projection of \$69,201.

**Progress Summary:** This project was approved by the Commission in Docket No. 19980007-EI, Order No. PSC-1998-1764-FOF-EI, issued December 31, 1998. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$ 65,893.

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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<sub>x</sub> 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<sub>x</sub> levels.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$50,424 compared to the original projection of \$50,482.

**Progress Summary:** This project was approved by the Commission in Docket No. 19980007-EI, Order No. PSC-1998-1764-FOF-EI, issued December 31, 1998. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$48,366.

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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<sub>2</sub> 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 was required by January 1, 2000. The CAAA impose SO<sub>2</sub> 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 2021 through December 2021 is \$5,431,446 compared to the original projection of \$5,440,931.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$8,966 compared to the original estimate of \$0, resulting in a variance of 100 percent. The variance is due to Big Bend Unit 2 operating the FGD system when generating by natural gas which was not originally anticipated but is required for cooling gases to protect system ductwork.

**Progress Summary:** This project was approved by the Commission in Docket No. 19980693-EI, Order No. PSC-1999-0075-FOF-EI, issued January 11, 1999. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$5,331,524.

There are not any O&M costs projected for the period January 2022 through December 2022.

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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 EPA the authority to request the collection of information necessary for it to study whether it is appropriate and necessary to develop performance of 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 2021 through December 2021 is \$7,943 compared to the original projection of \$7,958.

**Progress Summary:** This project was approved by the Commission in Docket No. 19990976-EI, Order No. PSC-1999-2103-PAA-EI, issued October 25, 1999. The project was placed in service in December 1999 and completed in May 2000.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$7,964.

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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<sub>2</sub> 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 performed.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$1,503,371 compared to the original projection of \$1,507,233.

**Progress Summary:** This project was approved by the Commission in Docket No. 20000685-EI, Order No. PSC-2000-1906-PAA-EI, issued October 18, 2000. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$1,522,184.

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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 make O&M and capital expenditures.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$1,680,736 compared to the original projection of \$1,684,675.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$218,747 compared to the original projection of \$252,000, resulting in a variance of -13.2 percent. This variance is due to Big Bend Units operating less than projected. As a result, less maintenance is required.

**Progress Summary:** This project was approved by the Commission in Docket No. 20001186-EI, Order No. PSC-2000-2104-PAA-EI, issued November 6, 2000. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$1,687,549.

The estimated O&M costs for the period January 2022 through December 2022 are \$259,560.



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**Project Title:** Big Bend NO<sub>x</sub> 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<sub>x</sub> emissions at Big Bend Station. By 2002, the Consent Decree required the company to achieve at least a 30 percent reduction beyond 1998 NO<sub>x</sub> emission levels for Big Bend Units 1 and 2 and at least a 15 percent reduction in NO<sub>x</sub> emissions from Big Bend Unit 3. Tampa Electric identified and completed projects that were the first steps to decrease NO<sub>x</sub> 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 2021 through December 2021 is \$485,706 compared to the original projection of \$487,214.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$2,950 compared to the original projection of \$2,028, resulting in a variance of 45.5 percent. This variance is due to maintenance required on a secondary damper that was more than originally projected.

**Progress Summary:** This project was approved by the Commission in Docket No. 20001186-EI, Order No. PSC-2000-2104-PAA-EI, issued November 6, 2000. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$501,526.

The estimated O&M costs projected for the period January 2022 through December 2022 are \$2,089.

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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 AEI Segundo bottom to the tank as well as installing a leak detection system, installing a spill containment for piping fittings and valves surrounding the tank, installing a new truck unloading facility and spill containment for the truck unloading facility, installing level instrumentation for overflow 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 2021 through December 2021 is \$63,892 compared to the original projection of \$63,896.

**Progress Summary:** This project was approved by the Commission in Docket No. 19980007-EI, Order No. PSC-1998-0408-FOF-EI, issued March 18, 1998. The project has been retired.

**Projections:** The investment was fully amortized in 2021. There is neither depreciation nor return for the period January 2022 through December 2022.

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

**Project Description:**

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

The scope of work for this project included cleaning and inspecting the tank in accordance with API 653 specifications, coating the internal floor plus 30 inches up the tank wall, installing an AEI Segundo bottom to the tank as well as installing a leak detection system, installing a spill containment for piping fittings and valves surrounding the tank, installing a new truck unloading facility and spill containment for the truck unloading facility, installing level instrumentation for overfill protection, installing secondary containment for below ground piping or reroute to above ground, and conducting a tank closure assessment.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$105,079 compared to the original projection of \$105,098.

**Progress Summary:** This project was approved by the Commission in Docket No. 19980007-EI, Order No. PSC-1998-0408-FOF-EI, issued March 18, 1998. The project has been retired.

**Projections:** The investment was fully amortized in 2021. There is neither depreciation nor return for the period January 2022 through December 2022.

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**Project Title:** SO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub>) equal to the number of tons of SO<sub>2</sub> 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 2021 through December 2021 is (\$2,688) compared to the original projection of (\$2,688).

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$41 compared to the original projection of \$15. The variance is not material.

**Progress Summary:** SO<sub>2</sub> emission allowances are being used by Tampa Electric to meet compliance standards for Phase I of the CAAA.

**Project Projections:** The estimated return on average net working capital for the period January 2022 through December 2022 is (\$2,880).

The estimated O&M costs for the period January 2022 through December 2022 are \$41.

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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, and Bayside Stations are affected by this rule.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated O&M costs for the period January 2021 through December 2021 is \$34,500 compared to the original projection of \$23,500. The variance is 46.8 percent and is due to Polk NPDES fees not being included in setting the original projection.

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

**Projections:** The estimated O&M costs for the period January 2022 through December 2022 are \$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 within 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 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 20010593-EI, Order No. PSC-2001-1847-PAA-EI on September 4, 2001. The project is complete and in service.

**Projections:** There are not any O&M costs projected for the period January 2022 through December 2022.

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**Project Title:** Polk NO<sub>x</sub> Emissions Reduction

**Project Description:**

This project was designed to meet a lower NO<sub>x</sub> 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<sub>2</sub> 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 2021 through December 2021 is \$103,219 compared to the original projection of \$103,428.

The actual/estimated O&M costs for the period January 2021 through December 2021 is \$595 compared to the original projection of \$0. The variance is 100 percent and is due to costs being charged to the project work order in error. The amount will be reversed in July 2021.

**Progress Summary:** This project was approved by the Commission in Docket No. 20020726-EI, Order No. PSC-2002-1445-PAA-EI on October 21, 2002. The project is complete and in service.

**Project Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$102,358.

There are not any O&M costs projected for the period of January 2022 through December 2022.

