

State of Florida



## Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

### -M-E-M-O-R-A-N-D-U-M-

---

**DATE:** March 24, 2005

**TO:** Director, Division of the Commission Clerk & Administrative Services (Bayó)

**FROM:** Division of Economic Regulation (Breman, Lee, Haff, Wheeler)  
Office of the General Counsel (Stern)

**RE:** Docket No. 041376-EI – Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause, by Tampa Electric Company.

**AGENDA:** 04/05/05 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\041376.RCM.DOC

---

### Case Background

On December 7, 2004, Tampa Electric Company (“TECO”) petitioned for cost recovery through the Environmental Cost Recovery Clause (“ECRC”) the cost of installing selective catalytic reduction (“SCR”) systems, installing alkali injection systems, and the cost of operating and maintaining these systems at Big Bend Units 1, 2, and 3. The installation of the SCR systems and alkali injection systems is necessary to meet air emissions limits for nitrogen oxides (“NOx”) pursuant to settlement agreements with the Florida Department of the Environmental Protection (“FDEP”) and the United States Environmental Protection Agency (“EPA”) issued on December 16, 1999, and February 29, 2000, respectively.

The Commission found that TECO made a reasonable assessment of possible NOx emission reduction technologies and selected the most cost-effective compliance alternative, which was to continue operation of the Big Bend Station using coal and to install a combination of pre-SCR, SCR and alkali injection systems at the various units. Order No. PSC-04-0986-

PAA-EI, issued October 11, 2004, in Docket No. 040750-EI, In Re: Petition for approval of new environmental programs for cost recovery through the Environmental Cost Recovery Clause, by Tampa Electric Company [hereinafter “SCR Order”]. The SCR Order includes an overview of the costs of all the options TECO considered for achieving compliance with the NO<sub>x</sub> criteria in the settlement agreements. TECO’s pre-SCR projects at Big Bend Units 1-3 were approved for ECRC treatment by the SCR Order. TECO now seeks approval for ECRC treatment of installing and operating the SCR and alkali injection systems on Big Bend Units 1, 2, and 3.

On January 10, 2005, the Florida Industrial Power Users Group (“FIPUG”) petitioned to intervene in this docket. FIPUG’s petition was approved by Order No. PSC-05-0165-PCO-EI, issued February 10, 2005.

Section 366.8255, Florida Statutes, the ECRC, gives the Commission the authority to decide whether a utility’s environmental compliance costs are recoverable through an environmental cost recovery factor. Electric utilities may petition the Commission to recover projected environmental compliance costs required by environmental laws or regulations. Section 366.8255(2), Florida Statutes. Environmental laws or regulations include “all federal, state, or local statutes, administrative regulations, order, ordinances, resolutions, or other requirements that apply to electric utilities and are designed to protect the environment.” Section 366.8255(1)(c), Florida Statutes. If the Commission approves the utility’s petition for cost recovery through this clause, only prudently incurred costs may be recovered. Section 366.8255(2), Florida Statutes.

### **Discussion of Issues**

**Issue 1:** Should the Commission approve TECO's petition for the Big Bend Units 1, 2, and 3 SCR systems and alkali injection systems as a new program for cost recovery through the ECRC?

**Recommendation:** Yes. The program is eligible for recovery through the ECRC and any prudently incurred costs for the Big Bend Units 1, 2, and 3 SCR and alkali injection systems are appropriate for recovery through the ECRC. (BREMAN, STERN)

**Staff Analysis:** In the spring of 2004, TECO completed a study of the most cost-effective option to reduce NO<sub>x</sub> air emissions at Big Bend Units 1-4 pursuant to settlement agreements with the FDEP and the EPA. TECO concluded that the most reasonable compliance plan included continued use of coal at Big Bend generating station and three retrofit activities: (1) installation of pre-SCR equipment; (2) installation of SCR; and, (3) alkali injection systems. The estimated cost of TECO's compliance plan includes a total of \$305,450,000 in capital additions over the next five years and \$12,750,000 in annual operating and maintenance expense thereafter.

In the SCR Order, at page 2, the Commission states:

“TECO's analysis showed that the retrofit activities were the most cost-effective option. The second most cost-effective option, a re-powering using a coal-fired circulating fluidized bed technology, had a [cumulative present worth revenue requirement] cost over \$700 million higher than TECO's proposed plan. We reviewed TECO's long range planning assumptions and find they are reasonable. We are not aware of any reasonable assumption that would cause a \$700 million increase in TECO's proposed Big Bend NO<sub>x</sub> compliance program and thereby cause the project to lose its cost-effectiveness. Thus, we find that TECO has made a reasonable assessment of possible options and selected the most cost-effective compliance alternative.”

Staff continues to believe that TECO's proposed NO<sub>x</sub> compliance plan has economic benefits that exceed alternatives based on what is known today. TECO asserts that no new facts have surfaced that would change its 2004 analysis. Thus, continued implementation of the proposed NO<sub>x</sub> compliance plan is reasonable because the proposed plan continues to be the option with the lowest long-term costs.

The SCR Order also granted ECRC treatment of prudently incurred costs for activities consisting of installation of pre-SCR retrofits at Big Bend Units 1-3 and SCR retrofit at Big Bend Unit 4. TECO's current petition requests ECRC treatment for the remaining activities necessary to fully implement its NO<sub>x</sub> compliance plan. The additional activities consist of retrofitting Big Bend 1-3 with SCR systems and alkali injection systems as well as the resultant annual operating and maintenance expense associated with such systems. TECO's projected in-service dates and in-service costs for the three Big Bend Unit 1-3 NO<sub>x</sub> emission control systems are shown below in Table 1. TECO's retrofit costs have not increased from the 2004 study estimate of \$233,745,000. The estimated annual operating and maintenance expense for the first full year of

operation for all three SCR and alkali injection systems combined is unchanged at \$10,010,000 per year.

