

State of Florida



Public Service Commission

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CLERK

DATE: September 23, 2004

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

FROM: Division of Economic Regulation (Bremman, Haff, Lee) *RLT* *LD*
Office of the General Counsel (Stern) *MS* *MA*

RE: Docket No. 040750-EI – Petition for approval of new environmental programs for cost recovery through the Environmental Cost Recovery Clause, by Tampa Electric Company.

AGENDA: 10/05/04 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\040750.RCM.DOC

Case Background

Tampa Electric Company (“TECO”) entered into settlement agreements with the Florida Department of Environmental Protection (“FDEP”) and the United States Environmental Protection Agency (EPA) which require TECO to reduce nitrogen oxides (“NOx”) emissions at the Big Bend Station. The Big Bend Station is coal fired and NOx emissions are to be reduced by installing pollution control technologies, repowering, or shutting down three of the four units at the station.

TECO has decided to continue operation of the coal-fired Big Bend Station and to install pollution control technologies to meet the NOx air emission limits set out in the settlement agreements. By Petition filed on July 15, 2004, TECO explained that it will meet the NOx criteria by installing Selective Catalytic Reduction (“SCR”) technology at Big Bend Units 1-4, installing pre-SCR technologies at Big Bend Units 1-3 and by installing alkali injection systems at Big Bend Units 1-4. TECO’s Petition requests that the costs for the first phase of these

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various NOx reduction technologies be recovered through the Environmental Cost Recovery Clause ("ECRC").

Section 366.8255, Florida Statutes, the ECRC, gives the Commission the authority to review and decide whether a utility's environmental compliance costs are recoverable through a 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, orders, 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 shall be recovered. Section 366.8255 (2), Florida Statutes.

Discussion of Issues

Issue 1: Should the Commission approve Tampa Electric Company's petition for the Big Bend Unit 4 SCR system and Pre-SCR retrofit activities on Big Bend Units 1, 2, and 3 as new activities for cost recovery through the ECRC?

Recommendation: Yes. Prudently incurred costs for the Big Bend Unit 4 SCR system and Pre-SCR retrofits on Big Bend Units 1, 2, and 3 are appropriate for recovery through the ECRC. (BREMAN, HAFF, LEE, STERN)

Staff Analysis: In the spring of 2004, TECO completed a study of the most cost-effective options to reduce NOx air emissions pursuant to the requirements of the settlement agreements. TECO's study compared the 30-year revenue requirements of nine generation options to the 30-year revenue requirements of retrofitting Big Bend Station with NOx air emissions equipment. Five of the generation options allowed for the re-powering of Big Bend Station using various coal-fired and gas-fired technologies. Four green-field options using coal-fired and gas-fired technologies were also evaluated to determine whether savings could be achieved by shutting down the Big Bend Station. All options were compared on a cumulative present worth revenue requirements (CPWRR) basis, similar to that used in a need determination for a new generating unit. The CPWRR analysis incorporated all capital, operating and maintenance, environmental compliance, fuel, and recurring capital costs. 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 CPWRR cost over \$700 million higher than TECO's proposed plan.

Staff reviewed TECO's long range planning assumptions and believes they are reasonable. Staff is not aware of any reasonable assumption that would cause a \$700 million increase in TECO's proposed Big Bend NOx compliance program and thereby cause the project to lose its cost effectiveness. Thus, staff believes TECO has made a reasonable assessment of possible options and selected the most cost-effective compliance alternative.

TECO's Big Bend NOx air emission compliance program consists of three retrofit activities: 1) installation of Pre-SCR equipment at Big Bend Units 1, 2, and 3; 2) installation of SCR at Big Bend Units 1-4; and, 3) alkali injection at Big Bend Units 1-4. TECO's estimated costs for the Big Bend NOx air emissions compliance program are shown in Tables 1 and 2. The Pre-SCR activities are improvements to power plant operations and coal/air controls. The Pre-SCR activities are more cost-effective than using SCR, but can not achieve the total NOx emission reduction required by the settlement agreements. Thus, the cost of the SCR activities are reduced but not avoided by the Pre-SCR activities. The alkali injection activities will be installed to address increases in SO₃ concentrations typically caused by the SCR systems. TECO plans to phase the retrofit activities over the next six years.

TECO's Petition seeks ECRC treatment of only those costs for activities that are currently underway and budgeted for 2005. The components of TECO's Petition are shown in bold face type in Tables 1 and 2 and consists of installation of Pre-SCR equipment at Big Bend Units 1, 2, and 3 and installation of SCR equipment at Big Bend Unit 4. These activities are required by the settlement agreements with DEP and EPA. The settlement agreements qualify as

“environmental laws or regulations” under Section 366.8255(1)(c), Florida Statutes, because they are orders of a Florida Circuit Court and a Federal District Court, respectively.

The Pre-SCR activity costs shown in Tables 1 and 2 for Big Bend Unit 4 are already included in the ECRC by Order No. PSC-03-0684-PAA-EI, issued June 6, 2003, in Docket No. 030226-EI, In Re: 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. The 2004 and 2005 revenue requirements associated with the installation of Pre-SCR equipment at Big Bend Units 1, 2, and 3 and installation of SCR equipment at Big Bend Unit 4 will be addressed at the November 8-10, 2004 hearing in Docket No. 040007-EI.

Table 1
 Projected Big Bend Station Capital Additions for NOx Emission Reductions
 (Dollars in thousands)

Unit No.	Unit 1	Unit 2	Unit 3	Unit 4	Total
Compliance Date	5/1/10	5/1/09	5/1/08	6/1/07	All Units
Pre-SCR equip.	\$2,135	\$1,585	\$2,635	\$550	\$6,905
SCR equip.	\$74,661	\$74,904	\$73,905	\$61,375	\$284,845
Alkali injection equip.	\$3,425	\$3,425	\$3,425	\$3,425	\$13,700
Total Capital Costs	\$80,221	\$79,914	\$79,965	\$65,350	\$305,450

Table 2
 Projected Big Bend Station Annual Operations & Maintenance Costs
 for NOx Emission Reductions
 (Dollars in thousands)

Unit No.	Unit 1	Unit 2	Unit 3	Unit 4	Total
Compliance Date	5/1/10	5/1/09	5/1/08	6/1/07	All Units
Pre-SCR	\$75	\$40	\$125	\$30	\$270
SCR	\$2,500	\$2,500	\$2,100	\$1,500	\$8,600
Alkali injection	\$970	\$970	\$970	\$970	\$3,880
Total O&M Costs	\$3,545	\$3,510	\$3,195	\$2,500	\$12,750

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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. Consequently, TECO's current base rates can not be reasonably expected to include the costs for which it seeks recovery in this Petition.

Conclusion

TECO has shown that its proposed Big Bend Unit 4 SCR system and the Pre-SCR retrofits on Big Bend Units 1, 2, and 3 are required to comply with a governmentally imposed environmental regulation. 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, staff believes prudently incurred costs for the Big Bend Unit 4 SCR system and Pre-SCR retrofit activities on Big Bend Units 1, 2, and 3 are appropriate for recovery through the ECRC.

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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 area 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 the Consummating Order.