

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960

April 14, 2022

Mr. Robert Velasco, PE, BCEE, QEP Air and Water Programs TECO P.O. Box 111 Tampa, Florida 33601-0111

Dear Mr. Velasco:

This is in response to your letter, dated March 24, 2022, to the U.S. Environmental Protection Agency, which requested a waiver of relief related to the timing sequence of submissions for continuous monitoring system (CMS) plans and the conduct of initial compliance demonstration testing events for stationary lean premix gas-fired combustion turbines located at TECO's Big Bend Station in Apollo Beach, Florida. The turbines are subject to Title 40, Code of Federal Regulations (CFR), Part 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. We requested additional information from you on March 30, 2022, and the information was received on the same day. Based on the information you provided, your waiver request is denied. Details regarding the basis for our determination are provided in the remainder of this letter.

TECO operates two lean premix gas-fired combustion turbines (CT) at TECO's Big Bend Station in Apollo Beach, Florida. These units, CTs 5 and 6, are each rated at 370 megawatts. Construction of the units began on July 29, 2019. As a result, both units are considered a new source under the provisions of the rule since construction began after January 14, 2003. CTs 5 and 6 began operation on September 28, 2021, and September 21, 2021, respectively. The Big Bend Station is a major source of emissions for hazardous air pollutants (HAPs). The turbines operate without an oxidation catalyst. On March 5, 2022, the EPA lifted the stay for provisions of the rule related to lean premix gas fired turbines (69 FR 10512). As a result, TECO is required to demonstrate compliance with the Subpart YYYY by September 5, 2022, or within 180 days after March 9, 2022. Since the units are not equipped with an oxidation catalyst to control emissions of HAPs, TECO must petition the EPA for approval of a continuous monitoring system (CMS) plan before conducting initial performance testing to demonstrate compliance with the HAPs emission standard.

Based on the information provided in your submission, TECO proposes to conduct engineering testing for CTs 5 and 6 on April 13, 2022, to support the development of a CMS plan. Additionally, you propose to conduct the initial HAPs emission standard compliance demonstration testing for CTs 5 and CT 6 on April 14, 2022, and April 15, 2022, respectively. Lastly, you propose to subsequentially submit the results of the initial compliance demonstration testing and CMS plans to the EPA on some date after April 15, 2022. You request EPA's approval of this procedure to demonstrate compliance with the applicable standards of Subpart YYYY.

EPA's Review of Subpart YYYY Applicability and Standards

Under 40 CFR 63.6085, owners/operators of stationary combustion turbines are subject to Subpart YYYY if they own or operate a stationary combustion turbine located at a major source of HAP emissions. Under 40 CFR 63.6090(a)(2), a *new* stationary combustion turbine is a stationary combustion turbine for which construction commenced after January 14, 2003. Under 40 CFR 63.6085(a), "stationary combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, the combustion turbine portion of any stationary cogeneration cycle combustion system, or the combustion turbine portion of any stationary combined cycle steam/electric generating system." "Stationary combustion turbines covered by this subpart include simple cycle stationary combustion turbines, regenerative/recuperative cycle stationary combustion turbines, cogeneration cycle stationary combustion turbines, and combined cycle stationary combustion turbines, and combined cycle stationary combustion turbines."

Under 40 CFR 63.6095(a)(3), if you startup a lean premix gas-fired stationary combustion turbine on or before March 9, 2022, you must comply with the emissions limitations and operating limitations in Subpart YYYY no later than March 9, 2022. Under 40 CFR 63.6105(a), after September 8, 2020, owners/operators must comply with the emission limitations, operating limitations, and other requirements of Subpart YYYY which apply. Under 40 CFR 63.6105(c), after September 8, 2020, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Under 40 CFR 63.6110(a), owners/operators must conduct the initial performance test to demonstrate compliance with the formaldehyde emission limitation of 91 parts per billion by volume (dry basis), or less, at 15-percent O₂, no later than September 5, 2022.

Under 40 CFR 63.6120(c), after September 8, 2020, performance tests must be conducted at 100 percent load, plus or minus 10 percent, and shall be conducted under such conditions based on representative performance of the affected source for the period being tested, excluding periods of startup, shutdown, and malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation.

Under 40 CFR 63.6120(e), for stationary combustion turbines not equipped with an oxidation catalyst, owners/operators must petition the EPA Administrator for operating limitations that will be monitored to demonstrate compliance with the formaldehyde emission limitation, and you must measure and record those operating parameters during the initial performance test. The parameters must be continuously monitored after the test. Owners/operators must not conduct the initial performance test until after a decision is granted by the EPA Administrator regarding the petition.

Under 40 CFR 63.6125(b), if you are operating a stationary combustion turbine that is required to comply with the formaldehyde emission limitation and you are not using an oxidation catalyst, you must continuously monitor parameters as specified in a response from the EPA Administrator related to an approval of your CMS petition. Additionally, you must comply with the petition-based operating limitations approved by the Administrator and continuously monitor compliance with the operating limitations.

Under 40 CFR 63.6110(b), an owner or operator is not required to conduct an initial performance test to determine outlet formaldehyde concentration on units for which a performance test has been previously conducted, but all of the following conditions must be met: (1) the test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly, (2) the test must not be older than 2 years, (3) the test must be reviewed and accepted by the Administrator, (4) either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes, and (5) the test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

Under 40 CFR 63.7(e)(2)(iv), performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in 40 CFR 63.7(e), in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of Chapter I unless the Administrator waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

Under 40 CFR 63.7(h)(2), individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis.

EPA's Determination

Subpart YYYY specifies an events-sequence standard which details the timing relationship between the conduct of initial compliance demonstration performance testing and the submission of CMS petitions required for sources whose turbines are not equipped with oxidation catalyst control devices. The CMS petition must be submitted to, and approved by, the EPA Administrator before initial compliance demonstration performance testing may be conducted. Because TECO is not proposing to submit a CMS plan before conducting initial performance compliance testing, the EPA is unable to approve your proposed compliance demonstration procedure.

Should you decide to conduct compliance demonstration performance testing on April 14-15, 2022, and the testing successfully demonstrates compliance with all provisions of 40 CFR 63.6110(b), the Florida Department of Environmental Protection (FDEP) may accept the test as outlined in 40 CFR 63.6110(b) since the FDEP is the Administrator described in 40 CFR 63.6110(b)(3). Additionally, the FDEP may also consider a request for a waiver filed under the provisions of 40 CFR 63.7(e)(2)(iv) or 40 CFR 63.7(h)(2) since the FDEP also serves as the Administrator for those types of requests. The EPA reviews and approves or disapproves CMS plans for the purposes of Subpart YYYY, but notifications regarding the conduct of performance testing should be submitted directly to the FDEP.

The review of your request and our determination was coordinated with the EPA's Region 4 Enforcement and Compliance Assurance Division, the EPA's Office of Enforcement and Compliance Assurance, EPA's Office of Air Quality Planning and Standards and the EPA's Office of General Counsel. If you have any questions about the response provided in this letter, please contact Mr. Tracy Watson of my staff at (404) 562-8998 or by email at watson.marion@epa.gov.

Sincerely,

CAROLINE FREEMAN

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Date: 2022.04.14 08:03:41 -04'00'

Caroline Y. Freeman Director Air and Radiation Division

cc: Sara Ayres, EPA OECA Sheila Igoe, EPA OGC Melanie King, EPA OAQPS Sahand Nasseri, HCEPC Hastings Read, FDEP