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**Project Title:** Bayside SCR Consumables

**Project Description:**

This project is necessary to achieve the NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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 costs for the period January 2021 through December 2021 are \$139,173 compared to the original projection of \$119,000. The variance is 17 percent and is due to Bayside Station generation being greater than originally projected, leading to the need for more consumables.

**Progress Summary:** This project was approved by the Commission in Docket No. 20021255-EI, Order No. PSC-2003-0469-PAA-EI, issued April 4, 2003. Annual O&M expenses will continue to be incurred.

**Projections:** The estimated O&M costs for the period January 2022 through December 2022 are projected to be \$151,000.



**Tampa Electric Company**  
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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<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> 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 2021 through December 2021 is \$185,038 compared to the original projection of \$185,486.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 20030226-EI, Order No. PSC-2003-0684-PAA-EI, issued June 6, 2003. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$186,356.

There are not any O&M costs projected for the period of January 2022 through December 2022.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times from 2021 through 2022. Thus, the installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements. This project was a necessary precursor to an SCR system designed to reduce inlet NO<sub>x</sub> 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 2021 through December 2021 is \$124,987 compared to the original projection of \$125,229.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 20040750-EI, Order No. PSC-2004-0986-CO-EI, issued October 11, 2004. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$123,675.

There are not any O&M costs projected for the period of January 2022 through December 2022.

**Tampa Electric Company**  
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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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times from 2021 through 2022. Thus, the installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements. This project was a necessary precursor to an SCR system designed to reduce inlet NO<sub>x</sub> 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 2021 through December 2021 is \$119,909 compared to the original projection of \$120,162.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 20040750-EI, Order No. PSC-2004-0986-CO-EI, issued October 11, 2004. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$119,394.

There are not any O&M costs projected for the period of January 2022 through December 2022.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times from 2021 through 2022. Thus, the installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements. This project was a necessary precursor to an SCR system designed to reduce inlet NO<sub>x</sub> 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 2021 through December 2021 is \$216,230 compared to the original projection of \$216,730.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 20040750-EI, Order No. PSC-2004-0986-CO-EI, issued October 11, 2004. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$216,878.

There are not any O&M costs projected for the period of January 2022 through December 2022.

**Tampa Electric Company**  
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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 meet certain criteria to comply with national performance standards for impingement and entrainment. Accordingly, Tampa Electric must develop its compliance strategies for its Bayside and Big Bend 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 costs for the period January 2021 through December 2021 are \$6,020 compared to the original projection of \$45,000, resulting in a variance of -86.6 percent. This variance is due to the delay in receiving the NPDES permit. Once the permit is received, the costs will be incurred.

**Progress Summary:** This project was approved by the Commission in Docket No. 20041300-EI, Order No. PSC-2005-0164-PAA-EI, issued February 10, 2005.

**Projections:** The estimated O&M costs for the period January 2022 through December 2022 are \$10,150.

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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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times. The installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$7,151,546 compared to the original projection of \$7,165,809.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 20041376-EI, Order No. PSC-2005-0502-CO-EI, issued May 9, 2005. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$7,086,740.

There are not any O&M costs projected for the period January 2022 through December 2022.

**Tampa Electric Company**  
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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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times. The installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$7,876,719 compared to the original projection of \$7,893,828.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$106,340 compared to the original projection of \$122,020, resulting in a variance of -12.9 percent. This variance is due to current estimates of Big Bend Unit 2 SCR maintenance costs, while generating on natural gas, are expected to be lower than originally projected, along with less total generation than originally estimated.

**Progress Summary:** This project was approved by the Commission in Docket No. 20041376-EI, Order No. PSC-2005-0502-CO-EI, issued May 9, 2005. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$7,857,960.

There are not any O&M costs projected for the period January 2022 through December 2022.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
**January 2022 through December 2022**  
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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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times. The installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$6,415,803 compared to the original projection of \$6,429,857.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$542,672 compared to the original projection of \$524,097, resulting in a variance of 3.5 percent.

**Progress Summary:** This project was approved by the Commission in Docket No. 20041376-EI, Order No. PSC-2005-0502-CO-EI, issued May 9, 2005. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$6,404,948.

The estimated O&M costs for the period January 2022 through December 2022 are \$372,522.



**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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**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<sub>x</sub> emissions at Big Bend Station on a per unit basis at prescribed times. The installation of cost-effective SCR technology on the generating units was necessary to meet NO<sub>x</sub> emissions requirements.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$5,168,642 compared to the original projection of \$5,199,976.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$893,479 compared to the original projection of \$1,077,230, resulting in a variance of -17.1 percent. This variance is due to current estimates of Big Bend Unit 4 SCR maintenance costs, while generating on natural gas, are expected to be lower than originally projected, along with less total generation than originally projected.

**Progress Summary:** This project was approved by the Commission in Docket No. 20040750-EI, Order No. PSC-2004-0986-PAA-EI, issued October 11, 2004. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$5,251,751.

The estimated O&M costs for the period January 2022 through December 2022 are \$1,397,376.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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**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 costs for the period January 2021 through December 2021 are \$0 compared to the original projection of \$36,000. This variance is due to the delay of groundwater monitoring work while awaiting Florida Department of Environmental Protection (“FDEP”) approval of the company’s plan. Once the permit is received, the costs will be incurred.

**Progress Summary:** This project was approved by the Commission in Docket No. 20050683-EI, Order No. PSC-2006-0138-PAA-EI, issued February 23, 2006. The project is complete and in service.

**Projections:** The estimated O&M costs for the period of January 2022 through December 2022 are \$37,080.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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**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 2021 through December 2021 is \$2,007,420 compared to the original projection of \$2,013,174.

**Progress Summary:** This project was approved by the Commission in Docket No. 20050598-EI, Order No. PSC-2006-0602-PAA-EI, issued July 10, 2006. The project is complete and in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$2,055,057.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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**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 2021 through December 2021 is \$781,102 compared to the original projection of \$783,036.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$5,494 compared to the original projection of \$3,000, resulting in a variance of 83.1 percent. This variance is due to higher cost of mercury traps used for stack testing than originally projected.

**Progress Summary:** This project was approved by the Commission in Docket No. 20120302-EI, Order No. PSC-2013-0191-PAA-EI, issued May 6, 2013. The project is in service.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is projected to be \$795,700.

The estimated O&M costs for the period January 2022 through December 2022 are projected to be \$2,000.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
**January 2022 through December 2022**  
**Description and Progress Report for**  
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**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 costs for the period January 2021 through December 2021 is \$93,149 compared to the original projection of \$93,528.

**Progress Summary:** This project was approved by the Commission in Docket No. 20090508-EI, Order No. PSC-2010-0157-PAA-EI, issued March 22, 2010. The project is complete and in service.

