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August 18, 2000

HAND DELIVERED

ORIGINAL

RECORDS AND  
REPORTING

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

001186-ET

Re: Petition of Tampa Electric Company for Approval of New Environmental Programs for Cost Recovery through the Environmental Cost Recovery Clause

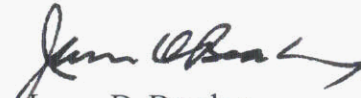
Dear Ms. Bayo:

Enclosed for filing in the above-styled matter are the original and fifteen (15) copies of Tampa Electric Company's Petition for Approval of New Environmental Programs for Cost Recovery through the Environmental Cost Recovery Clause.

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

Thank you for your assistance in connection with this matter.

Sincerely,

  
James D. Beasley

JDB/pp  
Enclosures

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FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ORIGINAL

In re: Petition of Tampa Electric Company )  
for approval of new environmental )  
programs for cost recovery through )  
the Environmental Cost Recovery Clause. )  
\_\_\_\_\_ )

DOCKET NO. 001186-EI  
FILED: August 18, 2000

**PETITION OF TAMPA ELECTRIC COMPANY FOR APPROVAL OF  
NEW ENVIRONMENTAL PROGRAMS FOR COST RECOVERY  
THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE**

Tampa Electric Company ("Tampa Electric" or "the company"), by and through its undersigned counsel, and pursuant to Section 366.8255, Florida Statutes, and Florida Public Service Commission ("Commission") Order Nos. PSC-94-0044-FOF-EI and PSC-94-1207-FOF-EI, hereby petitions this Commission for approval of cost recovery through the Environmental Cost Recovery Clause ("ECRC") for two new environmental compliance programs required to comply with environmental requirements to minimize particulate matter ("PM") and nitrogen oxide ("NO<sub>x</sub>") emissions at Big Bend Station. In support thereof the company alleges:

1. Tampa Electric is an investor-owned electric utility subject to the Commission's jurisdiction pursuant to Chapter 366, Florida Statutes. Tampa Electric serves retail customers in Hillsborough and portions of Polk, Pinellas and Pasco Counties in Florida. The company's principal offices are located at 702 North Franklin Street, Tampa, Florida 33602.

2. The persons to whom all notices and other documents should be sent in connection with this docket are:

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DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

3. On December 16, 1999 Tampa Electric and the Florida Department of Environmental Protection (“DEP”) entered into a Consent Final Judgment (“CFJ”). On February 29, 2000 the United States Environmental Protection Agency (“EPA”) and Tampa Electric entered into a Consent Decree which was lodged in the Federal District Court on February 29, 2000. Both the CFJ and the Consent Decree (“Orders”) embody the settlement of EPA’s claims that Tampa Electric commenced construction of major modifications at its Big Bend and Gannon Stations in violation of the of EPA’s New Source Review rules and New Source Performance Standards currently codified in Title I of the Clean Air Act Amendments (“CAAA”). The Orders have been provided to the Commission in its petition filed in Docket No. 000685-EI.

4. This petition requests cost recovery for two specific, environmental compliance projects required by the Orders. The first program requires Tampa Electric to perform several activities at Big Bend Station including the development of a Best Operational Practices Study (“Study”) to minimize emissions from each electrostatic precipitator (“ESP”), the performance of a Best Available Control Technology (“BACT”) analysis for the upgrade of each existing ESP, and the installation and operation of PM continuous emission monitors (“PM CEM”). The second program requires the submittal of plans and the implementation of projects to reduce NO<sub>x</sub> emissions.

#### **Particulate Emission Minimization and Monitoring Program**

5. The Particulate Emission Minimization and Monitoring Program at Big Bend Station is one of the environmental compliance requirements of the Orders.

6. In accordance with Section V.F. of the CFJ, “Tampa Electric Company shall undertake a performance optimization study and a BACT analysis of its electrostatic precipitators and make reasonable upgrades to the electrostatic precipitators at Big Bend Station by May 1, 2003.”

7. Paragraph 32 of the EPA Consent Decree details the requirements for initial studies to be performed in order to reduce PM emissions at Big Bend Station. According to Paragraph 32.A. of the Consent Decree, “Within twelve months after entry of this Consent Decree, Tampa Electric shall complete an optimization study which shall recommend the best operational practices to minimize emissions from each ESP and shall deliver the completed study to EPA for review and approval. Tampa Electric shall implement these recommendations within sixty days after EPA has approved them and shall operate each ESP in conformance with the study and its recommendations.” Paragraph 32.B. further requires, “Within twelve months after entry of this Consent Decree, Tampa Electric shall complete a BACT Analysis for upgrading each existing ESP now located at Big Bend and shall deliver the Analysis to EPA for review and approval.”

