

State of Florida



Public Service Commission

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DATE: April 12, 2013

TO: Office of Commission Clerk (Cole)

FROM: Division of Economics (Wu, Stallcup) *Wu*
Division of Engineering (Graves) *Graves*
Office of the General Counsel (Murphy) *Murphy*

RE: Docket No. 120302-EI – Petition for approval of a new environmental program for cost recovery through the Environmental Cost Recovery Clause by Tampa Electric Company.

AGENDA: 04/25/13 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Edgar

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECO\WP\120302.RCM.DOC

Case Background

On November 30, 2012, Tampa Electric Company (TECO or the Company) petitioned the Florida Public Service Commission (Commission) for approval of a new environmental compliance program, Mercury and Air Toxics Standards (MATS) Compliance Program (Petition), and to recover the associated costs through the Environmental Cost Recovery Clause

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(ECRC). TECO's Petition was filed pursuant to Section 366.8255, Florida Statutes (F.S.), and Commission Order Nos. PSC 94-0044-FOF-EI and PSC-99-2513-FOF-EI.¹

In March of 2005 the U. S. Environmental Protection Agency (EPA) promulgated the Clean Air Mercury Rule (CAMR), which was challenged in court. On February 8, 2008 the Circuit Court of Appeals for the District of Columbia vacated CAMR and ordered the EPA to propose a new rule by March 2011. On March 16, 2011, the EPA proposed the new rule.² On December 21, 2011, the EPA issued the final version of the rule titled the Mercury and Air Toxics Standards, or MATS rule.³ The final new rule applies to all coal and oil-fired electric generating units with a capacity of 25 MW or more, and requires compliance by April 16, 2015, with a possible one year extension and a possible additional year if there are reliability issues. By its Petition, TECO reports activities for complying with various emission standards of the final MATS rule at the Company's Big Bend (BB) and Polk Power Stations.

Pursuant to Section 366.8255(2), F.S., electric utilities may petition the Commission to recover projected environmental compliance costs required by environmental laws or regulations. Pursuant to Section 366.8255(1)(c), F.S., 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." If the Commission approves the utility's petition for cost recovery, only prudently incurred costs may be recovered.⁴ The Commission has jurisdiction over this matter pursuant to Section 366.8255(2), F.S.

¹ 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 366.0825, F.S., by Gulf Power Company; Order No. PSC 99-2513-FOF-EI, issued December 22, 1999, in Docket No. 990007-EI, In re: Environmental Cost Recovery Clause.

² That was under the Clean Air Act National Emission Standards for Hazardous Air Pollutants under Maximum Achievable Control Technology criteria that included all Hazardous Air Pollutants.

³ The rule was published in the *Federal Register* on February 15, 2012, setting the compliance deadlines. The final rule comprises some 210 pages and may be viewed at <http://www.epa.gov/mats/actions.html>. Appendix B shows specific MATS Rule References pertaining to the Petition.

⁴ See Order No. PSC 11-0080-PAA-EI, issued January 31, 2011, in Docket No. 100404-EI, In re: Petition by Florida Power & Light Company to recover Scherer Unit 4 Turbine Upgrade costs through environmental cost recovery clause or fuel cost recovery clause at pp. 2-5, recounting history of ECRC eligibility criteria pursuant to Section 366.8255, F.S.

Discussion of Issues

Issue 1: Should the Commission approve TECO's Petition for approval of its Mercury and Air Toxics Standards Compliance Program and the recovery of the associated cost through the Environmental Cost Recovery Clause pursuant to Section 366.8255, F.S.?

Recommendation: Yes. Staff recommends that the Commission approve the MATS Compliance Program for ECRC recovery. (Wu, Stallcup, Graves)

Staff Analysis:

The MATS rule sets forth Hazardous Air Pollutants (HAPs) standards for (1) Mercury, (2) Non-mercury metal HAPs, and (3) Acid Gases. Adherence to these standards must be determined using on-line monitoring or manual methods for monitoring and compliance. In its Petition, TECO notes that some of the emission standards in the new MATS rule are more rigorous than current emission limits and current actual emission levels. However, the Company's preliminary evaluations have indicated that modest enhancements of current control devices should achieve compliance with the standards.