**Projections:** There are no O&M costs projected for the period January 2022 through December 2022.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
**January 2022 through December 2022**  
**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 was no longer sufficient to hold the entire gypsum inventory, and Tampa Electric needed an additional storage facility. The new storage facility covers approximately 27 acres and holds approximately 870,000 tons of gypsum.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$1,985,437 compared to the original projection of \$1,991,084.

The actual/estimated O&M costs for the period January 2021 through December 2021 are \$621,996 compared to the original projection of \$1,177,899, resulting in a variance of -47.2 percent. The variance is due to a reduction in coal generation, compared to the original projection, so the amount of gypsum storage processing is reduced.

**Progress Summary:** This project was approved by the Commission in Docket No. 20110262-EI, Order No. PSC-2012-0493-PAA-EI, issued September 26, 2012. The project was placed in service in November 2014.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$2,030,933.

The estimated O&M costs for the period January 2022 through December 2022 are \$1,213,236.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
**January 2022 through December 2022**  
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**Project Title:** Big Bend Coal Combustion Residuals (“CCR”) Rule - Phase I & II

**Project Description:**

On April 17, 2015, the EPA published the CCR Rule with an effective date of October 19, 2015. The new rule requires the safe disposal of CCR in landfills and surface impoundments. Compliance activities include placing fugitive emissions dust control plans, increasing inspections, installing new groundwater monitoring wells, and closure of certain impoundments at CCR regulated management units.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 for Phase I and Phase II is \$325,512 and \$128,327 compared to the original projections of \$362,933 and \$328,169, respectively. The variances are due to timing differences in the project schedules when compared to the original projections. Because CCR removal activities have experienced project schedule delays early on, the final Project capital activities related to restoration of the site have been delayed. The project expenditures are still needed and will be incurred in the future.

The actual/estimated O&M costs for the period January 2021 through December 2021 for Phase I and Phase II are \$763,222 and \$5,813,349, respectively, compared to the original projections of \$0 and \$0, resulting in variances of 100% and 100%, respectively. The variances are due to timing differences in project schedules when compared to original projections. Another contributing factor to the increase is that more CCR material than originally estimated has been removed from the sites.

**Progress Summary:** Phase I was approved by the Commission in Docket No. 20150223-EI, Order No. PSC-2016-0068-PAA-EI, issued February 9, 2016. Phase II was approved by the Commission in Docket No. 20170168-EI, Order No. 2017-0483-PAA-EI, issued December 22, 2017.

**Projections:** Estimated depreciation plus return for the period January 2022 through December 2022 for Phase I and Phase II is \$578,364 and \$225,762, respectively.

The projected O&M costs for the period January 2022 through December 2022 for Phase I and Phase II are \$930,000 and \$0, respectively.

**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
**January 2022 through December 2022**  
**Description and Progress Report for**  
**Environmental Compliance Activities and Projects**

**Project Title:** Big Bend ELG Compliance

**Project Description:**

On November 3, 2015, the EPA published the ELG Rule with an effective date of January 4, 2016. The ELG Rule establish limits for wastewater discharges from flue gas desulfurization (“FGD”) processes, fly ash and bottom ash transport water, leachate from ponds and landfills containing coal combustion residuals (“CCR”), gasification processes, and flue gas mercury controls. The final rule requires compliance as soon as possible after November 1, 2020, and no later than December 31, 2023. Tampa Electric hired an engineering consulting firm to perform the Big Bend ELG Compliance Study, completed in 2018, that concluded with a determination of the most appropriate ELG compliance measures identified.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 for Big Bend ELG Compliance is \$439,715 compared to the original projection of \$782,650. This variance is due to timing differences in the project schedule when compared to the original projection. Project activities have occurred more slowly than originally projected due to permitting delays. FDEP issued its permit regarding the project on April 10, 2020. The project expenditures are still needed and will be incurred in the future.

The actual/estimated O&M costs for the period January 2021 through December 2021 for Big Bend ELG Compliance are \$0, compared to \$4,800 in the original projection. This variance is due to timing differences in the project schedule when compared to the original projection. The costs will be incurred in the future.

**Progress Summary:** The Study program was approved by the Commission in Docket No. 20160027-EI, Order No. PSC-2016-0248-PAA-EI, issued June 28, 2016, and it is now complete. The Compliance Project was approved by the Commission in Docket No. 2018007-EI, Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018.

**Projections:** The ELG Rule Compliance program estimated depreciation plus return for the period January 2022 through December 2022 is \$2,221,518.

The estimated O&M costs projected for the period of January 2022 through December 2022 are \$4,944.



**Tampa Electric Company**  
**Environmental Cost Recovery Clause**  
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**Project Title:** Big Bend Unit 1 Section 316(b) Impingement Mortality

**Project Description:**

In August 2014, the Environmental Protection Agency (“EPA”) published their final rule regarding Section 316(b) of the Clean Water Act. The rule became effective in October 2014. The rule establishes requirements for cooling water intake structures (“CWIS”) at existing facilities. Section 316(b) requires that the location, design, construction, and capacity of CWIS reflect the best technology available (“BTA”) for minimizing adverse environmental impacts. For this project, compliance activities include modifying the existing Big Bend Unit 1 CWIS to reduce impingement mortality of affected living organisms.

**Project Accomplishments:**

**Fiscal Expenditures:** The actual/estimated depreciation plus return for the period January 2021 through December 2021 is \$484,564, compared to the original projection of \$452,502. This variance is due to timing differences in the project schedule when compared to the original projection. Earlier permit and material delivery logistic delays have been resolved and as such, project activities are getting back on track.

The actual/estimated O&M expense for the period January 2021 through December 2021 is \$0 and did not vary from the original projection.

**Progress Summary:** This project was approved by the Commission in Docket No. 2018007-EI, Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018.

**Projections:** The estimated depreciation plus return for the period January 2022 through December 2022 is \$1,199,715.

There are not any O&M costs projected for the period of January 2022 through December 2022.

**Tampa Electric Company**  
 Environmental Cost Recovery Clause (ECRC)  
 Calculation of the Energy & Demand Allocation % By Rate Class  
**January 2022 to December 2022**

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	52.98%	9,728,165	9,728,165	2,096	1.07447	1.05324	10,246,140	2,252	49.27%	59.48%	58.69%
GS, CS	62.08%	953,392	953,392	175	1.07447	1.05323	1,004,138	188	4.83%	4.97%	4.96%
GSD, SBF	79.61%	8,099,346	8,085,442	1,161	1.06971	1.04880	8,494,582	1,242	40.85%	32.81%	33.43%
IS	105.90%	920,157	903,648	99	1.03064	1.01680	935,613	102	4.50%	2.69%	2.83%
LS1	802.58%	110,703	110,703	2	1.07447	1.05324	116,598	2	0.56%	0.05%	0.09%
TOTAL *		19,811,763	19,781,350	3,533			20,797,071	3,786	100%	100%	100%

