FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

(Sent by Electronic Mail – Return Receipt Requested)

Tony Candales, Assistant General Manager of Production
City of Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801-5079

Re: Title V Air Operation Permit Renewal
Proposed Permit No. 1050004-033-AV
C. D. McIntosh, Jr. Power Plant

Dear Mr. Candales:

One copy of the proposed permit determination for the renewal of the Title V air operation permit for the C. D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk County, is enclosed. This letter is only a courtesy to inform you that the draft permit has become a proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

"http://www.dep.state.fl.us/air/eproducts/apds/default.asp"

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the proposed Title V air operation permit is made by the USEPA within 45 days, the proposed permit will become a final permit no later than 55 days after the date on which the proposed permit was mailed (posted) to USEPA. If USEPA has an objection to the proposed permit, the final permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you have any questions, please contact the Project Engineer, Edward Svec, by telephone at 850/717-9031 or by email at ed.svec@dep.state.fl.us.

Sincerely,

Syed Arif
2013.10.03
16:19:59 -04'00'

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

Enclosures
JFK/sa/ejs

Mr. Tony Candales, Lakeland Electric: tony.candales@lakelandelectric.com
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Permit No. 1050004-033-AV

I. Public Notice.

An Intent To Issue Air Permit issued to City of Lakeland Electric for the C. D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk County, was clerked on August 12, 2013. The Public Notice Of Intent To Issue Air Permit was published in The Ledger on August 26, 2013. The draft Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice Of Intent To Issue Air Permit was received on August 26, 2013.

II. Public Comment(s).

No Comments were received from the public during the 30-day public comment period; however, comments were received from the Permittee. The comments were not considered significant enough to reissue the draft Title V air operation permit and require another Public Notice; therefore, the draft Title V air operation permit was changed. Those comments are addressed below. Additions to the permit are indicated by a double underline. Deletions from the permit are indicated by a ~~strike through~~.

Letter from Nedin Bahtic dated August 20, 2013; August 21, 2013; and, August 27, 2013.

Comment 1. I noticed that the two diesel peaking units (EUs 002-003) have been moved to the insignificant source category. We did request that the hours of operation be limited to <100 hours/year (each) in order to exempt them from Subpart ZZZZ, but I am not sure that they can qualify as insignificant. Potential emissions would have to be less than 5 tons/year, and they are a little over 6 tons/year for NO_x (at 100 hours/year, 202 gallons/hour, and AP-42 factor of 604 lbs. per 1,000 gallons).

Response 1. The application only quantified sulfur dioxide emissions for these units at 0.72 tons per year. Had the application provided this information, the units would have been classified as unregulated units. The Department agrees with the comment. Appendix I has been changed as follows and subsequent items are renumbered:
~~21. Diesel Engine Peaking Units 2 and 3 (Limited Use Engines under 40 CFR 63 Subpart ZZZZ)~~

Appendix U has been changed as follows:
-002 Diesel Engine Peaking Unit 2 (Limited Use Engines under 40 CFR 63 Subpart ZZZZ)
-003 Diesel Engine Peaking Unit 3 (Limited Use Engines under 40 CFR 63 Subpart ZZZZ)

Comment 2. Compliance Plan for Unit 5 initial testing on fuel oil (from previous Title V's) is gone from the Appendices (there is still reference to it in E.35., though).

Response 2. The application did not include this compliance plan. The following has been added to Appendix CP (see response to comment 3):
The C. D. McIntosh, Jr. Power Plant Unit 5 combustion turbine is equipped with dual fuel combustors for firing natural gas and distillate fuel oil. Initial compliance has been demonstrated for natural gas firing, but not for distillate fuel oil firing.

Compliance with the allowable emission limiting standards for oil shall be determined within 720 unit-operating hours on oil, as specified by the U.S. EPA Region 4 letter from R. Douglas Nealy dated February 14, 2001. The following Compliance Plan is for initial compliance for distillate fuel oil firing.

1. The Department's Southwest District, Air Section, will be notified of the actual date of the restart of Unit 5 on distillate fuel oil within 15 days of such date.

2. Emission limiting standards for NO_X, CO, SO_2, visible emissions and VOC, as identified in the specific conditions, shall be demonstrated within 720 unit-operating hours on oil.

3. Initial performance tests for NO_X, CO, VOC and visible emissions, shall be conducted using the test methods specified.

4. Compliance with SO_2 emission requirements will be demonstrated through fuel oil analyses (i.e., 0.05% sulfur content, by weight, or less), specified.

5. In approving the initial performance test extension, the U.S. EPA Region 4 waived the 30-day notification requirement of 40 CFR 60.8. The Department's Southwest District, Air Section, shall be notified in writing at least 15 days prior to the initial performance tests, unless another notification period has been approved in writing by the district office.

6. Performance test results shall be submitted to the Department's Southwest District, Air Section, no later than 45 days after the last test run.

7. Continuous compliance for NO_X emissions, when firing distillate fuel oil, shall be demonstrated using continuous emission monitoring systems (CEMS) and based on a 3-hour average, as described by specific condition.

Comment 3. Our request to conduct VE testing on Unit 1 within a day of start of the operation of this EU has not been put into the Compliance Plan, as we expected. Instead, I see that it is the last page of Appendix CAM.

