#### BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition for approval of new environmental program for cost recovery ORDER NO. 050958-EI ORDER NO. PSC-06-0602-PAA-EI ISSUED: July 10, 2006 by Tampa Electric Company.

The following Commissioners participated in the disposition of this matter:

LISA POLAK EDGAR, Chairman J. TERRY DEASON ISILIO ARRIAGA MATTHEW M. CARTER II KATRINA J. TEW

# NOTICE OF PROPOSED AGENCY ACTION ORDER APPROVING ENVIRONMENTAL PROGRAM FOR COST RECOVERY THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE

#### BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

#### BACKGROUND

On December 27, 2005, Tampa Electric Company (TECO) petitioned for cost recovery through the Environmental Cost Recovery Clause (ECRC) of the costs associated with a project entitled "Big Bend Flue Gas Desulfurization System Reliability Program" (FGD Reliability Program). The project is designed to improve reliability of the flue gas desulfurization systems (scrubbers) on Big Bend Units 1, 2, and 3. TECO indicates that such improvements are necessary to comply with settlement agreements with the Florida Department of Environmental Protection (FDEP) and the United States Environmental Protection Agency (EPA) issued on December 16, 1999, and February 29, 2000, respectively. Under the settlement agreements, memorialized in its Consent Decree with the EPA, TECO is prohibited from operating Big Bend Units 1, 2 and 3 unscrubbed at any time beginning in 2010 (Big Bend Units 1 and 2) and 2013 (Big Bend Unit 3). Thus the reliability of the units, as well as Unit 4 that shares the Unit 3's FGD system, is limited by the reliability of their respective FGD systems.

DOCUMENT NUMBER-DATE

**FPSC-COMMISSION CLERK** 

Section 366.8255, Florida Statutes, authorizes the Commission to review and decide whether a utility's environmental compliance costs are recoverable through an environmental cost recovery factor. Electric utilities may petition to recover projected new environmental compliance costs, required by environmental laws or regulations, not included in base rates. Section 366.8255(1)(c), Florida Statutes, provides that 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)(d), Florida Statutes, provides that environmental compliance costs include "all costs or expenses incurred by an electric utility in complying with environmental laws and regulations. . . ." Section 366.8255(2), Florida Statutes, program, it "shall allow recovery of the utility's prudently incurred environmental compliance costs, including the costs incurred in compliance with the Clean Air Act, and any amendments thereto or any change in the application or enforcement thereof. . . ."

We find that the costs associated with TECO's proposed program to improve the reliability of the scrubbers at Big Bend are eligible for recovery through the ECRC as environmental compliance costs, "incurred in compliance with the Clean Air Act, and any amendments thereto or any change in the application or enforcement thereof. . . ." Our reasons for this decision are explained in detail below.

## **DECISION**

## Teco's Proposed Project

TECO asserts that its FGD Reliability Program is required to comply with Paragraph 40 of its Consent Decree. As mentioned above, the Consent Decree is a February 29, 2000, settlement order with the EPA that establishes operational parameters relative to SO2 emissions for Big Bend units 1 through 3. Paragraph 36 of the Consent Decree required the company to declare in writing to the EPA whether the Big Bend Units would continue to combust coal, repower or shutdown. On August 19, 2004, the Company submitted a letter to the EPA indicating the Big Bend Station would continue to burn coal. This declaration triggered paragraph 40 of the Consent Decree, which provides deadlines after which the company may no longer operate any Big Bend Unit without the FGD systems in operation. Sub paragraphs 29 and 30 referenced within paragraph 40 provide for a gradual reduction in days which the company may operate without the FGD systems, transitioning to the stated deadlines. After 2010 for Big Bend Unit 3 and 2013 for Big Bend Units 1 and 2, the company can operate these units only to the extent the FGD system/scrubbers are in operation, according to paragraph 40. It provides:

40. If Tampa Electric elects under Paragraph 36 to continue combusting coal at Units 1, 2, and/or 3, Tampa Electric shall meet the following requirements.

A. Removal Efficiency or Emission Rate. Commencing on dates set forth in Subparagraph C and continuing thereafter, Tampa Electric shall

operate coal-fired Units and the scrubbers that serve those Units so that emissions from the Units shall meet at least one of the following limits:

- (1) the scrubber shall remove at least 95% of the SO2 in the flue gas that entered the scrubber; or
- (2) the Emission Rate for SO2 from each Unit does not exceed 0.25 lb/mmBTU.

B. <u>Availability Criteria.</u> Commencing on the deadlines set in this Paragraph and continuing thereafter, Tampa Electric shall not allow emissions of SO2 from Big Bend Units 1, 2, or 3 without scrubbing the flue gas from those Units and using other equipment designed to control SO2 emissions. Notwithstanding the preceding sentence, to the extent that the Clean Air Act New Source Performance Standards identify circumstances during which Bend Unit 4 may operate without its scrubber, this Consent Decree shall allow Big Bend Units, 2, and/or 3 to operate when those same circumstances are present at Big Bend Units 1, 2, and/or 3.