Compliance with the Mercury Standard

The Commission approved TECO's CAMR Phase I Emission Monitoring Compliance Program for cost recovery through the ECRC in November 2006.⁵ Since 2007 the Company has been recovering costs for its mercury monitoring activities at BB and Polk Power Stations. This monitoring data has been very valuable for evaluating whether or not the Company can comply with the recently finalized standards. TECO notes that the data collected provide confidence that applicable mercury requirements can be met using the Company's current control and monitoring systems. The Company has projected costs associated with this program for purchasing new mercury sorbent systems and an additional mercury spectrometer. These expenditures have been included in TECO's 2013 ECRC Projection Filing.

Compliance with the Non-mercury Metal HAPs Standard

The final MATS rule requires compliance with at least one of three parameters relating to non-mercury metal HAPs: (i) individual non-mercury metal HAPs, (ii) total non-mercury metal HAPs, or (iii) filterable particulate matter and continuous monitoring using a particulate matter continuous emissions monitoring system (PM CEMS) or stack testing. For BB Station, TECO's engineering studies indicated that the PM CEMS is the most technically feasible option to demonstrate compliance with the final MATS Rule. The Company already has PM CEMS units installed on Units 3 and 4 as part of the requirements of the Consent Decree.⁶ The Company notes that these PM CEMS units have successfully met the objectives of the Consent Decree. TECO believes that these PM CEMS will also successfully demonstrate compliance with the

⁵ Order No. PSC-06-0926-PAA-EI, issued November 6, 2006, in Docket No. 060583-EI, In re: Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause, by Tampa Electric Company.

⁶ Consent Decree entered into in 2000, in *United States v. Tampa Electric Company*, Civ. No. 99-2524-CIV-T-23F.

MATS Rule and Clean Air Act (CAA) requirements. TECO indicates that it needs to install a PM CEMS, unit and its necessary ports for operation, on the common stack serving BB Units 1 and 2. The Company believes that it is prudent to install this unit now in order to allow for the optimization of TECO's compliance plan. Installing the unit now could also avoid potentially substantial cost increases that are expected to occur because of the very limited pool of manufacturers of this equipment, coupled with the fact that other utilities will be attempting to obtain the same units to meet the new MATS Rule requirements.

For Polk Power Station, TECO plans to demonstrate compliance by obtaining low emitting electric generating unit (LEE) status on Polk Unit 1. LEE status is obtained by testing quarterly for three years and meeting the LEE status for each test. Testing can start as early as one year before the compliance date. The LEE status is 50 percent of the applicable emissions limit. Once LEE status is obtained, Polk Unit 1 will only need to test for PM once every three years and continue to meet the LEE status during this testing. The Company indicates that it will only incur operation and maintenance (O&M) cost to bring Polk Unit 1 into compliance.

Compliance with the Acid Gases Standard

The MATS rule requires continuous emissions monitoring or quarterly stack testing to demonstrate compliance with sulfur dioxide (SO₂) or hydrogen chloride (HCl) emissions. For its BB Units, TECO has evaluated several monitoring and stack testing alternatives in order to minimize the cost of compliance. Because of the testing frequency, the quarterly HCl stack testing alternative was not considered an economically feasible option. Further, the quarterly testing frequency would be difficult to achieve due to the dispatching and operating demands. In lieu of HCl testing, HCl continuous emission monitors were also considered. However, reviewing of these monitors revealed that these units were not capable of meeting the compliance limit which made this technology option infeasible for compliance purposes. Moreover, this option would also add significant operating and capital expenses. The SO₂ monitors are already installed and will not require any additional monitoring costs to implement. Consequently, the Company decided that the SO₂ monitoring is the most cost-effective compliance option.