Response 3. The Compliance Plan was incorporated into the Compliance Assurance Monitoring Plan. The last page of the Compliance Assurance Monitoring Plan has been removed and becomes the Compliance Plan. The Appendices have been changed as follows:

VI. Appendices. 61
Appendix A, Glossary.
Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 9, 1997).
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix CP, Compliance Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
……..

Comment 4. The last two pages of Appendix CAM used to specifically list CAM requirements for Unit 3 (12% opacity, 1-hour average), but now they are gone.

Response 4. The Department agrees with the comment. The following is added to Appendix CAM:
The following emissions units are subject to the CAM provisions only for the pollutants indicated:

E.U. ID No.	**Brief Description**	Pollutant(s) subject to CAM
-006	McIntosh Unit 3 - Fossil Fuel Fired Steam Generator **3,640 MMBtu/Hr Coal And Petroleum Coke-Fired Boiler**	PM

For ease of reference the following definitions are cited from 40 CFR 64.1 Definitions (10/03/1997):

> *Exceedance shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.*

Excursion shall mean a departure from an indicator range established for monitoring under this part, consistent with any averaging period specified for averaging the results of the monitoring.

Table 1. Monitoring Approach

	Compliance Indicator
I. Indicator	Opacity.
Measurement Approach	Continuous opacity monitoring system (COMS).
II. Indicator Range	An excursion is defined as any 1-hour average of opacity greater than 12.0%, excluding periods of start-up, shutdown and malfunction pursuant to Rule 62-210.700, F.A.C. An excursion will trigger an evaluation of operation of the boiler and ESP. Corrective action will be taken as necessary. Any excursion will trigger recordkeeping and reporting requirements.
III. Performance Criteria A. Data Representativeness	VE measurements are made in the stack
B. Verification of Operational Status	N/A
C. QA/QC Practices and Criteria	The COMS is automatically calibrated every 24 hours. Calibration information is recorded through a data acquisition system (DAS). A neutral density filter test is performed quarterly, as well as, preventative maintenance items; replace filters, clean optics, etc., as prescribed by the manufacturer.
D. Monitoring Frequency	Opacity is monitored continuously.
E. Data Collection Procedures	Six-minute averages are recorded through the DAS. Daily reports with all six-minute and hourly averages are generated. One-hour averages are determined every six minutes from the average of the previous ten consecutive six-minute averages.
F. Averaging Period	The averaging period for opacity observations is a 6-minute block average.

[40 CFR 64.10

Comment 5. Unit 5 is (I believe) incorrectly listed as subject to Subpart UUUUU. Units 1, 2, and 3 are also listed as subject to Subpart UUUUU, which is fine (even though Units 1 and 2 will more than likely be exempt based on the oil heat input percentages listed in 63.9983(c)), but Unit 5 is a stationary combustion turbine and as such should not be regulated under this rule.

Response 5. The Department agrees with the comment. Reference to Emissions Unit 028 are removed from Section I Subsection C – Rules and the following condition is deleted:

~~**E.38.** NESHAP Requirements - Subpart UUUUU. Except as otherwise provided in this permit, this emissions unit boiler shall comply with all applicable provisions of 40 CFR 63, Subpart UUUUU, National Emissions Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units. This emissions unit shall comply with **Appendix 40 CFR 63 Subpart UUUUU** attached to this permit by date of April 15, 2015. [40 CFR 63 Subpart UUUUU]~~

Comment 6. Two conditions from AC permit 1050004-032-AC have already been included in this Title V permit (A.3.b. and D.3.f.), but I thought that we would have to go through a separate permitting action to put these into the Title V permit. These two conditions are related to the Regional Haze SIP: A.3.b. limits future fuel oil deliveries to no more than 0.7% sulfur for Unit 1, while D.3.f. prohibits petcoke in Unit 3. These conditions will become effective once EPA approves Regional Haze SIP for Florida (expected to occur sometime in the next couple of months). I mean, I am glad if we can include them in the Title V already, but 1050004-032-AC specifically requires that a Title V permit revision application (to incorporate these two conditions into Title V) be submitted to FDEP within 180 days of the effective date of EPA's approval of Regional Haze SIP, so that permit condition (Section 2., Condition 7. of AC permit 1050004-032-AC) would remain unsatisfied. (Letter dated 8/20/2013)

I just wanted to clarify that, for item No. 6 below, I have no objections if the two conditions from construction permit 1050004-032-AC are included in this Title V Permit. It'll save us from submitting a separate Title V Permit revision application. Thank you for including them with this project. (Letter dated 8/27/2013)

Response 6. The Department acknowledges the comment. No change is required..

Comment 7. Newly regulated EU 008 (non-emergency engine, regulated under Subpart ZZZZ) has a permit condition (F.3.) which requires installation of an hour meter. The hour meter requirement in ZZZZ is only for *emergency* engines (63.6625(f)), so I believe that this condition should not have been included.

Response 7. Department agrees with the comment. Specific Condition **F.3.** has been changed as follows:
F.3. ~~Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]~~ RESERVED

III. Conclusion.

The enclosed proposed Title V air operation permit includes the aforementioned changes to the draft Title V air operation permit.

The permitting authority will issue the proposed permit No. 1050004-033-AV, with the changes noted above.