- Notes:
- (1) Average 12 CP load factor based on 2022 Projected calendar data
  - (2) Projected MWh sales for the period January 2022 to December 2022
  - (3) Effective sales at secondary level for the period January 2022 to December 2022.
  - (4) Column 2 / (Column 1 x 8760)
  - (5) Based on 2022 projected demand losses.
  - (6) Based on 2022 projected energy losses.
  - (7) Column 2 x Column 6
  - (8) Column 4 x Column 5
  - (9) Column 7 / Total Column 7
  - (10) Column 8 / Total Column 8
  - (11) Column 9 x 1/13 + Column 10 x 12/13

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

**Tampa Electric Company**  
 Environmental Cost Recovery Clause (ECRC)  
 Calculation of the Energy & Demand Allocation % By Rate Class  
 January 2022 to December 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Rate Class	Percentage of MWh Sales at Generation (%)	12 CP & 25% Allocation Factor (%)	Energy-Related Costs (\$)	Demand-Related Costs (\$)	Total Environmental Costs (\$)	Projected Sales at Meter (MWh)	Effective Sales at Secondary Level (MWh)	Environmental Cost Recovery Factors (¢/kWh)
RS	49.26%	58.69%	23,034,871	2,582,533	25,617,404	9,728,165	9,728,165	<b>0.263</b>
GS, CS	4.83%	4.96%	2,258,596	218,255	2,476,851	953,392	953,392	<b>0.260</b>
GSD, SBF	40.85%	33.43%	19,102,203	1,471,019	20,573,222	8,099,346	8,085,442	
Secondary								<b>0.254</b>
Primary								<b>0.252</b>
Transmission								<b>0.249</b>
IS	4.50%	2.83%	2,104,282	124,528	2,228,810	920,157	903,648	
Secondary								<b>0.247</b>
Primary								<b>0.244</b>
Transmission								<b>0.242</b>
LS1	0.56%	0.09%	261,866	3,960	265,826	110,703	110,703	<b>0.240</b>
<b>TOTAL *</b>	<b>100.00%</b>	<b>100.00%</b>	<b>46,761,818</b>	<b>4,400,295</b>	<b>51,162,113</b>	<b>19,811,763</b>	<b>19,781,350</b>	<b>0.259</b>

\* 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

**Tampa Electric Company**  
 Environmental Cost Recovery Clause  
 Calculation of the Projected Period Amount  
January 2022 to December 2022

Form 42 - 8P

**Calculation of Revenue Requirement Rate of Return**  
 (in Dollars)

	(1) Jurisdictional Rate Base 2022 Adj. FESR with Normalization (\$000)	(2) Ratio %	(3) Cost Rate %	(4) Weighted Cost Rate %
Long Term Debt	\$ 2,799,863	35.02%	4.17%	1.4604%
Short Term Debt	237,124	2.97%	1.01%	0.0300%
Preferred Stock	0	0.00%	0.00%	0.0000%
Customer Deposits	91,410	1.14%	2.44%	0.0279%
Common Equity	3,646,406	45.61%	10.75%	4.9030%
Accum. Deferred Inc. Taxes & Zero Cost ITC's	954,275	11.94%	0.00%	0.0000%
Deferred ITC - Weighted Cost	<u>265,755</u>	<u>3.32%</u>	7.65%	<u>0.2543%</u>
<b>Total</b>	<b>\$ <u>7,994,833</u></b>	<b><u>100.00%</u></b>		<b><u>6.68%</u></b>

**ITC split between Debt and Equity:**

Long Term Debt	\$ 2,799,863	Long Term Debt	46.00%
Equity - Preferred	0	Equity - Preferred	0.00%
Equity - Common	<u>3,646,406</u>	Equity - Common	<u>54.00%</u>
<b>Total</b>	<b>\$ <u>6,446,269</u></b>	<b>Total</b>	<b><u>100.00%</u></b>

**Deferred ITC - Weighted Cost:**

Debt = 0.2123% * 46.00%	0.1170%
Equity = 0.2123% * 54.00%	<u>0.1373%</u>
Weighted Cost	<u>0.2543%</u>

**Total Equity Cost Rate:**

Preferred Stock	0.0000%
Common Equity	4.9030%
Deferred ITC - Weighted Cost	<u>0.1373%</u>
	5.0403%
Times Tax Multiplier	1.34315
Total Equity Component	<u>6.7699%</u>

**Total Debt Cost Rate:**

Long Term Debt	1.4604%
Short Term Debt	0.0300%
Customer Deposits	0.0279%
Deferred ITC - Weighted Cost	<u>0.1170%</u>
Total Debt Component	<u>1.6353%</u>
<b>Total Cost of Capital</b>	<b><u>8.4052%</u></b>

**Notes:**

Column (1) - Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology.  
 Column (2) - Column (1) / Total Column (1)  
 Column (3) - Per Order No. PSC-2020-0165-PAA-EU, issued May 20, 2020, approving amended joint motion modifying WACC methodology..  
 Column (4) - Column (2) x Column (3)



**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20210007-EI**

**ENVIRONMENTAL COST RECOVERY FACTORS**

**PROJECTIONS**

**JANUARY 2022 THROUGH DECEMBER 2022**

**TESTIMONY  
OF  
BYRON T. BURROWS**

**FILED: AUGUST 27, 2021**

1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **PREPARED DIRECT TESTIMONY**

3   **OF**

4   **BYRON T. BURROWS**

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

8  
9   **A.**   My name is Byron T. Burrows. My business address is 702  
10           North Franklin Street, Tampa, Florida 33602. I am employed  
11           by Tampa Electric Company ("Tampa Electric" or "company")  
12           as Director, Environmental Services Department.

13  
14   **Q.**   Please provide a brief outline of your educational  
15           background and business experience.

16  
17   **A.**   I received a Bachelor of Science degree in Civil  
18           Engineering from the University of South Florida in 1995.  
19           I have been a Registered Professional Engineer in the  
20           state of Florida since 1999. Prior to joining Tampa  
21           Electric, I worked in environmental consulting for  
22           sixteen years. In January 2001, I joined TECO Power  
23           Services as Manager-Environmental with primary  
24           responsibility for all power plant environmental  
25           permitting, and I have primarily worked in the areas of

1 environmental, health and safety. In 2005, I became  
2 Manager of Air Programs. My responsibilities included air  
3 permitting and compliance related matters. In 2020, I was  
4 promoted to my current position, Director of  
5 Environmental Services. My responsibilities include the  
6 development and administration of the company's  
7 environmental policies and goals. I am also responsible  
8 for ensuring resources, procedures, and programs comply  
9 with applicable environmental requirements, and that  
10 rules and polices are in place, function properly, and  
11 are consistently applied throughout the company.

