

Florida Department of  
Environmental Protection

Memorandum

TO: Trina Vielhauer, Bureau of Air Regulation  
THROUGH: Jonathan K. Holtom, Title V Section *JH*  
FROM: Andrew Bass, E.I.  
DATE: 1/10/2011  
SUBJECT: Draft/Proposed Permit No. 1050004-029-AV  
Lakeland Electric, C.D. McIntosh, Jr. Power Plant  
Title V Permit Revision

Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Statement of Basis;
- Draft/Proposed permit; and,
- P.E. Certification.

The draft/proposed permit revises the Title V permit for the C.D. McIntosh, Jr. Power Plant, which is located in Polk County, Florida. The Statement of Basis provides a summary of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project.

The application was received and deemed complete on October 28, 2010. Day 90 is January 26, 2011. There is no ongoing/open enforcement case for this facility, according to the Southwest District office.

I recommend your approval of the attached draft/proposed permit.

Attachments

**P.E. CERTIFICATION STATEMENT**

**PERMITTEE**

Lakeland Electric  
3030 E. Lake Parker Drive  
Lakeland, FL 33805


Permit No. 1050004-029-AV  
Facility ID No. 1050004  
C.D. McIntosh, Jr. Power Plant  
Title V Permit Revision  
Polk County, Florida

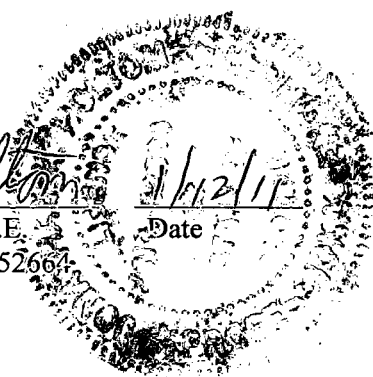
**PROJECT DESCRIPTION**

This project is for the revision of the Title V permit No. 1050004-023-AV for the above referenced facility. The permit revision will incorporate the provisions of Air Construction Permit No. 1050004-019-AC and 1050004-026-AC into the current Title V air operation permit.

*I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).*

This review was conducted by Andrew Bass, E.I. under my responsible supervision.

  
Jonathan K. Holtom, P.E.  
Registration Number: 52667

  
1/12/11  
Date



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T.  
Vinyard, Jr.  
Secretary

*Electronic Mail – Received Receipt Requested*

Mr. Thomas J. Trickey, P.E., Plant Manager  
Lakeland Electric  
3030 E. Lake Parker Drive  
Lakeland, Florida 33805

Re: Permit No. 1050004-029-AV  
C.D. McIntosh, Jr. Power Plant  
Title V Air Operation Permit Revision

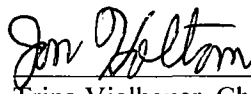
Dear Mr. Trickey:

Enclosed is the draft/proposed permit package to revise the Title V air operation permit for C.D. McIntosh, Jr. Power Plant. This facility is located in Polk County at 3030 E. Lake Parker Drive, Lakeland, Florida. The permit package includes the following documents:

- The Statement of Basis, which summarizes the facility, the equipment, and the primary rule applicability.
- The draft/proposed Title V air operation permit revision, which includes the specific permit conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permit provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the draft/proposed permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Air Permit must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication. Because this permit is being processed as a combined draft/proposed permit in order to reduce processing time, a duplicate copy of the proof of publication must also be transmitted by electronic mail within seven days of the date of publication to Ms. Ana Oquendo at EPA Region 4 at the the following address: [oquendo.ana@epamail.epa.gov](mailto:oquendo.ana@epamail.epa.gov).

If you have any questions, please contact the Project Engineer, Andrew Bass, E.I., by telephone at 850/717-9080 or by email at [andrew.bass@dep.state.fl.us](mailto:andrew.bass@dep.state.fl.us).

