



Florida Department of Environmental Protection

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Secretary

March 12, 2007

ELECTRONIC MAIL - RECEIVED RECEIPT REQUESTED

allengk@gru.com

Mr. George K. Allen,
Assistant General Manager – Energy Supply
City of Gainesville, GRU
P. O. Box 147117 (A132)
Gainesville, Florida 32614-7117

Re: DEP File No. 0010006-005-AC
Air Quality Control System Addition
Deerhaven Generating Station – Unit 2

Dear Mr. Allen:

The Department received an air construction permit application on February 23, 2007 to install emission control systems and refurbishment of the existing Unit 2 steam turbine at the Deerhaven Generating Station in Alachua County. Based on our initial review of the proposed project, we have determined that additional information is needed in order to continue processing this application package. Please submit the information requested below to the Department's Bureau of Air Regulation:

1. Please provide a flow diagram of Unit 2 including any control equipment as it exists now. Also, provide a flow diagram showing all the changes taking place due to the proposed project. Include in the flow diagram material balance flow rates for all the criteria pollutants.
2. Please provide the capacity factors for Unit 2 based on heat input for the period 2002-2006. Explain the reasons for a less than 80 percent capacity factor for any year. Additionally, provide the maximum hourly heat input rate for Unit 2 during the same period. Provide the heat input rate to Unit 2 during annual compliance test for particulate matter (PM) during the same period of 2002-2006. Show the calculations in arriving at the heat input numbers for the period 2002-2006 as listed in Table 6-1 of the application.
3. The application states that the selective catalytic reduction (SCR) system will be designed so that flue gas flows through it whenever Unit 2 is operating, i.e., there are no bypasses. Does this imply that ammonia injection to the SCR will always be on whenever Unit 2 is operating?
4. The application states that the Circulating Dry Scrubber (CDS) system to control SO₂ and SO₃ emissions will be designed so that flue gas flows through it whenever Unit 2 is operating, i.e.,

there are no bypasses. Does this imply that hydrated lime will be introduced into the scrubber at all times when Unit 2 is operating?

5. Please explain where hydrogen fluoride (HF) and sulfuric acid mist (SAM) emissions are being formed and what steps are being taken to mitigate them.
6. Please provide the calculations in arriving at the actual HF and SAM emissions for the period 2002-2006. How does it compare with the emissions number obtained by doing material balance calculations? Please provide those calculations as well.
7. Please explain why the highest heat input for the year 2006 was used in determining the projected actual emissions instead of using the annual average for the period 2005-2006.
8. Please provide emissions data for CO. How will the change affect CO emissions? How is the baseline actual CO emissions determined and how will the projected actual CO emissions be monitored?

We will forward any comments received from other agencies as soon as we receive them. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Permit applicants are advised that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days.

We will be happy to meet and discuss the details with you and your staff. I may be contacted at 850/921-9528. You may discuss the modeling requirements with Mr. Cleve Holladay at 850/921-8986.

Sincerely,



Syed Arif, P.E.
Bureau of Air regulation

/sa

cc: Gregg Worley, EPA (worley.gregg@epa.gov)
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