State of Florida



Huhlic 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: May 22, 2003

DIRECTOR, ADMINISTRATIVE SERVICES (BAYÓ)

DIVISION

COMMISSION

FROM:

TO:

DIVISION OF ECONOMIC REGULATION (BREMAN)

OFFICE OF THE GENERAL COUNSEL (STERN, VINING) MKS

OF

RE:

DOCKET NO. 030226-EI - PETITION FOR APPROVAL OF PROPOSED BIG BEND UNIT 4 SEPARATED OVERFIRE AIR (SOFA) PROJECT AND RECOVERY OF COSTS THROUGH ENVIRONMENTAL COST RECOVERY

THE

CLAUSE, BY TAMPA ELECTRIC COMPANY.

REGULAR AGENDA - INTERESTED PERSONS MAY 06/03/03 AGENDA:

PARTICIPATE

CRITICAL DATES: NONE

NONE SPECIAL INSTRUCTIONS:

FILE NAME AND LOCATION: S:\PSC\ECR\WP\030226.RCM

CASE BACKGROUND

On March 5, 2003, TECO petitioned this Commission for approval of the Big Bend Unit 4 Separated Over-fire Air ("SOFA") project as a new activity for cost recovery through the Environmental Cost Recovery Clause ("ECRC"). The SOFA project at Big Bend Unit 4 consists primarily of modifications inside the boiler such that fewer oxides of nitrogen (" NO_x ") will be created when coal is burned. TECO's Petition states that the project is required by its Consent Decree with the U.S. Environmental Protection Agency ("EPA"), entered in 2000.

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 the ECRC. Electric utilities may petition the Commission to recover projected environmental compliance costs required by environmental laws or

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regulations. <u>See</u> 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). If the Commission approves the utility's petition for cost recovery through this clause, only prudently incurred costs shall be recovered. <u>See</u> Section 366.8255(2), Florida Statutes.

DISCUSSION OF ISSUES

<u>ISSUE 1</u>: Should the Commission approve TECO's petition for the Big Bend Unit 4 Separated Overfire Air project as a new activity for cost recovery through the ECRC?

RECOMMENDATION: The cost of the SOFA system should be passed through the ECRC at this time, provided at least one of the following conditions is met: 1) TECO ultimately elects to run Unit 4 on coal; or, 2) EPA clearly states that Section 52.C.(1)(ii) of the Consent Decree is intended to apply before June 1, 2007, and identifies the applicable NO_x limit. If neither condition is met by June 1, 2007, then the money passed through the ECRC should be refunded with interest to the ratepayers. (Breman, Stern, Vining)

STAFF ANALYSIS:

TECO's Position

TECO entered into the Consent Decree to resolve allegations that work undertaken at the Big Bend and Gannon Stations violated the Clean Air Act. The provision of the Consent Decree that, according to TECO, requires the installation of SOFA is Section 52.C.(1)(ii), which states:

<u>General Requirement</u>. Tampa Electric shall expend the remainder of the Project Dollars required under this Consent Decree to: (i) demonstrate innovative NO_x control technologies on any of its Units or boilers at Gannon or

Big Bend not Shutdown or on Reserve/Standby; and/or (ii) reduce the $NO_{\rm x}$ Emission Rate for any Big Bend coalcombusting Unit below the lowest rate otherwise applicable to it under this Consent Decree.

TECO explains that it is getting clarification from EPA on what "the lowest rate otherwise applicable" is, for this point in time. The Consent Decree is unclear on NO_x limits at Unit 4 for any time prior to June 2007. TECO expects to receive the clarification sometime before the November true-up hearing for the ECRC (Docket No. 030007-EI).

Section 33 of the Consent Decree requires TECO to "advise EPA in writing, on or before May 1, 2005, whether Big Bend Unit 4 will be Shutdown, will be Re-Powered, or will continue to be fired by coal." Section 34.A. provides that if TECO elects to continue using coal it must meet a $\rm NO_x$ emission limit of 0.10 lb/mmBTU by June 1, 2007. There are no other provisions that appear to directly state a $\rm NO_x$ limit or $\rm NO_x$ reduction requirement for Unit 4 before 2007, however TECO claims that intermediate limits were most definitely intended by Section 52.C.(1)(ii).

According to TECO, SOFA is a type of in-furnace combustion control technology that reduces NO_x emissions by preventing NO_x formation. Selective Catalytic Reduction ("SCR") removes NO_x after they have been formed. TECO is certain that SCR will have to be installed if it elects to continue running Unit 4 on coal after May 1, 2005. TECO claims that installing SOFA now will reduce the cost of installing SCR later, because the SCR will not have to remove as much NO_x . TECO states that it is accepted throughout the industry that use of an in-furnace technology like SOFA, prior to the installation of a post- NO_x generation removal technology, like SCR, is the most prudent course.

TECO claims that installing SOFA prior to 2007 can provide substantial financial benefits. TECO's estimated cost for both the SOFA and SCR projects total \$41,500,000. The estimated cost for achieving the same emission rate with just the SCR technology is \$47.1 million. A \$5.6 million dollar net saving relative to using just SCR is expected because SOFA with SCR is less expensive than SCR without SOFA.

In addition, TECO states that the current outage schedule for Big Bend Unit 4 dictates this year as the only opportunity to

install a SOFA system before the 2007 deadline. TECO also indicates that there is a high probability that it will elect to continue running Unit 4 on coal. Assuming TECO started work on the SOFA project in March 2003 as is planned, the installation should be complete in March 2004. Finally, TECO notes that the SOFA system must be tested after it is installed in order to properly size a post-combustion technology like SCR.