The SO₂ emission limit of the Acid Gases Standard set by the MATS rule is 0.2 lb/MMBtu on a 30-day-rolling average basis. For the BB Station, the Company's data showed that the maximum SO₂ emission rates were 0.20 lb/MMBtu for Unit 1 and 2, 0.19 lb/MMBtu for Unit 3, and 0.38 lb/MMBtu for Unit 4 on a heat weighted 30-day-rolling average. Hence, flue gas desulfurization (FGD) enhancements will be required to provide the necessary margin of compliance to satisfy the SO₂ emission limit. Currently, the average removal efficiency rate is 97 percent for Units 1 and 2, 98 percent for Unit 3, and 95 percent for Unit 4. In order to achieve compliance, the removal efficiencies of all of the FGDs must be increased with particular emphasis on the Unit 4 system. TECO notes that the FGD absorber towers of all BB units will be modified and all spray nozzles will be replaced with a new design to increase gas liquid contact. The Unit 4 FGD system will also receive additional modifications to further increase its removal efficiency.

For Polk Power Station, TECO's engineering studies showed that LEE status can also be obtained for acid gases and is the most feasible option to comply with the MATS rule. To obtain

LEE status, Polk Unit 1 will need to be tested every quarter for three years and meet 50 percent of the applicable emissions limit. Once LEE status is obtained, the unit will need to be tested once every three years and continue to meet the LEE emissions limit during this testing.

The estimated total costs of the proposed MATS Compliance Program will be approximately \$15.4 million for the period 2012 through 2015. Details of the expenditures associated with the program are shown in Appendix A. TECO notes that collection of 2013 projected expenditures for the CAMR portion of the program is included in the ECRC factors for 2013. The Company has incurred costs associated with the other components of the proposed MATS program in 2012. These costs are included in TECO's 2012 ECRC True-up, which was filed in April 1, 2013. TECO will include program costs projected for 2013 and beyond in the appropriate projection filings. The Company confirmed that all of the expenditures would be subject to audit by the Commission. Table 1 below shows the projected customer bill impact resulting from the proposed program.⁷

Year	(\$/1,000 kWh)
2013	0.04
2014	0.07
2015	0.11
2016	0.11
2017	0.11

As part of its request for a comprehensive MATS program, TECO is requesting the existing CAMR program be subsumed into the overall MATS program. The Company asserted that this will better facilitate the execution of all MATS compliance activity as well as create a central collection point for all costs associated with the MATS program.

TECO indicated that the proposed installations of the components of the MATS Compliance Program are compliance activities associated with the requirements of the CAA. The Company proposed that the associated capital expenditures should be allocated to rate classes on an energy basis. Staff recommends this is reasonable and consistent with the Commission's precedential orders. In Orders Nos. PSC-94-0044-FOF-EI and PSC-05-0998-PAA-EI, the Commission found that costs associated with compliance with CAA should be allocated to rate classes in the ECRC on an energy basis, due to the strong nexus between the level of emissions which the CAA seeks to reduce and the number of kilowatt-hours generated.⁸

Based on the Petition and the Company's responses to staff discovery, staff recommends that the proposed new activities of the MATS program are not discretionary or voluntary. Instead, they are essential projects that would not be carried out but for TECO's obligation to

⁷ TECO's responses to Staff's First Data Request, No. 10 and Staff's Second Data Request, No. 11.

⁸ Order Nos. PSC-94-0044-FOF-EI, at pp. 21-23, and PSC-05-0998-PAA-EI, issued October 14, 2005, in Docket No. 050316-EI, In re: Petition for approval of integrated Clean Air Regulatory Compliance Program for cost recovery through Environmental Cost Recovery Clause, by Progress Energy Florida, Inc., at pp. 6-7.

comply with a government-imposed environmental regulation. The need for these compliance activities has been triggered after the Company's last test year upon which rates are currently based. Further, the costs of the proposed new components for the MATS Compliance Program are not recovered through some other cost recovery mechanism or through base rates. Thus, staff recommends that the new MATS program meets the criteria for ECRC cost recovery established by the Commission by 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; and
- (c) none of the expenditures are being recovered through some other cost recovery mechanism or through base rates. See *Id.* at page 6.

As such, staff recommends that the Commission approve TECO's proposed MATS Compliance Program for ECRC recovery pursuant to Section 366.8255, F.S. Staff recommends that the costs associated with the proposed projects be allocated to rate classes on an energy basis. Staff also recommends that TECO's existing CAMR program be subsumed into the overall MATS program in the ECRC.