Sincerely,

*for*   
Trina Vielhauer, Chief  
Bureau of Air Regulation

1/21/11  
Date

Enclosures  
TLV/jkh/adb

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

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*In the Matter of an  
Application for Title V Air Operation Permit by:*

Lakeland Electric  
3030 E. Lake Parker Drive  
Lakeland, Florida 33805

Permit No. 1050004-029-AV  
Facility ID No. 1050004  
C.D. McIntosh, Jr. Power Plant  
Title V Permit Revision  
Polk County, Florida

*Responsible Official:*  
Mr. Thomas J. Trickey, P.E., Plant Manager

**Facility Location:** Lakeland Electric operates the C.D. McIntosh, Jr. Power Plant, which is located in Polk County at 3030 E. Lake Parker Drive, Lakeland, Florida.

**Project:** The purpose of this project is to revise Title V air operation permit No. 1050004-023-AV, for the above referenced facility. Details of the project are provided in the application and the enclosed Statement of Basis.

**Permitting Authority:** Applications for Title V air operation permits which contain Acid Rain units are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Department of Environmental Protection's Air Resource Section in the Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft permit, the statement of basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft permit by visiting the following website: <http://www.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue a draft/proposed Title V air operation permit revision to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of the existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft/proposed permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the draft/proposed Title V air operation permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft/proposed permit, the Permitting Authority shall issue a revised draft/proposed permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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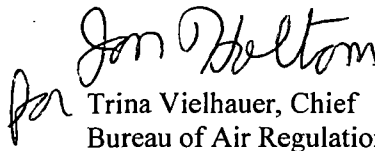
Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.

**EPA Review:** EPA has agreed to treat the draft/proposed Title V air operation permit as a proposed Title V air operation permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period, provided that the applicant also transmits an electronic copy of the required proof of publication directly to EPA at the following email address: [quendo.ana@epamail.epa.gov](mailto:quendo.ana@epamail.epa.gov). Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The final Title V air operation permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that result in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <http://www.epa.gov/region4/air/permits/Florida.htm>.

**Objections:** Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

Executed in Tallahassee, Florida.

  
Trina Vielhauer, Chief  
Bureau of Air Regulation

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

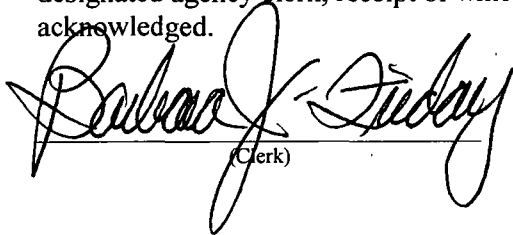
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Title V Air Operation Permit (including the Public Notice, the Statement of Basis, and the Draft/Proposed Permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested before the close of business on 1/24/11 to the persons listed below.

- Mr. Tom Trickey, P.E., Lakeland Electric ([tom.trickey@lakelandelectric.com](mailto:tom.trickey@lakelandelectric.com))
- Ms. Farzie Shelton, Lakeland Electric ([farzie.shelton@lakelandelectric.com](mailto:farzie.shelton@lakelandelectric.com))
- Mr. Bret Galbraith, Lakeland Electric ([bret.galbraith@lakelandelectric.com](mailto:bret.galbraith@lakelandelectric.com))
- Ms. Cindy Zhang-Torres, DEP SW District ([cindy.zhang-torres@dep.state.fl.us](mailto:cindy.zhang-torres@dep.state.fl.us))
- Mr. Mike Halpin, DEP Siting Office ([mike.halpin@dep.state.fl.us](mailto:mike.halpin@dep.state.fl.us))
- Ms. Vickie Gibson, DEP BAR Reading File ([victoria.gibson@dep.state.fl.us](mailto:victoria.gibson@dep.state.fl.us))
- Ms. Katy Forney, EPA Region 4: [forney.kathleen@epamail.epa.gov](mailto:forney.kathleen@epamail.epa.gov)
- Ms. Ana Oquendo, EPA Region 4: [oquendo.ana@epamail.epa.gov](mailto:oquendo.ana@epamail.epa.gov)
- Ms. Barbara Friday, DEP BAR: [barbara.friday@dep.state.fl.us](mailto:barbara.friday@dep.state.fl.us) (for posting with U.S. EPA, Region 4)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