12  
13 **Q.** What is the purpose of your testimony in this proceeding?  
14

15 **A.** The purpose of my testimony is to demonstrate that the  
16 activities for which Tampa Electric seeks cost recovery  
17 through the Environmental Cost Recovery Clause ("ECRC")  
18 for the January 2022 through December 2022 projection  
19 period are activities related to programs previously  
20 approved by the Commission for recovery through the ECRC.  
21

22 **Q.** Please provide an overview of the environmental  
23 compliance requirements that are the result of the Consent  
24 Final Judgment ("CFJ") entered into with the Florida  
25 Department of Environmental Protection ("FDEP") and the

1 Consent Decree ("CD") lodged with the U.S. Environmental  
2 Protection Agency ("EPA") and the Department of Justice  
3 ("the Orders").  
4

5 **A.** The general requirements of the Orders provide for further  
6 reductions of sulfur dioxide ("SO<sub>2</sub>"), particulate matter  
7 ("PM") and nitrogen oxides ("NO<sub>x</sub>") emissions at Big Bend  
8 Station. Tampa Electric has implemented the requirements  
9 of the Orders, and now these agreements have been  
10 terminated by the corresponding court systems. The  
11 ongoing requirements of these projects, which are further  
12 described later in my testimony, are now part of the Big  
13 Bend Title V operating permit (0570039-128-AV). The  
14 projects that are now required under the operating permit  
15 are listed below.

- 16 • Big Bend Particulate Matter ("PM") Minimization  
17 Program
- 18 • Big Bend NO<sub>x</sub> Emission Reduction Program
- 19 • Big Bend Units 1 - 3 Pre-Selective Catalytic  
20 Reduction ("SCR") Projects
- 21 • Big Bend Units 1 - 4 SCR Projects

22  
23 **Q.** Does the termination of the Orders change any of the  
24 environmental compliance requirements applicable to the  
25 company's generating units?



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

5  
6 **Q.** Please describe the Big Bend PM Minimization and  
7 Monitoring program activities and provide the estimated  
8 capital and O&M expenditures for the period of January  
9 2022 through December 2022.

10  
11 **A.** The Big Bend PM Minimization and Monitoring Program was  
12 approved by the Commission in Docket No. 20001186-EI,  
13 Order No. PSC-2000-2104-PAA-EI, issued November 6, 2000.  
14 In the order, the Commission found that the program met  
15 the requirements for recovery through the ECRC. Tampa  
16 Electric had previously identified various projects to  
17 improve precipitator performance and reduce PM emissions  
18 as required by the Orders. Tampa Electric does not  
19 anticipate any capital expenditures for this program  
20 during 2022; however, the O&M expenses associated with  
21 existing and recently installed Best Operating Practice  
22 ("BOP") and Best Available Control Technology ("BACT")  
23 equipment and continued implementation of the BOP  
24 procedures are expected to be \$259,560.

25

1 **Q.** Please describe the Big Bend NO<sub>x</sub> Emission Reduction  
2 program activities and provide the estimated capital and  
3 O&M expenses for the period of January 2022 through  
4 December 2022.

5  
6 **A.** The Big Bend NO<sub>x</sub> Emission Reduction program was approved  
7 by the Commission in Docket No. 20001186-EI, Order No.  
8 PSC-2000-2104-PAA-EI, issued November 6, 2000. In the  
9 order, the Commission found that the program met the  
10 requirements for recovery through the ECRC. Tampa  
11 Electric does not anticipate any capital expenditures for  
12 this program in 2022; however, the company will perform  
13 maintenance on the previously approved and installed NO<sub>x</sub>  
14 reduction equipment. This activity is expected to result  
15 in approximately \$2,089 of O&M expenses during 2022.

16  
17 **Q.** Please describe the Big Bend Units 1 through 3 Pre-SCR  
18 and the Big Bend Units 1 through 4 SCR projects and  
19 provide estimated capital and O&M expenditures for the  
20 period of January 2022 through December 2022.

21  
22 **A.** In Docket No. 20040750-EI, Order No. PSC-2004-0986-PAA-  
23 EI, issued October 11, 2004, the Commission approved cost  
24 recovery of the Big Bend Units 1 through 3 Pre-SCR and  
25 the Big Bend Unit 4 SCR projects. The Big Bend Units 1

1 through 3 SCR projects were approved by the Commission in  
2 Docket No. 20041376-EI, Order No. PSC-2005-0502-PAA-EI,  
3 issued May 9, 2005. The purpose of the Pre-SCR  
4 technologies is to reduce inlet NO<sub>x</sub> concentrations to the  
5 SCR systems, thereby mitigating overall SCR capital and  
6 O&M expenses. Those Pre-SCR technologies include windbox  
7 modifications, secondary air controls, and coal/air flow  
8 controls. The SCR projects at Big Bend Unit 1 through 4  
9 encompass the design, procurement, installation, and  
10 annual O&M expenses associated with an SCR system for  
11 each unit. The SCR for Big Bend Units 1 through 4 were  
12 placed in service April 2010, September 2009, July 2008,  
13 and May 2007, respectively.

14  
15 For the period of January 2022 through December 2022,  
16 there are not any capital or O&M expenditures anticipated  
17 for the Big Bend Units 1 through 3 Pre-SCR projects. There  
18 are not any anticipated capital expenditures for the Big  
19 Bend Units 1 through 4 SCR. There are no O&M expenses  
20 anticipated for Big Bend Unit 1 SCR and Big Bend Unit 2  
21 SCR. The O&M expenses are projected to be \$372,522 for  
22 Big Bend Unit 3 SCR, and \$1,397,376 for Big Bend Unit 4  
23 SCR. These expenses are primarily associated with ammonia  
24 purchases and maintenance.

25

1 **Q.** Please identify and describe the other Commission-  
2 approved programs, or those pending Commission approval,  
3 that you will discuss.  
4

5 **A.** The programs previously approved or pending approval by  
6 the Commission that I will discuss include the following  
7 projects:

- 8 1) Big Bend Unit 3 Flue Gas Desulfurization ("FGD")  
9 Integration.
- 10 2) Big Bend Units 1 and 2 FGD
- 11 3) Gannon Thermal Discharge Study
- 12 4) Bayside SCR Consumables
- 13 5) Clean Water Act Section 316(b) Phase II Study
- 14 6) Big Bend FGD System Reliability
- 15 7) Arsenic Groundwater Standard
- 16 8) Mercury and Air Toxics Standards ("MATS")
- 17 9) Greenhouse Gas ("GHG") Reduction Program
- 18 10) Big Bend Gypsum Storage Facility
- 19 11) Coal Combustion Residuals ("CCR") Rule
- 20 12) Big Bend Unit 1 Section 316(b) Impingement Mortality
- 21 13) Big Bend Effluent Limitations Guidelines ("ELG")  
22 Rule Compliance
- 23 14) Bayside Section 316(b) Compliance (pending approval  
24 in Docket No. 20210087-EI, filed on April 21, 2021)  
25

1     **Q.**     Please describe the Big Bend Unit 3 FGD Integration and  
2             the Big Bend Units 1 and 2 FGD activities and provide the  
3             estimated capital and O&M expenditures for the period of  
4             January 2022 through December 2022.