In its Petition, TECO asks to recover costs for capital and O&M expenditures "associated with the engineering, procurement, construction, start-up, tuning, operation and ongoing maintenance of the SOFA system." TECO estimates \$3,230,000 for capital costs and \$30,000 annually for O&M, on a levelized present worth basis, for the first full year of service. Periodic O&M expenses will be incurred to replace the SOFA components within the boiler such as overfire air nozzles, pneumatic damper drivers, and certain expansion joints.

Staff's Review

Based on staff's interpretation of the Consent Decree, TECO is not required to reduce $NO_{\rm x}$ emissions at Unit 4 until 2007. The $NO_{\rm x}$ limit that applies at that time depends on whether TECO elects to shutdown, repower, or continue to use coal at the Unit. Section 52.C.(1)(ii), for which TECO awaits clarification from the EPA, appears to apply to the limits set for 2007 for Unit 4, although TECO believes otherwise. The provision does not state the year 2007 expressly because the $NO_{\rm x}$ limits for other units at Big Bend and Gannon start in different years and the provision applies to those units too.

The Consent Decree set a $\mathrm{NO_x}$ emission limit of 0.10 lbs/mmBtu for Big Bend Unit 4 <u>if</u> TECO continues to use of coal. Instead of using coal TECO may elect to repower or shut down the facility in which case different $\mathrm{NO_x}$ emission limits would apply and different emission control technologies will be reviewed. The SOFA project would contribute little to environmental compliance if TECO elects to repower with natural gas because the SOFA project is specific to minimizing $\mathrm{NO_x}$ creation when burning coal. On or before May 1, 2005, TECO must advise the EPA in writing of the Company's election to repower, shut down, or continue using coal. TECO has not made that election.

Staff does not believe that the express terms of the Consent Decree require TECO to install a SOFA system at this time. The only time SOFA may be needed is after TECO formally elects to continue to run Unit 4 on coal. If the SOFA system is installed now, and TECO repowers or shuts down, then the money will have been wasted.

Staff recommends that the cost of the SOFA system be passed through the ECRC at this time, provided at least one of the following conditions is met: 1) TECO ultimately elects to run Unit 4 on coal; or, 2) EPA clearly states that Section 52.C.(1)(ii) of the Consent Decree is intended to apply before June 1, 2007, and identifies the applicable NO_{x} limit. If neither of these conditions are met by June 1, 2007, then TECO should be required to refund, with interest, the costs of SOFA that were passed through the ECRC. If condition number 2 is not met, TECO should be allowed to continue to pass the costs of SOFA through the clause until at least May 1, 2005. If at that time TECO elects to run Unit 4 on coal then the costs will not have to be refunded, assuming Unit 4 does ultimately remain coal fired. If and when TECO does not elect coal by May 1, 2005, then TECO should be required to refund, with interest, all the costs of SOFA that were passed through the clause.

A conditional approval is appropriate for the following reasons: 1) TECO claims that the intent of Section 52.C.(1)(ii) is to allow $NO_{\rm x}$ reductions prior to a final decision on what to do with Unit 4, and is awaiting clarification from EPA on this; 2) TECO claims it will most likely elect to continue running Unit 4 on coal; and 3) assuming that TECO will elect to run Unit 4 on coal, and that the only scheduled outage of the Unit between now and 2007 is in 2004, installation of SOFA during a planned outage will be the most cost-effective way to proceed.

The Commission has granted a conditional approval for cost recovery when there was a reason to believe the environmental requirement is eminent. In Docket No. 960007-EI, Order No. PSC-96-0361-FOF-EI, FPL was granted conditional approval to include costs for a turtle net in the ECRC. FPL provided a draft license, rather than a final license. Issuance of the final license was delayed due to shutdown of the federal government, but FPL anticipated it would get a final license before the next true-up hearing. FPL was allowed to include project costs in the ECRC conditioned on producing the final license at the next true-up hearing.

Staff believes a similar decision in this case is appropriate primarily because TECO's customers should not carry all the financial risks associated with the SOFA project during the pendency of EPA's review of the SOFA project and during the pendency of TECO's election regarding continued use of coal. Conditional approval subject to refund including interest will balance the interests of the customers and obligations of TECO while satisfying the requirements of 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. Consequently, TECO's current base rates can not be reasonably expected to include the costs for which it seeks recovery in this Petition.

Based on the forgoing, staff believes that TECO's Big Bend Unit 4 SOFA project conditionally satisfies the requirements of Section 366.8255, Florida Statutes, and conditionally qualifies for recovery through the ECRC. The actual expenditures will be addressed in the up-coming ECRC true-up cycle and be subject to audit. Issues that will determine the specific amount recoverable through the ECRC, such as whether specific costs were prudently incurred and whether they have already been recovered in other mechanisms, will be further examined and resolved in Docket No. 030007-EI. TECO is not requesting a change in the ECRC factors that have been approved for 2003. Based on the information currently available, it appears that there is no potential for a significant rate impact. Therefore, the review of TECO's expenses should be addressed at the November 2003 ECRC hearing.

ISSUE 2: Should this docket be closed?

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

STAFF ANALYSIS: If a protest to the proposed agency action is not filed within 21 days of the date of issuance, this docket should be closed upon the issuance of a Consummating Order.

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