



June 30, 1997

Farzie Shelton
ENVIRONMENTAL COORDINATOR, Ch E.

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**BUREAU OF
AIR REGULATION**

Clair H. Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
Magnolia Park Courtyard
Tallahassee, FL 32301

RE: C.D. McIntosh, Jr. Power Plant
Draft Title V Permit No. 1050004-003-AV
Polk County, Florida

Dear Clair:

Lakeland Electric and Water Utilities (Lakeland) would like to again thank you and your staff for the cooperation we received in reaching an amicable resolution on the draft Title V permit for the Charles Larsen Memorial Power Plant. As you know, we recently received the draft Title V permit for our other facility, the C.D. McIntosh, Jr. Power Plant, and we have identified a few issues and concerns, as outlined below, that need to be resolved prior to issuance of a proposed permit. We feel that, while these issues are important to Lakeland, they should be easily resolvable without the need for a hearing. Several of these issues are identical ones we recently resolved for the Larsen Plant, and therefore Lakeland does not anticipate that the process of developing agreeable conditions for the McIntosh Plant should extend beyond the 30-day extension of time with which you previously agreed. To meet this deadline, however, we would like to work as expeditiously as possible with you and your staff to resolve the issues that we have identified, which are as follows:

Startup Fuels--The draft permit lists "propane" as the exclusive "startup fuel" for Units 001, 005, and 006. Startup fuels also include fuel oil and natural gas, and Lakeland therefore requests that Conditions A3, D3, and E3 be revised as follows:

A3/D3. Startup: The only fuels allowed to be burned are is propane, No. 2 fuel oil, natural gas, No. 6 fuel oil, or any combination of these fuels.

E3. Startup: The only fuels allowed to be burned are is propane, No. 2 fuel oil, natural gas, No. 6 fuel oil, coal, petroleum coke, refuse derived fuel, or any combination of these fuels.

Heat Input--Because the most accurate method of measuring the actual heat input is based on the heating value of the fuel used and fuel flow meter data, Lakeland requests that this be identified in the permit Conditions A1, D1, and E1 as the compliance method.

A1/D1/E1. Permitted Capacity. The maximum operation heat input rate is as follows: . . .

Compliance with the heat input limits shall be determined based on the heating value of the fuels used and fuel flow meter data.

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Fuel Use for Unit 001--Lakeland requests that the description for Unit 001 be revised to reflect a fuel use rate while firing No. 6 fuel oil as "(approximately 6,300 to 6,330 gallons per hour)."

Use of No. 2 Fuel Oil in Unit 001--Consistent with the Title V permit application, Lakeland requests that the description for Unit 001 as well as Conditions A1 and A3 be revised to clearly authorize the use of No. 2 fuel oil, for both startup and normal operations.

Federal Enforceability of Fuel Analysis Requirements--Because the sulfur content limits for the diesel engine peaking units and the gas turbine peaking unit were voluntarily requested by Lakeland and are therefore not federally enforceable, the requirement to demonstrate compliance based on a fuel analysis should also be considered "not federally enforceable." Lakeland requests that this clarification be added to Conditions B9, B12, C9, and C12.

Vendor Data--To clarify that not only may "vendor data" be used to determine compliance with the sulfur content limits but that Lakeland's own as-received data can be used for compliance purposes, Lakeland requests that language to this effect be added to Conditions A15, A20, B9, and C9.

A15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. . . .

A20. Sulfur Dioxide. . . . the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery.

B9/C9. Not federally enforceable. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery.

ASTM Methods--The latest ASTM methods for determining sulfur content of fuel for Emission Unit 001 (Condition A.21), Emissions Units 002 and 003 (Condition B.12.) and Emission Unit 004 (Condition C.12.) were not cited. As of June 1997, the latest ASTM methods are: D2622-94 (instead of D2622-92) and D129-95 (instead of D129-91).

Used Oil Sampling and Analysis--Lakeland requests that Condition A30 be revised to clarify that it is unnecessary to sample and analyze each batch of used oil delivered. The federal rules do not require a sampling of each batch to determine compliance with the "on-specification" requirements. Rather, the federal rules authorize the use of "generator knowledge" to determine compliance, as indicated in the current air operation permit for Unit 001. The requirement to burn only "on-specification" used oil should be sufficient for enforceability.

A30. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch (1,000 gallons minimum) delivered for firing or based on generator knowledge as appropriate. Evidence of compliance shall be maintained, and provided upon request. See specific condition A.11.

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Testing Requirements for Diesel Engines--Lakeland requests that the permit require annual visible emissions testing only if a diesel engine unit operates for more than 400 hours per year, and once prior to renewal. The Department has the authority to allow this, and it is consistent with the testing requirements for the gas turbine. Lakeland therefore suggests the following additional condition be added to the permit under Section B:

B. Visible Emissions Testing--Annual. By this permit, annual emissions compliance testing for visible emissions is not required unless a unit operates more than 400 hours during the prior year, excluding periods of startup.

Gas Turbine Description--The gas turbine has a "nominal nameplate rating" of 20 megawatts. Lakeland requests that the description be revised to delete any reference to a "maximum rated output" of 20 megawatts.