5  
6     **A.**     The Big Bend Unit 3 FGD Integration program was approved  
7             by the Commission in Docket No. 19960688-EI, Order No.  
8             PSC-1996-1048-FOF-EI, issued August 14, 1996. The Big  
9             Bend Units 1 and 2 FGD program was approved by the  
10            Commission in Docket No. 19980693-EI, Order No. PSC-1999-  
11            0075-FOF-EI, issued January 11, 1999. In these orders,  
12            the Commission found that the programs met the  
13            requirements for recovery through the ECRC. The programs  
14            were implemented to meet the SO<sub>2</sub> emission requirements of  
15            the Phase I and II Clean Air Act Amendments ("CAAA") of  
16            1990. Portions of Big Bend Units 1 & 2 FGD will be retired  
17            as part of the Big Bend Modernization project. Specific  
18            treatment of the retired ECRC assets is being addressed  
19            in the company's current general base rate proceeding,  
20            Docket No. 20210034-EI, filed on April 9, 2021.

21  
22            The company does not anticipate any capital or O&M  
23            expenditures during January 2022 through December 2022  
24            for the Big Bend Unit 3 FGD Integration project, nor any  
25            capital or O&M expenditures for the Big Bend Units 1 & 2

1 FGD project during January 2022 through December 2022.

2

3 **Q.** Please describe the Gannon Thermal Discharge Study  
4 program activities and provide the estimated O&M  
5 expenditures for the period of January 2022 through  
6 December 2022.

7

8 **A.** The Gannon Thermal Discharge Study program was approved  
9 by the Commission in Docket No. 20010593-EI, Order No.  
10 PSC-2001-1847-PAA-EI, issued September 14, 2001. In that  
11 order, the Commission found that the program met the  
12 requirements for recovery through the ECRC. For the period  
13 of January 2022 through December 2022, there are not any  
14 projected O&M expenditures for this program. In the intent  
15 to issue the permit renewal, dated August 9, 2013, FDEP  
16 indicated that the proposed NPDES permit authorizes a  
17 thermal variance under Section 316(a) of the Clean Water  
18 Act for the permit period. Bayside Power Station applied  
19 for renewal of the National Pollutant Discharge  
20 Elimination System ("NPDES") Permit in February 2018, and  
21 the permit is still pending. If a thermal study is  
22 required, Tampa Electric will incur O&M expenses and will  
23 include them in the true-up filing.

24

25 **Q.** Please describe the Bayside SCR Consumables program

1 activities and provide the estimated O&M expenditures for  
2 the period of January 2022 through December 2022.

3  
4 **A.** The Bayside SCR Consumables program was approved by the  
5 Commission in Docket No. 20021255-EI, Order No. PSC-2003-  
6 0469-PAA-EI, issued April 4, 2003. For the period of  
7 January 2022 through December 2022, Tampa Electric  
8 projects O&M expenses associated with the consumable  
9 goods, primarily anhydrous ammonia, to be approximately  
10 \$151,000.

11  
12 **Q.** Please describe the Clean Water Act Section 316(b) Phase  
13 II Study Program activities and provide the estimated O&M  
14 expenditures for the period of January 2022 through  
15 December 2022.

16  
17 **A.** The Clean Water Act Section 316(b) ("Section 316(b)") Phase  
18 II Study program was approved by the Commission in Docket  
19 No. 20041300-EI, Order No. PSC-2005-0164-PAA-EI, issued  
20 February 10, 2005. The final rule adopted under Section  
21 316(b), the Cooling Water Intake Structures ("CWIS") Rule,  
22 became effective October 14, 2014. The rule establishes  
23 requirements for CWIS at existing facilities. Section  
24 316(b) requires that the location, design, construction,  
25 and capacity of CWIS reflect the best technology available

1 ("BTA") for minimizing adverse environmental impacts. Tampa  
2 Electric is working with the regulating authority to  
3 determine the scheduling for biological, financial, and  
4 technical study elements necessary to comply with the rule.  
5 These elements will ultimately be used by the regulating  
6 authority to determine the necessity of cooling water  
7 system retrofits.

8  
9 At this time, CWIS Rule compliance alternatives for Bayside  
10 Power Station have been evaluated. The biological,  
11 financial, and technical study elements have been completed  
12 for Bayside Power Station and submitted with the station's  
13 NPDES permit renewal application in February 2018. Selected  
14 cost effective BTA retrofits for impingement mortality  
15 reduction include the installation of screening facilities.

16  
17 The estimated Clean Water Act Section 316(b) Phase II Study  
18 related O&M expenses for Big Bend Station and Bayside Power  
19 Station for the period January 2022 through December 2022  
20 are \$10,150.

21  
22 For Big Bend Unit 1, which will be repowered to a clean,  
23 natural gas-fired combined cycle unit, the permit will  
24 require installation of impingement mortality controls.  
25 Therefore, in Order No. PSC-2018-0594-FOF-EI, issued on



1 December 20, 2018, the Commission approved cost recovery  
2 for the Big Bend Unit 1 Section 316(b) Impingement Mortality  
3 project.

4  
5 The estimated O&M expense for NPDES Annual Surveillance  
6 Fees for Big Bend, Bayside, and Polk generating plants for  
7 the period January 2022 through December 2022 are \$34,500.

8  
9 **Q.** Are other plants expected to require retrofits to comply  
10 with Section 316(b)?

11  
12 **A.** Yes. As stated earlier and outlined in the company's Bayside  
13 Power Station Section 316(b) Compliance petition, filed  
14 with the Commission on April 21, 2021, in Docket No.  
15 20210087-EI, Tampa Electric plans to install traveling  
16 screens to reduce impingement mortality to comply with  
17 Section 316(b).

18  
19 **Q.** Please describe the Big Bend Unit 1 Section 316(b)  
20 Impingement Mortality project activities and provide the  
21 estimated capital and O&M expenditures for the period of  
22 January 2022 through December 2022.

23  
24 **A.** The Big Bend Unit 1 Section 316(b) Impingement Mortality  
25 project was approved by the Commission in Docket No.

1 20180007-EI, Order No. PSC-2018-0594-FOF-EI, issued  
2 December 20, 2018. In that order, the Commission found that  
3 the program met the requirements for recovery through the  
4 ECRC and granted Tampa Electric cost recovery for prudently  
5 incurred costs. For the period of January 2022 through  
6 December 2022, Tampa Electric projects capital expenditures  
7 for the Big Bend Unit 1 Section 316(b) Impingement Mortality  
8 Project to be \$1,705,374. There are no O&M expenses  
9 anticipated for 2022.