C. <u>Deadlines</u>. Big Bend Unit 3 and the scrubber(s) serving it shall be subject to the requirements of this Paragraph beginning January 1, 2010 and continuing thereafter, Until January 1, 2010, Tampa Electric shall control SO2 emissions from Unit 3 as required by Paragraphs 30 and 31. Big Bend Units 1 and 2 and the scrubber(s) serving them shall be subject to the requirements of this Paragraph beginning January 1, 2013 and continuing thereafter. Until January 1, 2013, Tampa Electric shall control SO2 emissions from Units 1 and 2 as required by Paragraphs 29 and 31.

D. Nothing in this Consent Decree shall alter requirements of NSPS, 40 C.F.R. Part 60 Subpart Da, that apply to operation of Unit 4 and the scrubber serving it.

Based upon these constraints, TECO initiated this docket with the intent of improving the reliability of the scrubbers to maintain the availability of all Big Bend Units. The FGD Reliability Program consists of 13 separate additions and modifications of the FGD systems to increase reliability of the individual scrubbers and to isolate scrubber components. For example, much of the FGD equipment is currently served by common transformers and motor control centers. The failure of transformers and motor control centers can lead to outages of multiple generating units. The installation of separate transformers and motor centers for each FGD system would isolate plant outages to a single unit. This same scenario exists for the inlet and outlet ducts to Big Bend Units 3 and 4. Isolating these common ducts will allow for only one unit being taken down for duct maintenance. Additional activities involve back up systems and improvements to avoid potential clogging of both the gypsum blow down lines and the mist eliminator systems. The individual activities are centered on improvements to FGD components

which the company has identified as most likely to cause scrubber failure and thus generating unit outages.

Along with its request to approve the FGD Reliability Program as eligible for cost recovery, TECO has asked us to determine whether the program should be implemented at the time unscrubbed days are no longer allowed pursuant to the Consent Decree, or in conjunction with already planned generating unit outages for installation of selective catalytic reduction systems. TECO also seeks approval of a cost recovery methodology for the costs of the FGD Reliability Program. Presently, costs associated with the scrubbers on Big Bend Units 1 and 2 are being recovered through the ECRC. Costs associated with Big Bend Unit 4 are included in base rates. The Big Bend Unit 4 scrubber is interconnected with Big Bend Unit 3 and the costs of the interconnection are currently recovered through the ECRC.

On March 16, 2006, TECO revised its schedule showing its proposed cost recovery methodology. Based upon this schedule, the total estimated capital cost of the Big Bend FGD System Reliability Program is \$21,651,000. This total program cost is allocated into three components for cost recovery. We have evaluated the reasonableness and timing of the project as a whole, while our evaluation of the proposed cost recovery is related to the individual components of the program.

TECO's proposed cost recovery methodology allocates a portion of the costs to a new ECRC program for costs associated with Units 3 and 4, and allocates Units 1 and 2 costs to an existing ECRC program that already includes the affected scrubbers. Additional costs, which include retirements and replacements to Units 3 and 4, are allocated for future base rate recovery. Based upon this methodology, TECO would recover an estimated \$11,929,000 capital investment costs as the new ECRC Big Bend FGD System Reliability project. If the overall project is approved as eligible for ECRC cost recovery, TECO would recover an additional estimated \$7,096,000 as incremental capital costs to its existing Big Bend Units 1 and 2 FGD program in its annual ECRC filings. An additional estimated \$2,626,000 in FGD program costs would be recovered in base rates.

TECO will incur operational and maintenance (O&M) expenses for the FGD reliability project, but decreases to existing O&M expenses due to automation and increased reliability related to the total project are expected to offset the proposed FGD reliability project O&M expenses.

## Project Eligibility

As we mentioned above, to be eligible for cost recovery through the ECRC, the FGD Reliability Program must be necessary to comply with environmental laws or regulations. The Consent Decree requires TECO to remove at least 95% of the SO2 in the flue gas that enters the scrubber and provides that TECO will not operate the Big Bend Units without the scrubbers operating. Presently, the company is in compliance with the Consent Decree by removing 95% of the SO2 and not exceeding the unscrubbed operating days allowed in the transition period leading to the paragraph 40 deadlines. When the paragraph 40 compliance requirements prohibiting operation on any unscrubbed days become effective, the Big Bend baseload units

may not operate when the scrubbers are not available. Shutting down or de-rating these units would result in the dispatch of higher fuel cost units or the purchase of replacement capacity and energy. In direct response to the impact of this increased requirement in the Consent Decree, TECO has proposed a new project to improve the reliability of the existing scrubbers, thereby maintaining the reliability of the Big Bend Units and avoiding higher cost capacity and energy.