  
(Clerk) 1/24/11 (Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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Florida Department of Environmental Protection  
Bureau of Air Regulation  
Draft/Proposed Permit No. 1050004-029-AV  
Lakeland Electric, C.D. McIntosh, Jr. Power Plant  
Polk County, Florida

**Applicant:** The applicant for this project is Lakeland Electric. The applicant's responsible official and mailing address are: Mr. Thomas J. Trickey, P.E., Plant Manager, Lakeland Electric, C.D. McIntosh, Jr. Power Plant, 3030 E. Lake Parker Drive, Lakeland, Florida 33805.

**Facility Location:** The applicant operates the existing C.D. McIntosh, Jr. Power Plant, which is located in Polk County at 3030 E. Lake Parker Drive, Lakeland, Florida.

**Project:** The applicant applied on October 28, 2010 to the Department for a Title V air operation permit revision. This is a revision of Title V air operation permit No. 1050004-023-AV. The existing facility consists of three fossil fuel fired steam generators, two diesel powered generators, and two gas turbines. The permit revision will incorporate the provisions of Air Construction Permit Nos. 1050004-019-AC and 1050004-026-AC, which allowed the installation of a selective catalytic reduction system to reduce NOx emissions and a sorbent injection system to reduce the sulfuric acid mist emissions.

**Permitting Authority:** Applications for Title V air operation permits which contain Acid Rain units are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Department of Environmental Protection's Air Resource Section in the Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft/proposed permit, the statement of basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft permit by visiting the following website: <http://www.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue a draft/proposed Title V air operation permit revision to the applicant for the project described above. The applicant has provided reasonable assurance that continued operation of the existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft/proposed permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the draft/proposed Title V air operation permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and

**(Public Notice to be Published in the Newspaper)**



## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft/proposed permit, the Permitting Authority shall issue a revised draft/proposed permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of the Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available for this proceeding.

**EPA Review:** EPA has agreed to treat the draft/proposed Title V air operation permit as a proposed Title V air operation permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period, provided that the applicant also transmits an electronic copy of the required proof of publication directly to EPA at the following email address: [ouquendo.ana@epamail.epa.gov](mailto:ouquendo.ana@epamail.epa.gov). Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The final Title V air operation permit will be

**(Public Notice to be Published in the Newspaper)**

## **PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT**

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issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that result in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <http://www.epa.gov/region4/air/permits/Florida.htm>.

**Objections:** Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

## STATEMENT OF BASIS

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Title V Air Operation Permit Revision  
Permit No. 1050004-029-AV

### APPLICANT

The applicant for this project is Lakeland Electric. The applicant's responsible official and mailing address are: Mr. Thomas J. Trickey, P.E., Plant Manager, Lakeland Electric, C.D. McIntosh, Jr. Power Plant, 3030 E. Lake Parker Drive, Lakeland, Florida 33805.

### FACILITY DESCRIPTION

The applicant operates the C.D. McIntosh, Jr. Power Plant, which is located in Polk County at 3030 E. Lake Parker Drive, Lakeland, Florida. This facility consists of three fossil fuel fired steam generators, two diesel powered generators, and two gas turbines. Fossil fuel fired steam generators 1 and 2 are fired with No. 6 fuel oil and natural gas, with distillate oil used as an igniter. Fossil fuel fired steam generator 3 is primarily fired with coal, refuse derived fuel and petroleum coke. Gas Turbine Peaking Unit 1 is primarily fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. McIntosh Unit 5, a 370 MW combined cycle stationary combustion turbine, is fired with natural gas, or No. 2 or superior grade fuel oil with a maximum sulfur content of 0.05 percent by weight. This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

### PROJECT DESCRIPTION

The purpose of this permitting project is to revise the Title V permit for the above referenced facility to incorporate the terms and conditions of Air Construction Permit Nos. 1050004-019-AC and 1050004-026-AC.

