



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

August 16, 2010

RECEIVED

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BUREAU OF  
AIR REGULATION

Mr. Alvaro Linero  
Air Program Administrator  
Division of Air Resource Management  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS 5500  
Tallahassee, Florida 32399-2400

Dear Mr. Linero:

Thank you for sending the Prevention of Significant Determination (PSD) preliminary determination and draft PSD permit (air construction permit) for the proposed Gainesville Renewable Energy Center (GREC) project within the Gainesville Regional Utilities (GRU) Deerhaven Generating Station located in Gainesville, Florida. The project consists of the construction of a net 100 megawatts (MW) woody biomass-fueled electric power plant. The GREC will be located on approximately 131 acres of land leased from the City of Gainesville, who is the owner. The applicant determined that the project is subject to PSD review for carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter (PM/PM<sub>10</sub>).

Based on our review of the preliminary determination and the draft PSD permit, the Environmental Protection Agency (EPA) has the following comments:

1. The Technical Evaluation and Preliminary Determination fail to provide clear information on the PSD applicability of PM<sub>2.5</sub>. Table 2 does not include the significant emission rate (SER) for PM<sub>2.5</sub>. On May 16, 2008, EPA issued the Final Rule on the Implementation of the New Source Review (NSR) Provisions for Particulate Matter Less than 2.5 Microns (PM<sub>2.5</sub>). The SER for direct PM<sub>2.5</sub> emissions was set at 10 ton per year (tpy).

Table 2-11 of the application states the project's total amount of emissions for PM<sub>2.5</sub> is estimated to be 278.3 tpy. The estimated amount triggers PSD. In Section 5.4 of the preliminary determination, the Department mentions some measures that were incorporated into the permit to adequately minimize PM<sub>2.5</sub> emissions. The principal target of these measures is to limit PM<sub>2.5</sub> precursors emitted at the facility (i.e., sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), ammonia, and hydrogen chloride (HCl)). However, it is not clear these measures are indeed the Best Available Control Technology (BACT) for PM<sub>2.5</sub>. This ambiguity goes along with the lack of an emission limit for PM<sub>2.5</sub> on the draft permit. Refer to Condition 9, where a table is provided with all the emission limitations for emission unit 002 (EU 002), the basis for the limitation and how to show compliance with it.

The permitting authority must determine a BACT requirement for PM<sub>2.5</sub> and include it in the permit. The BACT analysis to determine the emission limitation should also be included on the preliminary determination. When determining a test method for PM<sub>2.5</sub>, have in mind that EPA has been working to finalize the Other Test Method 027 *Determination of PM<sub>10</sub> and PM<sub>2.5</sub> Emissions from Stationary Source*. The method should become final within the next few months.

2. The netting analysis calculations to determine the offsets for NO<sub>x</sub> and SO<sub>2</sub> and enforceable emission caps are not currently part of the permit's public file. EPA request that this should be included as provided as part of the file for this permit. The permitting authority should consider incorporating Table 1 *Summary of the Applicant's PSD Applicability Analysis* on Gainesville Regional Utilities (GRU) Deerhaven Generating Station (DHS) Unit 2's Technical Evaluation and Preliminary Determination for construction permit (0010006-012-AC) into GREC's preliminary determination. However, it must be clear to the public that the netting analysis calculations were submitted in GRU DHS Unit 2 application.
3. EPA commented on the GREC's permit application. The following comment was not appropriately addressed neither in the Response to Additional Information Request No.2 dated May 2010 nor in the draft permit.

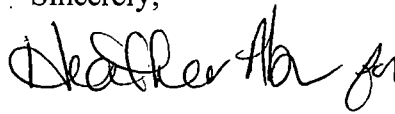
*BFB Boiler Operation – The air quality impact assessment was limited to BFB boiler operation between 70 and 100 percent load. This limited load range should be included as a permit condition.*

The permitting authority should address the comment since there is no specific condition for EU002 limiting its operation to 70-100% load.

4. Some of the conditions in the draft permit do not have a citation included or the citation might be misleading. The permitting authority should revise the following conditions to reflect the appropriate citations. Section 3 *Emission Unit Specific Conditions*:
  - a. Subsection A, Condition 1
  - b. Subsection B, Conditions 2.a. and 2.b.
  - c. Subsection C, Conditions 3-6 and 15
5. The information provided in the preliminary determination for the allowable emissions on the BFB Boiler during startup of the unit is inconsistent with the application and draft PSD permit. According to the preliminary determination, a period of 12 hours during a 24-hour period is allowed for excess emissions. However, the application and the draft PSD permit allows for a period of 14 hours of excess emissions within 24 hours. This discrepancy should be clarified and the appropriate documents revised.

If you have any questions regarding these comments or need additional information, feel free to contact Ana M. Oquendo at 404-562-9781 or Katy R. Forney at 404-562-9130.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregg M. Worley". The signature is fluid and cursive, with a large initial "G" and a distinct "W".

Gregg M. Worley  
Chief  
Air Permits Section