

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: June 24, 2022

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Knoblauch, Ramos) *TB*
Division of Economics (Wu) *JGH*
Office of the General Counsel (Amig) *TLT*

RE: Docket No. 20220055-EI – Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause, by Tampa Electric Company.

AGENDA: 07/07/22 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: La Rosa

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

On March 11, 2022, Tampa Electric Company (TECO or Company) petitioned the Florida Public Service Commission (Commission) to approve the Clean Air Act (CAA), National Emission Standards Hazardous Air Pollutants (NESHAP) Subpart YYYY Compliance Project (Project) for cost recovery through the Environmental Cost Recovery Clause (ECRC). TECO stated that the project is required to comply with the Environmental Protection Agency's (EPA) CAA, NESHAP Subpart YYYY standard for stationary, gas-fired combustion turbines (CTs).

The EPA promulgated NESHAP for stationary, gas-fired combustion turbines in 2004. However, that same year, the effectiveness of the rule was stayed by the EPA specifically for new lean premix gas-fired and diffusion flame gas-fired turbines. The stay was enacted to avoid

unnecessary expenditures related to compliance with NESHAP in the event that these two subcategories of turbines were later delisted. In March 2020, the EPA concluded that the risks related to hazardous air pollutants from combustion turbines were acceptable, even without the standard in place; however, public commenters subsequently requested that the EPA reconsider this determination. Additionally, industry interests requested the EPA completely delist stationary, gas-fired combustion turbines from the Hazardous Air Pollutant (HAP) program.

On March 9, 2022, the EPA published a Final Rule¹ removing the stay for natural gas-fired, stationary combustion turbines, but stated that it would continue to evaluate the delisting petition. Despite the delisting petition still under consideration, the EPA concluded that even if the petition was granted, a lengthy rulemaking process would be required following the delisting and further delay was not warranted in lifting the stay. The Final Rule requires lean premix and diffusion flame gas-fired turbines located at major sources of HAP emissions that were constructed or reconstructed after January 14, 2003, must comply with the formaldehyde standard beginning March 9, 2022. The Final Rule will also apply to the startup of any future affected units.

Pursuant to Section 366.8255, Florida Statutes (F.S.), the Florida Legislature authorized the recovery of prudently incurred investor-owned electric utility environmental compliance costs through the ECRC. The method for cost recovery for such costs was first established by Order No. PSC-94-0044-FOF-EI, issued on January 12, 1994.² The Commission has jurisdiction over this matter pursuant to Section 366.8255, F.S.

¹ Federal Register, Volume 87, No. 46, pp. 13183-13192, codified at Title 40, Part 63, Code of Federal Regulations.

² Order No. PSC-94-0044-FOF-EI, issued January 12, 1994, in Docket No. 19930613-EI, *In re: Petition to establish an environmental cost recovery clause pursuant to Section 366.0285, Florida Statutes by Gulf Power Company*.

Discussion of Issues

Issue 1: Should the Commission approve Tampa Electric Company's petition for approval of the CAA, NESHAP Subpart YYYYY Compliance Project for cost recovery through the Environmental Cost Recovery Clause?

Recommendation: Yes. Staff recommends that TECO's CAA, NESHAP Subpart YYYYY Compliance Project is necessary to comply with the EPA's CAA, NESHAP Subpart YYYYY standard. The Project's capital expenditures and operation and maintenance expenses should be allocated to rate classes on an energy basis. (Knoblauch, Wu)

Staff Analysis: The Final Rule applies to stationary combustion turbines located at major sources of HAP emissions. The Final Rule outlines national emission and operating limitations, and lays out the requirements to demonstrate initial and continuous compliance with those set limitations. The emission concentration of formaldehyde for a stationary combustion turbine is limited to a set threshold, except during turbine startup. If the emissions are above the threshold level, an oxidation catalyst is utilized to bring emissions to an acceptable level. If an oxidation catalyst is not required, operating limitations must be maintained as approved by the Florida Department of Environmental Protection (FDEP).

In its petition, TECO stated that the CT units that were subject to the rule were the Big Bend Station CT Units 4A, 4B, 5, and 6. A Compliance Test Study is required to determine the applicable compliance measures that are needed at each unit. However, TECO stated that preliminary data indicates oxidation catalysts will be required at Big Bend CT Units 4A and 4B, and Big Bend CT Units 5 and 6 will only require lean-premix combustion technology to meet the standard. To ensure the formaldehyde emissions are within the limitations, annual performance tests and monitoring will be required and must be provided to the EPA in accordance with the standard.