### PROCESSING SCHEDULE AND RELATED DOCUMENTS

Renewed Title V Air Operation Permit effective date January 1, 2009.

Application to revise Title V permit received October 29, 2010.

Notice of Intent to Issue Air Permit issued Month day, 2011.

Public Notice Published Month day, 2011.

### PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAIR: The facility is subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Siting: Unit 3 was originally certified pursuant to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies to emission unit 3 for the control of particulate matter (PM). Unit 3 uses an electrostatic precipitator (ESP) to control PM emissions. The other emissions units at the facility are not subject to CAM for one or more of the following reasons: they do not trigger the pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system (CEMS); or, they are not equipped with air pollution control devices.

## STATEMENT OF BASIS

### PROJECT REVIEW

The purpose of this Title V Permit Revision is to incorporate the provisions of the Air Construction Permit Nos. 1050004-019-AC and 1050004-026-AV into the current Title V air operation permit. The construction permits authorized the construction of a selective catalytic reduction (SCR) system to reduce NOx emissions and a sorbent injection system to reduce sulfuric acid mist (SAM) emissions. The changes being made to the permit are shown below. Additions are shown in double underline format and deletions are shown in ~~strike through~~ format. For ease of locating, the changes are also highlighted within the draft permit.

1. **E.15 and E.16** are being deleted and replaced with the condition below.

~~**E.15. Carbon Monoxide (CO).**~~

- ~~a. Emissions of CO shall not exceed 0.20 lb/mmBtu heat input on a 30 operating day rolling average as demonstrated by the required CEMS. This CO emission limit may be adjusted downward to make this limit more stringent based on the Department's reassessment of BACT during the subsequent phase of this project involving installation of selective catalytic reduction.~~
- ~~b. Emissions of CO shall not exceed 0.20 lb/mmBtu on a 3 hr average during the initial compliance demonstration.~~

~~[Rules 62-210.200(BACT) and 62-212.400(PSD), F.A.C.; and, PSD-FL 387.]~~

~~**E.16. Emissions Limits Subject to Revision.** Emissions of CO from Unit 3 shall not exceed the limitations specified in this permit. Based on results of compliance tests and continuous monitoring data, the Department will reassess the BACT determination in conjunction with the subsequent phase of the project which will include installation of selective catalytic reduction. The emission limit may be adjusted downward to make this limit more stringent provided that overall control attained for all air pollutants including CO, SO<sub>2</sub>, NO<sub>x</sub>, PM/PM<sub>10</sub>, sulfuric acid mist and VOC is optimized. Such revision shall be based on data that represents a full range of operating conditions and a representative period of time. Such revision, if required by the Department, shall be in the form of a federally enforceable permit and shall be publicly noticed by the permittee. [Rules 62-4.070(3), 62-210.200(BACT) and 62-212.400(PSD), and 62-212.400(7)(a), F.A.C.; and, and, PSD-FL 387.]~~

**E.16. CO Emission Limit Subject to Revision.** Emissions of carbon monoxide (CO) from Unit 3 shall not exceed 0.20 pounds per million Btu heat input (lb/MMBtu) on a 30-day rolling average as described in air construction permit 1050004-018-AC. Based on results of compliance tests and analysis of 12 months worth of continuous monitoring data, the Department will reassess the previously issued best available control technology (BACT) determination. The emission limit may be adjusted downward to make this limit more stringent provided that overall control attained for all air pollutants including CO, SO<sub>2</sub>, NO<sub>x</sub>, PM/PM<sub>10</sub>, sulfuric acid mist, and VOC is optimized. Such revision shall be based on data that represents a full range of operating conditions and a representative period of time. Such revision, if required by the Department, shall be in the form of an air construction permit following the Department's procedures in Rules 62-210.300 and 62-4.055, F.A.C. [ Air Construction Permit Nos. 1050004-019-AC, Specific Condition 13.a and 1050004-026-AC, Specific Condition 13.]