10  
11 **Q.** Please describe the Bayside Section 316(b) Compliance  
12 project activities and provide the estimated capital and  
13 O&M expenditures for the period of January 2022 through  
14 December 2022.

15  
16 **A.** The Bayside Section 316(b) Compliance project petition was  
17 filed with the Commission on April 21, 2021, in Docket No.  
18 20210087-EI. The petition relates to impingement mortality  
19 reduction methods to be applied to comply with the EPA rule.  
20 The petition is currently pending approval. For the period  
21 of January 2022 through December 2022, Tampa Electric  
22 projects capital expenditures for the Bayside Section  
23 316(b) Compliance Project to be \$5,689,564. There are no  
24 O&M expenses anticipated during 2022.

25

1 **Q.** Please describe the Big Bend FGD System Reliability  
2 program activities and provide the estimated capital  
3 expenditures for the period of January 2022 through  
4 December 2022.

5  
6 **A.** Tampa Electric's Big Bend FGD System Reliability program  
7 was approved by the Commission in Docket No. 20050958-EI,  
8 Order No. PSC-2006-0602-PAA-EI, issued July 10, 2006. The  
9 Commission granted approval for prudent costs associated  
10 with this project. For the period of January 2022 through  
11 December 2022, there are no anticipated capital  
12 expenditures for this project.

13  
14 **Q.** Please describe the Arsenic Groundwater Standard program  
15 activities and provide the estimated O&M expenditures for  
16 the period of January 2022 through December 2022.

17  
18 **A.** The Arsenic Groundwater Standard program was approved by  
19 the Commission in Docket No. 20050683-EI, Order No. PSC-  
20 2006-0138-PAA-EI, issued February 23, 2006. In that  
21 order, the Commission found that the program met the  
22 requirements for recovery through the ECRC and granted  
23 Tampa Electric cost recovery for prudently incurred  
24 costs. This groundwater standard applies to Tampa  
25 Electric's Bayside, Big Bend, and Polk Power Stations. A

1 detailed plan of study was submitted to the FDEP, and  
2 after reviewing the study, FDEP requested a site wide  
3 groundwater evaluation. Tampa Electric submitted the  
4 results of this evaluation in 2020 and a proposal for  
5 modification of the site groundwater monitoring network  
6 to evaluate ongoing compliance. The proposal is under  
7 review by FDEP. Once FDEP completes its review, additional  
8 O&M expenses may be incurred if additional monitoring and  
9 assessment are required. For the period of January 2022  
10 through December 2022, the anticipated O&M expenses  
11 associated with the program are \$37,080.

12  
13 **Q.** Please describe the MATS program activities.

14  
15 **A.** The MATS program was approved by the Commission in Docket  
16 No. 20120302-EI, Order No. PSC-2013-0191-PAA-EI, issued  
17 May 6, 2013. In that order, the Commission found that the  
18 program met the requirements for recovery through the ECRC  
19 and granted Tampa Electric approval for cost recovery of  
20 prudently incurred costs. Additionally, the Commission  
21 granted the subsumption of the previously approved CAMR  
22 program into the MATS program.

23  
24 On February 8, 2008, the Washington D.C. Circuit Court  
25 vacated EPA's rule removing power plants from the Clean

1 Air Act list of regulated sources of hazardous air  
2 pollutants under Section 112. At the same time, the court  
3 vacated the Clean Air Mercury Rule. On May 3, 2011, the  
4 EPA published a new proposed rule for mercury and other  
5 hazardous air pollutants according to the National  
6 Emissions Standards for Hazardous Air Pollutants section  
7 of the Clean Air Act. On February 16, 2012, the EPA  
8 published the final rule for MATS. The rule revised the  
9 mercury limits and provided more flexible monitoring and  
10 record keeping requirements. Additionally, monitoring of  
11 acid gases and particulate matter is required. Compliance  
12 with the rule began on April 16, 2015. Tampa Electric is  
13 currently meeting or exceeding the standards required by  
14 the MATS rule for mercury, particulate matter, and acid  
15 gases at Polk Power Station and Big Bend Power Station.

16  
17 **Q.** Please provide MATS program estimated capital and O&M  
18 expenditures for the period of January 2022 through  
19 December 2022.

20  
21 **A.** For 2022, Tampa Electric does not anticipate capital  
22 expenditures under the MATS program. O&M expenditures are  
23 projected to be approximately \$2,000 for testing  
24 requirements and equipment maintenance.

25

1 **Q.** Please describe the GHG Reduction program activities and  
2 provide the estimated O&M expenditures for the period of  
3 January 2022 through December 2022.

4  
5 **A.** Tampa Electric's GHG Reduction program, which was  
6 approved by the Commission in Docket No. 20090508-EI,  
7 Order No. PSC-2010-0157-PAA-EI, issued March 22, 2010, is  
8 a result of the EPA's GHG Mandatory Reporting Rule  
9 requiring annual reporting of greenhouse gas emissions.  
10 Tampa Electric was required to report greenhouse gas  
11 emissions for the first time in 2011. Reporting for the  
12 EPA's GHG Mandatory Reporting Rule will continue in 2022.  
13 For 2022, there are no O&M expenditures anticipated.

14  
15 **Q.** Please describe the Big Bend Gypsum Storage Facility  
16 activities and provide the estimated capital and O&M  
17 expenditures for the period of January 2022 through  
18 December 2022.

19  
20 **A.** The Big Bend Gypsum Storage Facility program was approved  
21 by the Commission in Docket No. 20110262-EI, Order No.  
22 PSC-2012-0493-PAA-EI, issued September 26, 2012. In that  
23 order, the Commission found that the program meets the  
24 requirements for recovery through the ECRC. For 2022,  
25 Tampa Electric does not anticipate capital expenditures;

1           however, the projected O&M expenses for this program are  
2           expected to be \$1,213,236.

3  
4           **Q.** Please describe the company's EPA CCR Rule compliance  
5           activities and provide the estimated capital and O&M  
6           expenditures for the period of January 2022 through  
7           December 2022.

8  
9           **A.** On April 17, 2015, the EPA issued a final rule to regulate  
10          CCR as non-hazardous waste under Subtitle D of the  
11          Resource Conservation and Recovery Act ("RCRA"). The  
12          rule, which became effective on October 19, 2015, covers  
13          all operational CCR disposal facilities, as well as  
14          inactive impoundments which contain CCR and liquids. The  
15          Big Bend Unit 4 Economizer Ash Ponds, the East Coalfield  
16          Stormwater Pond (converted former slag fines pond), and  
17          the North Gypsum Stackout Area are regulated under the  
18          rule.