8. The costs of the Best Operational Practices Study (“Study”), the performance of a BACT analysis and any resulting ESP upgrades are activities Tampa Electric seeks to recover through the ECRC and they include operating and maintenance (“O&M”) and capital expenditures. Tampa Electric is requesting approval for only those activities which are required under the Orders and have identified scopes of work. The cost estimates contained in this petition for these activities are preliminary and are subject to finalization of the studies and approval by EPA. Tampa Electric will submit separate notifications for future activities for PM minimization which have been identified in the on-going Study and analysis recommendations in accordance with the Orders. Once the Study and BACT analysis have been completed, Tampa Electric anticipates that new operating practices will be implemented and the installation of capital equipment will occur which will result in additional O&M and capital expenditures which are eligible for recovery through the ECRC, subject to Commission review.

9. The Study will be performed by the Electric Power Research Institute and the Southern Research Institute and is projected to result in O&M costs of approximately \$125,000 in 2000. Once the study has been completed and reviewed, Tampa Electric will be required to spend additional O&M dollars to implement the recommended operational practices. The company has already identified some specific activities that must be performed to improve precipitator operations such as turning vanes and perforated plates improvements on Big Bend Unit 1. These improvements will result in O&M expenses of approximately \$90,000 in 2000 and \$560,000 in 2001.

10. Tampa Electric is also seeking recovery of capital expenditures associated with the Study. In order to obtain accurate and meaningful data to complete the Study, an upgrade of the controls and software system of the precipitators is required. The estimate for this upgrade is approximately \$105,000 and will be incurred in 2000.

11. Tampa Electric projects that \$60,000 in initial capital expenditures could result in 2000 and \$1,265,000 in 2001 as result of the BACT analysis and implementation on Big Bend Units 1 and 2. This estimate includes the cost of the analysis, laboratory testing and capital improvements required as a result of the BACT analysis. Cost projections for PM minimization activities for 2000 and 2001 are summarized in Exhibit A.

### **Reduction of Nitrogen Oxide Emissions**

12. The Reduction of Nitrogen Oxide Emissions Program at Big Bend Station is one of the environmental compliance requirements of the Orders.

13. Section V of the CFJ requires Tampa Electric by December 31, 2004 to spend up to \$8 million to demonstrate alternative commercially viable NO<sub>x</sub> reduction technologies for natural gas-fired or coal fired generating facilities as determined by the DEP and Tampa Electric.

14. The EPA Consent Decree also specifies requirements for the reduction of NO<sub>x</sub> emissions. Paragraph 35 requires the early reduction of NO<sub>x</sub> from Big Bend Units 1 through 3 and states that on or before December 31, 2001, Tampa Electric shall submit to EPA for review and comment a plan to reduce NO<sub>x</sub> emissions from Big Bend Units 1, 2 and 3, through the expenditure of up to \$3 million on combustion optimization using commercially available methods, techniques, systems, or equipment, or combinations thereof. This paragraph also requires that Tampa Electric's implementation of all aspects of its plan at Big Bend Units 1, 2 and 3 on or before December 31, 2002.

15. Paragraph 52 of the EPA Consent Decree requires either the expenditure of project dollars to demonstrate innovative NO<sub>x</sub> control technologies on any of its units or boilers at Gannon or Big Bend Station which are not shutdown or on reserve/standby or the reduction of the NO<sub>x</sub> emission rate for any Big Bend Station coal-combusting unit below the lowest rate otherwise applicable to it under the Consent Decree.

16. Paragraph 50 of Section VII of the Consent Decree entitled "NO<sub>x</sub> Reduction Projects and Mitigation Projects" requires Tampa Electric to submit plans and implement the NO<sub>x</sub> reduction projects described in Paragraphs 35 and 52 of the EPA Consent Decree.

17. Tampa Electric has identified both O&M and capital expenditures which are projected to be incurred to meet the required NO<sub>x</sub> reductions. Approximately \$60,000 of capital expenditures in year 2000 and \$405,000 in 2001 will be incurred to install neural network systems on Big Bend Units 1 and 2. The neural network system is a combustion optimization software system which tracks data points in the boiler and compares the operational parameters to relationships between combustion operating conditions and NO<sub>x</sub> emissions. The database will then establish operating set points on a real-time basis to optimize combustion.

18. A second capital activity which will reduce NO<sub>x</sub> emissions in accordance with the Orders is the burner and windbox modifications proposed for Big Bend Units 1, 2 and 3. The capital improvements include modeling and analysis, and equipment upgrades and are projected to be \$70,000 in 2000 and approximately \$520,000 in 2001. Additionally, \$50,000 in O&M expenses are projected to be incurred in 2001 for boiler tuning projects Exhibit B summarizes the company's forecast of expenditures in 2000 and 2001 for activities required to achieve the NO<sub>x</sub> emission reductions specified in the Orders.

