



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4

Final Determination

Prevention of Significant Deterioration Air Permit PSD-EPA-R4014 Tampa Electric Company – Polk 2-5 Combined Cycle Conversion Project December 18, 2013

On September 24, 2013, the Region 4 office of the U.S. Environmental Protection Agency (EPA) requested public comment on a draft Prevention of Significant Deterioration (PSD) air permit for Greenhouse Gas (GHG) emissions from Tampa Electric Company's (TECO) Polk 2-5 Combined Cycle Conversion Project (Project).

This Project is a major modification which would modernize the existing Polk Power Station by adding higher-efficiency combined cycle combustion turbine technology. It consists of modifying four (4) existing simple cycle combustion turbines, Units 2 through 5, to add combined cycle operation in a 4-on-1 configuration, increasing the total nominal capacity of the units from 660 to 1,160 megawatts (MW, net). The 4-on-1 configuration will consist of: four (4) existing General Electric 7FA.03 combustion turbines, each a nominal 165 MW (net) output; four (4) heat recovery steam generators, each equipped with duct burners; and one (1) nominal 500 MW (net) output steam turbine generator. Other equipment to be added includes: a six-cell mechanical draft cooling tower, a 500 kilowatt (kW) diesel-fired emergency generator engine, a new transmission line, and existing line upgrades. The Project will increase the total generating capacity of the site to a nominal 1,420 MW (net).

The EPA prepared a preliminary determination, fact sheet, and statement of basis document that explains the permit requirements. These documents, as well as the application, supporting materials, public notice and response to public comments are available in the Administrative Record for this project. The Administrative Record is available at the EPA Region 4 office and can be accessed through EPA's website at: <http://www.epa.gov/region4/air/permits/ghgpermits/ghgpermits.html> and www.regulations.gov (Docket #EPA-R04-OAR-2013-0648).

The EPA announced the public comment period and opportunity for public hearing via a public notice published in *The (Lakeland) Ledger*, in emails to the GHG public notice list, and on www.regulations.gov and the EPA Region 4's website. A total of 25 comments from two commenters were received (via email) during the public comment period, which closed on October 25, 2013. The EPA reviewed each of the comments received and prepared a Response to Comments document, which reiterates the comments and provides the EPA's responses. Complete copies of all comments are included in the Administrative Record for the Project, which can be accessed at the websites listed above.

After consideration of the expressed view of all interested persons, the pertinent federal statutes and regulations, the application and supplemental information submitted by the applicant, and additional material relevant to the application and contained in the Administrative Record, the EPA has made a final determination in accordance with title 40, Code of Federal Regulations (CFR), part 52, to issue PSD air permit PSD-EPA-R4014 to TECO.

The final permit differs from the draft permit offered for public comment and the changes are identified in the redline-strikeout version of the final permit. In summary, the EPA made the following changes to the draft permit as a result of our response to public comments:

1. Corrected a number of typos including, but not limited to, incorrect facility street address and condition cross-referencing.
2. Clarified various inspection frequencies, monitoring, and recordkeeping and reporting requirements specified in *Sections IX.B. through F.*
3. Clarified that the GHG emission limits specified in *Condition IX.B.2.*, excluding the combined cycle/natural gas (with or without duct burners) scenario, are corrected to International Standard Organization (ISO) conditions. Also clarified that the maximum combined heat input rate of the combustion turbines/heat recovery steam generators with duct burners specified under **EQUIPMENT LIST** is based on ISO conditions.
4. Corrected the averaging time for the GHG emission limits specified in *Condition IX.B.2.*, excluding the combined cycle/natural gas (with or without duct burners) scenario, from a rolling average to a single 3-hour test average.
5. Revised *Condition IX.D.10.a.* to apply only to the combined cycle/natural gas (with or without duct burners) scenario and added *Condition IX.D.10.b.* to address the other operating scenarios.

The final permit, EPA's response to the public comments, and additional supporting information are available at <http://www.epa.gov/region4/air/permits/ghgpermits/ghgpermits.html>, as well as, the EPA Region 4 Office and are also available upon request to Ms. Rosa Yarbrough at: R4GHGpermits@epa.gov; (404) 562-9643; or in writing to: EPA Region 4, APTMD; ATTN: Ms. Rosa Yarbrough; 61 Forsyth Street, SW; Atlanta, GA 30303.

Any person who filed comments on the draft permit may petition the Environmental Appeals Board (EAB) to review any of the revised conditions of the final permit, including a showing that the conditions in question are based on a finding of fact or law which is clearly erroneous, as well as, a demonstration that these same issues were raised during the comment period. Please see 40 CFR § 124.19 and visit <http://www.epa.gov/eab/> for more information regarding the procedure for appeals to the EAB.