19  
20          The initial phase of the company's CCR compliance was  
21          approved by the Commission in Docket No. 20150223-EI,  
22          Order No. PSC-2016-0068-PAA-EI, issued February 9, 2016.  
23          In that order, the Commission found that the CCR Rule -  
24          Phase I program met the requirements for recovery through  
25          the ECRC. Incremental ongoing O&M expenses resulting from

1 the groundwater monitoring program, berm inspections, and  
2 general maintenance of regulated units were approved  
3 under the Order. In order to determine the best option to  
4 remain in compliance with the new rule, the company  
5 evaluated whether to continue operation of the regulated  
6 CCR units or close them. Tampa Electric chose a  
7 combination of closure and retrofit projects to remain in  
8 compliance with the CCR Rule, as discussed later in this  
9 section.

10  
11 Two CCR retrofit projects were also approved for Tampa  
12 Electric's CCR Rule - Phase I program under Order No.  
13 PSC-2016-0068-PAA-EI. These included: 1) removal of  
14 remaining residual slag from the East Coalfield  
15 Stormwater Runoff Pond and lining the pond to continue  
16 operating it as part of the station's stormwater system;  
17 and 2) installing secondary stormwater containment  
18 facilities and lining drainage ditches for the North  
19 Gypsum Stackout Area to make it fully compliant with the  
20 rule's requirements.

21  
22 Phase II of Tampa Electric's CCR Rule program was approved  
23 by the Commission in Docket No. 20170168-EI, Order No.  
24 2017-0483-PAA-EI, issued December 22, 2017. In that  
25 Order, the Commission found that the Phase II program met



1 the requirements for recovery through the ECRC. Expenses  
2 for the Economizer Ash Pond System Closure project, which  
3 includes removal and offsite disposal of all CCR and  
4 restoration of the area, were approved by the Commission's  
5 Order.

6  
7 The Economizer Ash Pond System Closure began in the fourth  
8 quarter of 2018 with initial dewatering and removal of  
9 CCR for disposal. Due to the large amount of CCR in the  
10 Economizer Ash Ponds that needed to be dewatered and  
11 shipped to the landfill, this project has continued and  
12 is expected to be completed in late 2021. The East  
13 Coalfield Stormwater Runoff Pond (slag pond) closure and  
14 retrofit project was originally scheduled to be completed  
15 in 2019 but was delayed due to unusually high rainfall  
16 amounts throughout that year. As a result, this project  
17 was initiated in 2020 and completed in early 2021, in  
18 accordance with state regulatory requirements. The North  
19 Gypsum Stackout Area Drainage Improvements Project was  
20 also delayed to finalize engineering and construction  
21 scope details, but is currently underway, with completion  
22 expected in 2022.

23  
24 Tampa Electric expects to incur \$1,500,000 in capital  
25 expenditures for the North Gypsum Stackout - Phase I

1 project during 2022. The company expects to incur O&M  
2 expenses of \$930,000 for this CCR Rule - Phase I project  
3 in 2022. There are no capital or O&M expenditures  
4 anticipated for the CCR Rule - Phase II (Economizer Ash  
5 Closure) project in 2022.

6  
7 **Q.** Please describe Tampa Electric's ELG Rule activities,  
8 both study and compliance related and provide the  
9 estimated capital and O&M expenditures for the period of  
10 January 2022 through December 2022.

11  
12 **A.** On November 3, 2015, the EPA published the final Steam  
13 Electric Power Generating ELG Rule, with an effective date  
14 of January 4, 2016. The ELG establish limits for  
15 wastewater discharges from FGD processes, fly ash, and  
16 bottom ash transport water, leachate from ponds and  
17 landfills containing CCR, gasification processes, and  
18 flue gas mercury controls. Big Bend Station's FGD system  
19 is affected by this rule. The blow-downstream from the  
20 FGD system is currently sent to a physical chemical  
21 treatment system to remove solids, some metals, and  
22 ammonia and adjust pH prior to discharge to Tampa Bay via  
23 the once through condenser cooling system water. This  
24 treatment system will need to be modified or replaced to  
25 achieve compliance with the new EPA regulations. The rule

1 requires compliance after November 1, 2018, but no later  
2 than December 31, 2023. EPA issued a temporary stay of  
3 these compliance deadlines beginning April 25, 2017 for  
4 certain waste streams, including FGD wastewater.

5  
6 The Big Bend ELG Study Program ("ELG Study") was approved  
7 by the Commission in Docket No. 20160027-EI, Order No. PSC-  
8 2016-0248-PAA-EI, issued June 28, 2016.

9  
10 The ELG Study, which was completed in 2018, identified  
11 viable technologies to treat the Tampa Electric Big Bend  
12 Station combined effluent streams to bring the streams into  
13 compliance with the more stringent requirements under the  
14 ELG Rule and resulted in the selection of the deep well  
15 injection solution.

16  
17 The Big Bend ELG Compliance project was approved by the  
18 Commission in Docket No. 20180007-EI, Order No. PSC-2018-  
19 0594-FOF-EI, issued December 20, 2018. In that order, the  
20 Commission found that the program met the requirements for  
21 recovery through the ECRC and granted Tampa Electric cost  
22 recovery for prudently incurred costs.

23  
24 On June 6, 2017, the EPA issued proposed rulemaking to  
25 postpone these deadlines until it has completed

1 reconsideration of the 2015 rule. On August 11, 2017, EPA  
2 issued a letter to the Utility Water Act Group ("UWAG")  
3 and the U.S. Small Business Association regarding  
4 petitions received by the EPA requesting reconsideration  
5 of the rule. In this letter, EPA stated that it would be  
6 appropriate to conduct rulemaking to "potentially revise"  
7 the limitations for bottom ash transport water and FGD  
8 wastewater. The compliance deadlines for these waste  
9 streams were revised to be as soon as possible after  
10 November 1, 2021, but no later than December 31, 2023.  
11 Tampa Electric expects that the selected compliance  
12 option will continue to be required as the best option  
13 for customers even if some changes are made to the rule.  
14 For the year January 2022 through December 2022, Tampa  
15 Electric projects capital expenditures to be \$13,510,436.  
16 The company projects \$4,944 in O&M expenditures for this  
17 project for the period.

18  
19 **Q.** Please summarize your testimony.

20  
21 **A.** The settlement agreements Tampa Electric had with FDEP  
22 and EPA required significant reductions in emissions from  
23 Big Bend and Gannon Power Stations. These settlement  
24 agreements have been terminated due to the company having  
25 satisfied all requirements as set forth by the CFJ and

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CD. Ongoing requirements for projects originating with the CFJ and CD have been incorporated into Big Bend's Title V Operating permit (0570039-128-AV) and are 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 2022. Additionally, my testimony identified other projects that are required for Tampa Electric to meet environmental requirements, and I provided the associated 2022 activities and projected expenditures.

**Q.** Does this conclude your direct testimony?

**A.** Yes, it does.