**Qualifications and Estimated Expenditures for ECRC Recovery**

19. Tampa Electric will incur costs for the new environmental programs in order to meet compliance requirements related to the CAAA as set out in the Orders. The new programs meet the criteria established by this Commission in Docket No. 930613-EI, Order No. PSC-94-0044-FOF-EI in that:

- (a) All expenditures will be prudently incurred after April 13, 1993.
- (b) The activities are legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the company's last test year upon which rates are based.
- (c) None of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

20. Tampa Electric is not requesting a change in its ECRC factors that have been approved for calendar year 2000. The programs' actual expenditures will be addressed in the upcoming projections filing and will be subject to audit. Tampa Electric reflected the expenditures associated with the environmental activities described above in its August 18, 2000 true-up filing.

21. Tampa Electric is seeking approval from the Commission that the activities associated with the reduction of PM and NO<sub>x</sub> emissions are eligible for recovery through the ECRC. The cost information provided in this petition reflects preliminary estimates and will be updated as new costs are identified and approved in accordance with the Orders.

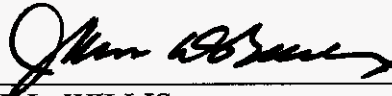
22. The program is a CAAA compliance activity and, accordingly, should be allocated to rate classes on an energy basis.

23. Tampa Electric is not aware of any disputed issues of material fact relative to the matters set forth in this Petition.

WHEREFORE, Tampa Electric Company respectfully requests the Commission to approve recovery of the activities identified to be performed in 2000 and 2001 associated with compliance with the PM Emission Minimization and Monitoring Program at Big Bend Station and the Reduction of NO<sub>x</sub> Emissions Program required under the Orders therewith through the ECRC.

DATED this 18<sup>th</sup> day of August, 2000.

Respectfully submitted,



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(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY



## EXHIBIT A

### Big Bend Station Forecast of Costs for Reductions of Particulate Matter

#### Year 2000

Activity	August	Septem	October	Novem	Decem	Total
<b>O&amp;M Activity</b>						
SRI consulting and testing Best Operational Pract.	25,000	25,000	20,000	5,000		75,000
EPRI consulting and Best Operational practices	19,000	12,000	8,000	5,000	8,000	50,000
Install turning vanes and perforated plates on BB1				80,000	10,000	90,000
<b>Capital Activity</b>						
Solvara and ESPert system for Big Bend precip.	40,000	40,000	10,000	15,000		105,000
BB1 precipitator plate and wires wide plate spacing				55,000	5,000	60,000

**Total Capital = \$ 165,000**  
**Total O&M = \$ 215,000**  
**Total Expenditures = \$ 380,000**

#### Year 2001

Activity	January	February	March	April	May	June	July	August	Septem	October	Novem	Decem	Total
<b>O&amp;M Activity</b>													
Install turning vanes and perforated plates on BB1	20,000	20,000	260,000	260,000									560,000
<b>Capital Activity</b>													
<b>Big Bend 1 Spring Outage 2001</b>													
BB1 precipitator plate and wires wide plate spacing	20,000	25,000	455,000	500,000									1,000,000
<b>Big Bend 2 Outage Spring 2002</b>													
Perform Eng and Procurement of BACT items				5,000	6,000	7,000	10,000	10,000	210,000	6,000	6,000	5,000	265,000

**Total Capital = \$ 1,265,000**  
**Total O&M = \$ 560,000**  
**Total Expenditures = \$ 1,825,000**

## EXHIBIT B

### Forecast of Costs for Reductions of NO<sub>x</sub> Emissions

#### Year 2000

Activity	August	Septem	October	Novem	Decem	Total
<b>O&amp;M Activities</b>						
NONE						
<b>Capital Activities</b>						
<b>Big Bend 1 Spring Outage Activities</b>						
BB1 Neural Network Combustion Optimization	5,000	10,000	15,000	20,000	10,000	60,000
BB1 Burner and Windbox mods					70,000	70,000

**Total Capital = \$ 130,000**  
**Total O&M = 0**  
**Total Expenditures = \$ 130,000**

#### Year 2001

Activity	January	February	March	April	May	June	July	August	Septem	October	Novem	Decem	Total
<b>O&amp;M Activities</b>													
BB1 Boiler Tuning and Balancing				10,000	10,000	10,000	10,000	10,000					50,000
<b>Capital Activities</b>													
<b>Big Bend 1 - Outage Spring of 2001</b>													
BB1 Neural net	75,000	75,000	80,000	50,000	40,000	30,000	20,000						370,000
BB1 Burner and Windbox mods	90,000	130,000	130,000	50,000	30,000	20,000							450,000
<b>Big Bend 2 - Outage Spring 2002</b>													
BB2 Neural net								5,000	15,000	5,000	5,000	5,000	35,000
BB2 Burner and Windbox mods								5,000	45,000	5,000	5,000	10,000	70,000

**Total Capital = \$ 925,000**  
**Total O&M = \$ 50,000**  
**Total Expenditures = \$ 975,000**