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating ~~maximum rated output~~ of 20 megawatts.

Heat Input Rates for Diesel Engines and Gas Turbine--The appropriate capacity limitation on the gas turbine peaking unit and the diesel engine peaking units should be in terms of "heat input rate" rather than a "fuel consumption rate," Lakeland requests that Conditions B1 and C1 be changed accordingly. In addition, because the heat input rate correction curves for the gas turbine peaking units (EU ID No. 004) have previously been provided to the Department, Condition C1 should be revised to reflect the appropriate temperature and the "lower heating value" basis.

B1. Permitted Capacity. The maximum heat input firing rate of each diesel engine peaking unit is 28 mmBtu/hour ~~201.6 gallons per hour~~ while firing No. 2 fuel oil.

C1 Permitted Capacity. The maximum heat input firing rate of the turbine is 330 mmBtu/hour while firing natural gas (lower heating value) and 320 mmBtu/hour while firing fuel oil (lower heating value) at 30 degrees F. 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil.

C13/D35. Operating Rate during Testing.

...

b. . . . Data, ~~curves~~, and calculations necessary to demonstrate the heat input rate correction at ~~both design and test~~ conditions shall be submitted to the Department with the compliance test report, consistent with the heat input curves previously submitted to the Department based on design conditions.

The phrase "unless otherwise specified in the applicable standard" is not applicable to any of the emission limits under 40 CFR Part 60 Subpart D.

NOx CEMS for Units 005 and 006--Because Units 005 and 006 (McIntosh Units 2 and 3) are not required to install and operate continuous emissions monitoring systems (CEMS) for nitrogen oxides (NOx) under the applicable New Source Performance Standard, Subpart D, Paragraph (3) of Condition D11 and E12 should be deleted. The initial compliance tests for these units indicated that

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the NOx levels were less than seventy percent of the standard, and under 40 CFR 60.45(b)(3) NOx CEMS are therefore not required. Lakeland therefore requests that the NOx CEMS requirements in Conditions D11 and D12 be deleted, including the corresponding references to NOx under Condition D29, E29, and E31.

Compliance with SO2 Limit on Unit 005--In lieu of an annual stack test to determine compliance with the sulfur dioxide limit of 0.8 lb/mmBtu for Unit 005, the permittee is authorized by its construction permit to use fuel sampling and analysis. Lakeland requests that the draft Title V permit be revised to clearly authorize the use of fuel sampling and analysis to demonstrate compliance with the sulfur dioxide limit. In addition, because 40 CFR 60.45(b)(2) provides that units without a flue gas desulfurization system, such as Unit 005, are not required to install a CEM for sulfur dioxide and may instead use fuel sampling and analysis to determine compliance. Because a sulfur dioxide CEM is not required under Subpart D, Lakeland requests that Conditions D29, D30, and D31 be deleted and that D28 be revised to include only opacity.

D17. The owner or operator shall determine compliance with the particulate matter, SO2, and NOx standards in 40 CFR 60.42, 60.43, and 60.44 as follows: . . .

(4) Sulfur Dioxide. The permittee may demonstrate compliance with the sulfur dioxide emissions limit based on a fuel analysis provided by the vendor or the permittee upon each fuel delivery. Method 6 shall be used to determine the SO2 concentration. . . .

D28. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, ~~sulfur dioxide emissions, and oxygen.~~

Annual NOx Testing--Similar to the annual testing requirements for particulate matter, Lakeland requests that a new condition be added for Unit 005 to specify that annual NOx testing should be conducted on fuel oil if it has been used for more than 400 hours during the year, and otherwise it is to be conducted on natural gas. This will prevent the need to conduct duplicative testing on oil and gas, and clarify that the annual testing should be conducted using the worst-case fuel.

D___. By this permit, annual compliance testing for nitrogen oxides shall be conducted while firing fuel oil if it has been used for more than 400 hours during the prior year (other than during startup); otherwise, it shall be conducted while firing natural gas.

Performance/Compliance Testing--A portion of 40 CFR 60.8(c) should be included as part of Conditions D.16. and E.17. to indicate that periods of startup, shutdown and malfunction are not representative conditions for performance/compliance tests under 40 CFR 60.8. The Condition should state:

Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emissions limit during periods of startup, shutdown and malfunction be considered a violation of the applicable emission limit .

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Excess Emissions Reports--Because Units 005 and 006 are "new" rather than "existing" emission units under Rule 62-296.405, Florida Administrative Code, the reporting requirements under paragraph (1) of that rule do not apply and Conditions D34 and E36 should be deleted. In addition, the excess emission reporting requirements under Conditions D32 and E34 should include a reference to 40 CFR 60.7(e), which allows less frequent reporting under certain circumstances.

D32/E34. . . . Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c).
Less frequent reporting may be allowed under the provisions of 40 CFR 60.7(e).

Excess Emissions for New Units--Because Units 005 and 006 are "new" rather than "existing" emission units under Rule 62-210.700, paragraph (1) rather than paragraphs (2) and (3) of that rule apply. Conditions D6, D12, D13, E6, E13, and E14 should be revised accordingly.