Docket No. 120302-EI
Date: April 12, 2013

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. (Murphy)

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, 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.

Appendix A: MATS Project Costs						
MATS Capital Expenditures						
	CAMR		MAST Non-mercury		Acid Gas	
	Big Bend	Polk	Big Bend	Polk	Big Bend	Polk
2012	\$0	\$0	\$0	\$0	\$1,550,000	\$0
2013	\$150,000	\$30,000	\$620,000	\$0	\$430,900	\$0
2014	\$0	\$0	\$0	\$0	\$5,850,000	\$0
2015	\$90,000	\$30,000	\$0	\$0	\$5,634,620	\$0
MATS O&M Expenditures**						
	CAMR		MAST Non-mercury		Acid Gas	
	Big Bend	Polk	Big Bend	Polk	Big Bend	Polk
2013*	\$47,250	\$15,750	\$86,000	\$0	\$0	\$0
2014	\$48,290	\$16,097	\$72,000	\$40,000	\$40,000	\$40,000
2015	\$49,352	\$16,451	\$73,584	\$40,880	\$212,500	\$40,880
Total Capital Expenditures					\$14,385,520	
Total O&M Expenditures					\$839,034	
Subtotal Capital and O&M Costs					\$15,224,554	
MATS Engineering Study Cost					\$200,000	
Total Project Cost					\$15,424,554	
*2013 costs for CAMR includes \$20,000 filed in TECO's 2013 ECRC Projection Filing in Docket No. 120007-EI.						
**These O&M expenditures represent costs that will occur during the construction phase of the project.						
Subsequent annual O&M expenditures will occur at the 2015 level escalated annually.						

Appendix B: Specific MATS Rule References Pertaining to TECO's Petition*

1. TECO Petition Paragraph 5
 - 1.1. For applicability, see p163 (§ 63.9982 (a) (*What is the affected source of this subpart?*)).
 - 1.2. For compliance date requirement, see p163, (§ 63.9984 (b) (*When do I have to comply with this subpart?*))
2. TECO Petition Paragraph 6
 - 2.1. For the standards, see p163 (§ 63.9991 (a) (*What emission limitations, work practice standards, and operating limits must I meet?*))
 - 2.2. For the test methods required, see p170 (§ 63.10007, (*What methods and other procedures must I use for the performance tests?*))
3. TECO Petition Paragraph 7
 - 3.1. For the 1st and 2nd parts, see p5 (*A. What is the statutory authority for this final rule?*)
 - 3.2. For 3rd part (standards), see p188 (*TABLE 2 TO SUBPART UUUUU OF PART 63—EMISSION LIMITS FOR EXISTING EGUS*),
 - 3.2.1. For Big Bend Station, see subcategory #1. The table lists standards for each parameter. Note that filterable particulate matter is an alternative to meeting the non-Hg HAP metals standard. And meeting the sulfur dioxide standard represents compliance with acid gas standards.
 - 3.2.2. For Polk Power Station, see p189, subcategory #3, IGCC. Note that the hydrochloric acid standard represents acid gases.
4. TECO Petition Paragraph 9
 - 4.1. For the list of alternatives, see p188 (*TABLE 2 TO SUBPART UUUUU OF PART 63—EMISSION LIMITS FOR EXISTING EGUS*),
 - 4.1.1. For Big Bend Station, see subcategory #1. The table lists standards for each parameter.
 - 4.1.2. For Polk Power Station, see p189, subcategory #3, IGCC.
5. TECO Petition Paragraph 10
 - 5.1. For LEE status requirements, see p168 (§ 63.10005 (h) *Low emitting EGUs*)
6. TECO Petition Paragraph 11
 - 6.1. For the emission limits, see p188 (*TABLE 2 TO SUBPART UUUUU OF PART 63—EMISSION LIMITS FOR EXISTING EGUS*), For Big Bend Station, see subcategory #1. The table lists standards for each parameter.

* Source of the information: an email dated March 18, 2013, from Mr. Howard Bryant, Manage, Regulatory Affairs Department, Tampa Electric Company.