

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4 ATLANTA FEDERAL CENTER 61 FORSYTH STREET ATLANTA, GEORGIA 30303-8960 Sugn-Ann Pell.
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DIVISION OF AIR RESOURCE MANAGEMENT

March 6, 2013

Mr. Jeffery F. Koerner, Administrator Office of Permitting and Compliance Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Facility: 1050233

Subject: Initial Comments Re: Tampa Electric Company (TECO) – Polk Power Station Proposed Combined Cycle Conversion Project (PSD-FL-421)

Dear Mr. Koerner:

The U.S. Environmental Protection Agency has reviewed the Prevention of Significant Deterioration (PSD) preliminary determination dated December 31, 2012, and associated draft construction permit for TECO's proposed combined cycle conversion project at Polk Power Station, located in Mulberry (Polk County), Florida. The proposed project will convert the four (4) existing simple cycle combustion turbine generators (CTGs) to combined cycle operation. As part of the conversion, four (4) heat recovery steam generators equipped with duct burners, a steam turbine generator, a six-cell mechanical draft cooling tower, and an emergency generator diesel engine will be installed.

Based on the review of the PSD preliminary determination and draft construction permit, the EPA has the following comments:

- According to the application's NO_X best available control technology (BACT) analysis for the CTGs, the applicant did not consider General Electric's (GE) product line known as Operational Flexibility Enhancements (OpFlexTM) as a control option for NO_X emissions. Based on our familiarity with the Shady Hills Generating Station project to install two nominal 170 MW simple cycle CTs, Region 4 is aware of the availability of the OpFlexTM technology as an add-on feature to existing GE 7FA.03 units (like those being modified at Polk Power Station) which can reduce NO_X emissions during low-load scenarios such as startups and shutdowns. Therefore, the applicant needs to evaluate this particular technology as part of the NO_x BACT analysis for the CTGs at Polk Power Station.
- On January 22, 2013, the United States Court of Appeals for the District of Columbia, in Sierra Club v. EPA, No. 10-1413, 2013 WL 216018, ordered the 24-hour de minimis ambient impact level (also known as significant monitoring concentration or SMC) for PM_{2.5} to be vacated. In its decision, the Court indicated that the EPA did not have the authority to exempt PSD applicants from the statutory requirement to provide ambient monitoring data as part of a complete application. Id. at *8-10. Thus, we advise the applicant that it is no longer consistent with the Clean Air Act (CAA) to claim an exemption based on the PM2.5 SMC from the monitoring data requirement at CAA section 165(e)(2). The applicant may, however, obtain data from an

existing monitoring network if it can show to our satisfaction that such data is representative of the air quality in the area that the proposed source would impact.

• Even though the draft construction permit limits the annual hours of simple cycle operation (1,000 hours per CTG, instead of 4,380 as previously permitted and currently proposed by the applicant) and associated fuel oil usage (375 hours per CTG, instead of 750 as previously permitted and currently proposed by the applicant), the preliminary determination provides no justification for establishing such limits. Therefore, the preliminary determination should be revised accordingly to include the necessary justifications.

Thank you for the opportunity to comment on the TECO preliminary determination and draft construction permit. If you have any questions regarding the above comments, please feel free to contact Mr. Art Hofmeister at (404) 562-9115 or hofmeister.art@epa.gov.

Sincerely,

Kelly A. Fortin

Acting Section Chief Air Permits Section