Florida Department of Environmental Protection
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Tallahassee, Florida 32399-2400

Charlie Crist
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Michael W. Sole
Secretary

January 23, 2007

Electronic Mail – Received Receipt Requested

Mr. Timothy Bachand, Authorized Representative (timothy.bachand@lakelandelectric.com)
Lakeland Electric
501 East Lemon Street, MS-M01
Lakeland, Florida 33801

Re: C.D. McIntosh, Jr. Power Plant
DEP File No. 1050004-018-AC
Addition of Low NOx Burners, Overfire Air, and Selective Catalytic Reduction to Unit No. 3
Request for Additional Information

Dear Mr. Bachand:

Thank you for your air construction permit application and fee received on December 29, 2006, requesting a modification to add low NO_x burners (LNB), overfire air (OFA), and selective catalytic reduction (SCR) to Unit No. 3 at the C.D. McIntosh, Jr. Power Plant. However, we have deemed your application incomplete, due to the following items needing further clarification:

1. On page 19 of Part I of the Application, we note that sulfur dioxide (SO_2), nitrogen oxides (NO_x), and volatile organic compounds (VOC) are not listed as pollutants emitted by the emissions units. Was this an oversight?

2. On page 1-1 of Part II of the Application, you state that "there is the potential for collateral increases in ... sulfuric acid mist (SAM) and particulate matter (PM)." Please provide quantitative estimates of these expected increases. Do you propose pounds per hour and tons per year limits in addition to pounds per million Btu heat input limits? What testing methodology and averaging times do you suggest?

3. On page 2-1 of Part II of the Application, you state "average NO_x emissions levels are expected to be in the 0.30 lb/MMBtu range following the installation of the LNB and OFA system." Please provide a basis for this conclusion with quantitative estimates if possible.

4. On page 2-1 of Part II of the Application, you state "VOC emission levels ... are not expected to change from current emission levels." Please justify this conclusion with quantitative estimates if possible. Do you propose VOC emission limits and testing?

5. Are the pollutant emissions reported in Table 3-2 based on stack test data?

6. On page 4-1 of Part II of the Application, you state that "for the Project, the emissions of CO are expected to exceed the significant emission rate." Please provide a quantitative estimate of this

expected increase. Do you propose pounds per hour and tons per year limits in addition to the pounds per million Btu heat input limit? Do you propose the use of CO CEMs as the method of compliance? What averaging times do you suggest?

7. Do you expect any change in the quality and composition of the unit's fly ash as a result of the installation of the low NO_x burners, overfire air and SCR system?

8. Have you considered imposing an ammonia slip limit in the construction permit? What method of testing and test frequency do you recommend?

9. It appears that the Process Flow Diagram does not include the ammonia injection subsystem to control sulfur trioxide production. Please update this diagram. Please also provide more details regarding the operating parameters of this subsystem.

10. On page 4-1 of Part II of the application, you indicate that recent CO BACT determinations for new units range from 0.1 to 0.2 lb/MMBtu. Because the project includes the installation of new burners, please explain why new burners cannot be selected to achieve CO emission levels comparable to the lower range of the recent BACT determinations.

11. Rule 62-212.400(3)(h)(5), F.A.C., states that an application must include information relating to the air quality impacts of, and the nature and extent of, all general commercial, residential, industrial and other growth which has occurred since August 7, 1977, in the area the facility or modification would affect. Please satisfy this rule.

12. Please address any additional impacts from CO regarding vegetation, soils and wildlife in the surrounding Class II area.

When we receive this information, we will continue processing your application. We are available to discuss the details of our request for additional information. 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 62-213.420(1)(b), F.A.C., requires applicants to respond to requests for information within 90 days, unless the applicant has requested in writing, and has been granted, additional time within 90 days. If you have any questions, please contact Tom Cascio at 850-921-9526.

Mr. Timothy Bachand
January 23, 2007

Sincerely,

A. A. Linero, P.E.
Program Administrator
Permitting South Section

AAL/tbc

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