The Consent Decree does not specifically require TECO to increase the reliability of its existing scrubbers, but the Consent Decree is the basis for TECO's decision, in order to continue to operate the plants at current levels. The most direct way to comply with the Consent Decree would be to de-rate or not operate the units based upon scrubber availability, but this option would lead to decreased system/unit reliability and additional fuel costs to ratepayers. A utility has some flexibility to choose the most prudent and cost effective means to comply with new or increased environmental requirements. Sound regulatory policy would dictate that the most cost effective compliance option be initiated for the benefit of the company's ratepayers. Since TECO's inability to operate the Bend Units without the scrubbers constantly in operation is a "change in the application or enforcement" of the Consent Decree's environmental requirements, TECO's decision to improve the reliability of the Big Bend scrubbers is eligible for recovery of costs through the ECRC. The company has estimated net fuel savings of \$34,000,000 over the initial four years after completion of the FGD reliability project using current forecasts of replacement capacity and energy costs.

This is not a project designed to increase system reliability. The FGD reliability project will provide better and more reliable scrubber operation and maintain the baseline dispatch of the Big Bend units in a cost effective manner. Both unit availability and system reliability would be maintained at their existing levels in response to the increased constraints of the Consent Decree.

TECO's current base rates do not recover the costs of the FGD reliability project for which TECO is seeking recovery through the ECRC. TECO's current base rates were established by Order No. PSC-93-0758-FOF-EI, issued May 19, 1993, in Docket No. 920324-EI, <u>In Re: Application for a rate increase by Tampa Electric Company.</u> Approximately six years later, the settlement agreements, including the Consent Final Judgment with the DEP and the Consent Decree with the EPA, were entered into on December 16, 1999, and February 29, 2000. Thus, these costs were not considered at the time base rates were last modified and TECO's proposed FGD Reliability Program is eligible for cost recovery through the ECRC.

#### **Project Evaluation**

To improve FGD performance, the company engaged the consulting firm of Sargent and Lundy to identify a cost effective approach for these modifications and upgrades. The Sargent and Lundy study addressed the following questions:

- What FGD system reliability modifications and upgrades were cost effective for improving overall unit availability?
- Should the cost effective FGD system reliability improvements be made just prior to the expiration of the allocated un-scrubbed

operating days or should they be installed as part of the ongoing selective catalytic reduction systems ("SCR") construction unit outages?

The overall project includes 13 separate components which were identified as necessary to maintain FGD system performance with minimal unit outages subsequent to the 2009 and 2012 Consent Decree deadlines. The company's modeling and cost-benefit analysis shows each component to be cost effective. Beginning in 2006, the company will incur estimated capital expenditures of \$21,651,000 over a four year period with estimated net savings to ratepayers of \$33,998,000. Most of the estimated savings is comprised of fuel cost savings. When unscrubbed days are no longer permitted, the Big Bend baseload units may not operate when the scrubbers are not available, resulting in the dispatch of higher fuel cost units or the purchase of replacement capacity and energy. The analysis was also used to determine the cost effectiveness of implementing this project in conjunction with already planned plant outages for installation of the selective catalytic reduction systems (SCR) or waiting until 2010 and 2013 when the transition period ends. The analysis showed it is cost effective to implement the FGD reliability program and SCR installations at the same time to avoid additional generating unit outages and additional replacement fuel costs. The results showed that both the scope and timing of the FGD reliability project were cost effective. On the basis of the above analysis we conclude that TECO has made a reasonable assessment of possible options and selected the most cost effective alternative.

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. 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 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, <u>In Re: Petition to establish an environmental cost recovery clause pursuant to Section 366.8255</u>, 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. Because the costs for which TECO is seeking recovery in this docket relate to the goals of CAAA, we find that cost allocation on an energy basis is appropriate.

# **CONCLUSION**

We find that because the costs associated with the program are not being recovered in base rates, and because the project will maintain unit/system reliability, TECO has initiated an economically justified and beneficial environmental compliance option for its ratepayers. The

FGD reliability program will allow for better utilization of the existing scrubbers and maintain generating unit availability at its existing level. Therefore, we approve cost recovery through the ECRC for the scrubber reliability project, we approve implementation of the project in conjunction with the planned plant outages for installation of the previously approved selective catalytic reduction systems, and we approve the company's cost recovery methodology.

It is therefore,

ORDERED by the Florida Public Service Commission that the Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause by Tampa Electric Company is granted. It is further

ORDERED Tampa Electric Company's proposed methodology for implementation of the program is approved. It is further

ORDERED that the provisions of this Order, issued as proposed agency action, shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "Notice of Further Proceedings" attached hereto. It is further

ORDERED that in the event this Order becomes final, this docket shall be closed.

By ORDER of the Florida Public Service Commission this <u>10th</u> day of <u>July</u>, <u>2006</u>.

BLANCA S. BAYÓ, Director Division of the Commission Clerk and Administrative Services

By:

Kay Flynn, Chief Bureau of Records

(SEAL)

MCB

# NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on July 31, 2006.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.