PSD Permit Conditions--It appears that several of the applicable provisions from the recent revision to the Prevention of Significant Deterioration (PSD) permit for Unit 006 (McIntosh Unit 3) have not been included in the draft Title V permit. Lakeland suggests that the Department consider the December 11, 1995, revision to the PSD permit, a copy of which was included as part of the Title V application.

Objectionable Odor--Lakeland requests that the facility-wide Condition 2 regarding objectionable odor be identified as being "not federally enforceable."

General Standard for VOCs--Lakeland requests that facility-wide condition 7 regarding procedures to minimize volatile organic compound (VOC) emissions be revised to clarify that containers "containing VOC materials" will be kept closed "when not in use" and delete the requirement to store such containers in "weather-tight buildings." A revision to the Title V application addressing this issue is attached as Attachment A.

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. . . . Containers containing VOC materials shall be kept closed when not in use and stored in weather-tight buildings.

General Particulate Matter Standards (Unconfined Emissions)--Lakeland will be forwarding to you in a separate submittal revising its list of reasonable precautions taken to minimize unconfined particulate matter emissions, and requests that the Department make corresponding changes to facility-wide Condition 8 upon receipt of this application modification.

Relevant Documents on File With the Department--Lakeland requests that on page three of the permit, the Department include a reference to the supplemental information filed with the Department on May 7, 1997.

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Unregulated Emissions Units and/or Activities--Because the general purpose diesel engines, emergency generators, and general purpose painting have been categorized as "unregulated" rather than "exempt," Lakeland requests that the usage limitations be deleted. This change should be made on page three of the permit, as well as in the Appendix U-1. Further, the word "engine" should be added to the description of the "CT startup diesel."

-xxx	CT startup diesel <u>engine</u>
-xxx	General purpose diesel engines (<32,000 gal/yr)
-xxx	Emergency generators (<32,000 gal/yr)
-xxx	General purpose painting (<6 gal/month average)

In addition to the above, the following unregulated emission units should be included in Appendix U-1. These emission units have no "emissions-limiting pollutant" and no work practice standard but do have a general visible emission limitation of 20 percent.

-xxx	Coal Processing and Conveying System, Coal Storage System, Coal Transfer and Loading System, Limestone Handling and Storage System, and Flyash Handling and Storage System
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Exempt Units--"Mobile sources" were included in the exempt list. Lakeland requests that mobile sources be omitted from the Title V permit altogether since mobile sources are not regulated under the Title V permit program.

NSPS Emission Limit Terminology-- for Emission Unit 005--In several areas of the Conditions for this emissions unit, fuels are mentioned that do not apply. In some cases the wording of the NSPS was modified to exclude these fuels. In Condition D.5. (1) the "or fossil fuel and wood residue" should be deleted. The equation in and legend in Condition D.10. should be modified to exclude lignite (w) and solid fossil fuel (z). The reference to solid fuel and combinations in the table and legend in Condition D.29. should be deleted.

Summary Table 2-1--Summary table 2-1 should be corrected to be consistent with the permit conditions; specifically:

- Clarify that each delivery of used oil is not required to be sampled and analyzed;
- Add a footnote explaining the purpose of the "frequency base dates" is a suggestion to conduct the annual testing within 90 days of the date listed;
- Clarify that compliance with the sulfur dioxide limit for Unit 005 (McIntosh Unit 2) can be accomplished using fuel sampling and analysis in lieu of a stack test, as authorized by the construction permit; and
- Clarify that NOx CEMs are not required for Unit 005 or 006 and that an SO2 CEM is not required for Unit 005.

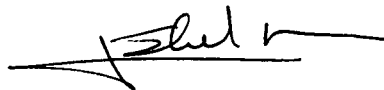
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Table 1-1-- for Emission Units 002 and 003--A footnote for this table should note that the Equivalent Emissions are for each unit. Additionally this table needs revision for the PSD Permit Conditions for emission unit 006.

*General Conditions--*Several conditions in TV-1 (the general conditions) should be identified as being "not federally enforceable." Further, Condition 58 regarding unconfined particulate matter emissions should be deleted since the facility-specific requirements were included in the facility section of the permit. Lakeland understands that the Department has to date been unwilling to make these changes. If the changes are made in the future, Lakeland requests that TV-1 be replaced with the more current version. Lakeland does not, by accepting a final permit with the current version of TV-1, acquiesce that any of the conditions are federally enforceable.

After you and your staff have reviewed and considered our comments, we would appreciate receiving a written response from you or your staff, such as draft "replacement" pages for the permit or a letter explaining the Department's position regarding these issues as soon as possible. We would also like to meet with you and your staff regarding these issues within the next two weeks or so. Thank you again for your continued cooperation. We look forward to hearing from you soon and continue to feel optimistic that all of these issues can be resolved without the need for a formal hearing. If you or your staff have any questions, please contact me at 941-499-6603.

Sincerely,



Farzie Shelton
Environmental Coordinator

cc: Howard L. Rhodes, DEP
Pat Comer, DEP OGC
Scott M. Sheplak, DEP
Edward Svec, DEP
Ronald Tomlin, Lakeland
Angela Morrison, HGSS