Table 1  
Projected Big Bend 1-3 NOx Emission Reduction Activities  
Capital Additions and Annual Operating & Maintenance Costs

Big Bend Unit	In-Service Date (Compliance Date)	Capital Additions SCR & Alkali Injection	O & M Costs SCR & Alkali Injection
Unit 1	5/1/2010	\$78,086,000	\$3,470,000
Unit 2	5/1/2009	\$78,329,000	\$3,470,000
Unit 3	5/1/2008	\$77,330,000	\$3,070,000
Total Big Bend 1-3		\$233,745,000	\$10,010,000

The depreciation rates used to calculate the depreciation expense for the proposed plant additions should be the rates that are in effect during the period the capital investment is in service. Since the proposed plant additions will have no salvage value once the generating plant retires, the controlling depreciable life is the remaining life of the generating plant. Thus, the proposed plant additions will be recovered on a schedule consistent with the remaining life of the Big Bend generating station.

TECO proposes that the resultant plan implementation costs be allocated to the rate classes on an energy basis consistent with Commission policy set by Order No. PSC-94-0044-FOF-EI, issued January 12, 1994, in Docket No. 930613-EI, In Re: Petition to establish an environmental cost recovery clause pursuant to Section 366.8255, Florida Statutes by Gulf Power Company. In that docket, the Commission ordered that costs associated with compliance with the Clean Air Act Amendments of 1990 (CAAA) be allocated to the rate classes in the ECRC on an energy basis, due to the strong nexus between the level of emissions which the CAAA seeks to reduce and the number of kilowatt hours generated. In every subsequent order approving recovery of CAAA costs through the ECRC, the Commission has required that the costs be allocated to the rate classes on an energy basis. Because the costs for which TECO is seeking recovery in this docket are also related to CAAA compliance, staff believes that TECO's proposed energy allocation is appropriate.

TECO's current base rates were established by Order No. PSC-93-0758-FOF-EI, issued May 19, 1993, in Docket No. 920324-EI, In Re: Application for a rate increase by Tampa Electric Company. At that time, TECO did not have any comparable NOx emission control systems at the Big Bend generating station. Approximately six years later, the settlement agreements with the DEP and the EPA were entered into on December 16, 1999, and February 29, 2000, respectively. Consequently, it is reasonable to conclude that TECO's current base rates do not recover any of the costs of the SCR and alkali injection systems for which TECO is seeking recovery through the ECRC. Thus, prudently incurred costs for the Big Bend Units 1-3 SCR and alkali injection systems are recoverable through the ECRC.

Docket No. 041376-EI  
Date: March 24, 2005

The costs of complying with the settlement agreements qualify as environmental compliance costs under Sections 366.8255(1)(c) and (2) because the settlement agreements are court orders. The Commission has previously approved cost recovery for activities required by the settlement agreements. The Commission orders approving cost recovery are shown in Table 2.

Table 2  
 Commission Orders Approving Cost Recovery  
 For Activities Required by the Settlement Agreements

Order No.	Date Issued	Docket No.	Docket Title
PSC-00-1906-PAA-EI	10/18/2000	000685-EI	Petition of Tampa Electric Company for approval of a new environmental program for cost recovery through the environmental cost recovery clause.
PSC-00-2104-PAA-EI	11/6/2000	001186-EI	Petition for approval of new environmental programs for cost recovery through the Environmental Cost Recovery Clause by Tampa Electric Company.
PSC-00-2391-FOF-EI	12/13/2000	000007-EI	Environmental cost recovery clause.
PSC-01-2463-FOF-EI	12/18/2001	010007-EI	Environmental Cost Recovery Factors.
PSC-02-1735-FOF-EI	12/10/2002	020007-EI	Environmental cost recovery clause.
PSC-03-0469-PAA-EI	4/4/2003	021255-EI	Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause, by Tampa Electric Company.
PSC-03-0684-PAA-EI	6/6/2003	030226-EI	Petition for approval of proposed Big Bend Unit 4 Separated Overfire Air (SOFA) project and recovery of costs through environmental cost recovery clause, by Tampa Electric Company.
PSC-03-1348-FOF-EI	11/25/2003	030007-EI	Environmental cost recovery clause.
PSC-04-0986-PAA-EI	10/11/2004	040750-EI	Petition for approval of new environmental programs for cost recovery through the Environmental Cost Recovery Clause, by Tampa Electric Company.
PSC-04-1187-FOF-EI	12/1/2004	040007-EI	Environmental cost recovery clause.

Conclusion

TECO provided adequate information explaining its proposed activities and projected costs. TECO's current base rates do not provide cost recovery of the proposed activities. Therefore, prudently incurred costs for the Big Bend Units 1-3 SCR and alkali injection systems qualify for recovery through the ECRC.

Docket No. 041376-EI

Date: March 24, 2005

**Issue 2:** Should this docket be closed?

**Recommendation:** Yes, this docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the proposed agency action. (Stern)

**Staff Analysis:** If no timely protest to the proposed agency action is filed within 21 days, this docket should be closed upon the issuance of a Consummating Order.