2. The conditions below are being added from the provisions established in the Air Construction permits 1050004-019-AC and 105004-026-AC.

**E.15. Ammonia Emissions (Slip).** Subject to the requirements of Condition 36 in this section, the SCR system shall be operated for an ammonia slip target of less than 5 ppmv based on the average of three, 1-hour test runs. [Air Construction Permit No. 1050004-026-AC, Specific Condition 12.]

**E.17. NOx Emission Limit.** NOx emissions from Unit 3 shall not exceed 0.22 lb/MMBtu of heat input based on a calendar year average of all periods of operation, including startup, shutdown and malfunction. The permittee shall begin collecting and averaging data towards a demonstration of compliance with the new NOx

## STATEMENT OF BASIS

emissions limitation beginning January 1, 2011. [Air Construction Permit No. 1050004-026-AC, Specific Condition 13.b.]

**E.26. Ammonia Monitoring Requirements.** In accordance with the manufacturer's specifications, the permittee shall calibrate, operate, and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. [Air Construction Permit No. 1050004-019-AC, Specific Condition 22.]

**E.34. Determining Actual SAM Emissions.** On an annual basis, the permittee must demonstrate that SAM emissions increases as a result of this project are less than 7 TPY. The permittee shall operate the sorbent injection system at a frequency and injection rate for SAM control to satisfy this requirement. An automated control system will be used to adjust the sorbent flow rate for the given set of operating conditions based on the most recent performance test results. Actual SAM emissions shall be calculated using the information available for the given operating conditions (e.g., the sulfur content of fuel blend, the SO<sub>2</sub> emission rate prior to the SCR catalyst, the unit load, the flue gas flow rate, the sorbent injection rate and the current catalyst oxidation rate). If performance testing shows that it is unnecessary to operate the sorbent injection system for a given coal blend or the sorbent injection system is removed, the permittee shall determine actual SAM emissions based on emissions factors developed through the performance tests. [Air Construction Permit No. 1050004-026-AC, Specific Condition 16.]

**E.35. SAM Performance Tests and Sorbent Injection for SAM Emissions Control.** The permittee conducted stack tests to determine the uncontrolled sulfuric acid mist emission rate, the controlled sulfuric acid mist emission rate, and actual control efficiency of the installed sorbent injection system. Tests were conducted while firing the fuel blend with the highest sulfur content that will be fired in the unit. During each test run, the permittee continuously monitored and recorded the sorbent injection rate. The purpose of these tests were to determine actual control efficiency of the installed systems and to establish the correlation between SAM emissions and the sorbent injection rate, which will be used to calculate the actual annual emissions. If the permittee desires to alter the injection rate of the system that has been previously determined (due to lower sulfur coal being burned, to turn off the system, or any other situation the permittee feels the system can be adjusted for), then the following tests shall be conducted. Within 45 days of firing a fuel blend with a sulfur content that is 0.20% sulfur by weight (based on a 14-operational day rolling average) higher than the maximum sulfur content previously tested or if the permittee desires a new injection rate, then the permittee shall conduct the following additional SAM performance tests.