Formaldehyde analyzing equipment, Fourier Transform Infrared Spectroscopy (FTIR), will be used to conduct the annual performance tests for all units.³ The analyzing equipment will consist of one trailer mounted FTIR gas analyzer that can be mobilized at each site on an as needed basis to conduct the annual testing. For CT Units 5 and 6, which appear to not require oxidation catalysts, carbon monoxide (CO) monitoring equipment and a data acquisition system (DAS) will be utilized to ensure emissions meet the set limitations.

Table 1-1 provides the estimated costs for the Project. The Project costs include the Compliance Test Study, capital costs, and operation and maintenance (O&M) expenses, which include air permitting and performance testing costs for all units, as well as catalyst testing and maintenance costs for CT Units 4A and 4B. The Company indicated these estimates are preliminary and depending on the results of the Compliance Test Study, additional equipment or compliance measures may be required. TECO anticipates that the final results of the study will be available no later than September, 2022. TECO requested the capital expenditures and operation and maintenance expenses be allocated on an energy basis, which is in line with the Commission's

³ Document No. 02948-2022, filed May 16, 2022, TECO's Response to Staff's First Data Request.

previous decision regarding the emission reduction-related compliance cost. Table 1-2 below shows the estimated annual impact of the Project on residential customer bills.

**Table 1-1
 Estimated Capital and O&M Costs**

	2022 (\$000)	2023 (\$000)	2024 (\$000)	2025 (\$000)	2026 (\$000)	Total ² (\$000)
Compliance Test Study¹	45	-	-	-	-	45
Capital						
Catalyst Equipment & Installation	250	-	-	-	-	250
DAS Installation & Integration	50	-	-	-	-	50
CO Monitors Installation	150	-	-	-	-	150
MKS Starboost FTIR	135	-	-	-	-	135
Capital Total	585	-	-	-	-	585
In-Service Annual O&M						
Air Permitting	20	-	-	-	-	20
Annual Stack Tests	-	40	40	40	40	160
Catalyst Tests	-	-	-	-	20	20
Catalyst O&M (labor & materials)	-	10	10	10	10	40
Catalyst Wash (labor & materials)	-	-	-	-	125	125
Monitor Maintenance (labor & materials)	-	20	20	20	20	80
MKS Starboost FTIR O&M	-	5	5	5	5	20
O&M Total	20	75	75	75	220	465

1 Estimated study costs incurred to ensure that measures implemented include best available technology to comply with the Final Rule.

2 The estimated annual O&M expense after the commercial in-service date will continue through the life of the compliance equipment.

Source: Document No. 02948-2022, filed May 16, 2022, TECO’s Response to Staff’s First Data Request.

**Table 1-2
 Residential Bill Impact**

Year	\$ / 1,000 kWh	\$ / 1,200 kWh
2022	\$0.00	\$0.00
2023	\$0.01	\$0.01
2024	\$0.01	\$0.01
2025	\$0.01	\$0.01
2026	\$0.01	\$0.02

Source: TECO’s Response to Staff’s First Data Request No. 4

Based on TECO’s petition and the Company’s responses to staff’s data requests, staff recommends that TECO’s ECRC Project is necessary for compliance with the EPA Rule. The

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Commission's criteria for ECRC recovery relevant to this docket, established by Order No. PSC-94-0044-FOF-EI, are:

- (1) The activities are legally required to comply with 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
- (2) None of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

Staff recommends that the activities proposed in TECO's petition meet these criteria. The activities described in the petition are necessary for TECO to comply with governmentally imposed environmental regulation. The need for the compliance activities were triggered after TECO's last test year upon which rates are currently based.⁴ Specifically, the need for these activities was triggered by the removal of the stay of the EPA's CAA, NESHAP Subpart YYYY standard, which requires TECO to demonstrate compliance within 180 days after the stay was lifted and published in the Federal Register or by September 5, 2022. Finally, the costs of the proposed compliance activities are not currently being recovered through some other cost recovery mechanism or through base rates. Staff notes that the reasonableness and prudence of individual expenditures related to the Project will continue to be subject to the Commission's review in future ECRC proceedings.

Conclusion

Staff recommends that TECO's CAA, NESHAP Subpart YYYY Compliance Project is necessary to comply with the EPA's CAA, NESHAP Subpart YYYY standard. The Project's capital expenditures and operation and maintenance expenses should be allocated to rate classes on an energy basis.

⁴ A joint Stipulation and Settlement Agreement between TECO and intervening parties was filed in Docket No. 20210034-EI on August 6, 2021, and approved by the Commission in Order No. PSC-2021-0423-S-EI.

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 Order. (Imig)

Staff Analysis: At the conclusion of the protest period, if no protest is filed, this docket should be closed upon the issuance of a Consummating Order.