- a. Conduct the SAM performance tests in accordance with the following requirements, or
  - (1) For each set of operating conditions being evaluated, the permittee shall conduct at least a 1-hour test run to determine SAM emissions. At least nine such test runs shall be conducted to evaluate the effect on SAM emissions from such parameters as the SO<sub>2</sub> emission rate prior to the SCR catalyst (and FGD system), the unit load, the flue gas flow rate, the sorbent injection rate and the current catalyst oxidation rate.
  - (2) Tests shall be conducted under a variety of fuel blends and load rates that are representative of the actual operating conditions. Sufficient tests shall be conducted to establish the SAM emissions rates for the following scenarios: SCR reactor in service (ammonia injection) without sorbent injection, and SCR reactor in service (ammonia injection) under varying operating conditions and levels of sorbent injection.
  - (3) At least 15 days prior to initiating the performance tests, the permittee shall submit a test notification, preliminary test schedule and test protocol to the Bureau of Air Regulation and the Compliance Authority.
  - (4) Within 45 days following the last test run conducted, the permittee shall provide a report summarizing the emissions tests and results. All SAM emissions test data shall be provided with this report.
  - (5) Within 45 days following the submittal of the emissions test report and no later than 90 days following the last test run conducted, the permittee shall submit a project report summarizing the following:
    - (a) Identify each set of operating conditions evaluated;

## STATEMENT OF BASIS

- (b) Identify each operating parameter evaluated;
- (c) Identify the relative influence of each operating parameter, describe how the automated control system will adjust the sorbent injection rate based on the selected parameters;
- (d) Identify the frequency with which operational parameters will be reevaluated and adjusted within the automated control system;
- (e) Provide the algorithm used for the automated control system or a series of related performance curves; and
- (f) Provide details for calculating and estimating the SAM emissions rate based on the level of sorbent injection and operating conditions. The test results shall be used to adjust the sorbent injection control system and estimate SAM emissions.

b. If the sorbent injection system is removed or is determined to be unnecessary for a given coal blend, conduct at least three, 1-hour test runs at permitted capacity to determine the SAM emissions rate. The permittee shall use the data collected to calculate the actual SAM emissions when operating under the given conditions, including the period of time from first fire of the fuel blend until the performance test results are known. [Air Construction Permit No. 1050004-026-AC, Specific Condition 15.]

**E.36. Ammonia Slip Tests.** Annual compliance with the ammonia (NH<sub>3</sub>) slip target shall be determined using EPA conditional test method (CTM-027), EPA method 320, or other methods approved by the Department. If the tested ammonia slip rate exceeds 5 ppmv during the test, the permittee shall:

- a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
- b. Before the ammonia slip exceeds 7 ppmv, take corrective actions that result in lowering the ammonia slip to less than 5 ppmv; and
- c. Test and demonstrate that the ammonia slip is less than 5 ppmv within 30 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmv, testing and reporting shall resume on an annual basis. [Air Construction Permit No. 1050004-026-AC, Specific Condition 18.]

**E.46. Future Actual Emissions Reporting.** The permittee shall maintain and submit to the Department on an annual basis for a period of 5 years from the date the SCR systems are initially operated, information demonstrating in accordance with Rule 62-212.300(1)(e), F.A.C., using the emissions computation and reporting procedures in Rule 62-210.370, F.A.C., that the installation of LNB, OFA and SCR did not result in an emissions increase of PM or SAM that would equal or exceed the respective significant emission rates as defined in Rule 62-210.300, F.A.C. The future emissions shall be compared with the baseline actual emissions for the period 2002-2001 for SAM and 2003-2002 for PM as reported in the annual operating reports (AOR) using EPA Method 5B for PM and Method 8A (controlled condensate) for SAM. [Air Construction Permit No. 1050004-019-AC, Specific Condition 14.]

**E.47. New Control Equipment.** In accordance with Rule 62-210.300(1)(a), F.A.C., if the sorbent injection system is removed, the permittee shall obtain an air construction permit to install new acid mist mitigation equipment or to reinstall the sorbent injection system if required to maintain SAM emissions below a 7 TPY increase above the baseline emissions, which were estimated at 136 TPY. [Air Construction Permit No. 1050004-026-AC]

- 3. Permit condition numbers were adjusted accordingly based on the addition and deletion of conditions.
- 4. Appendix TV is being updated for administrative changes.

### CONCLUSION

This project revises Title V air operation permit No. 1050004-023-AV, which was effective on January 1, 2009. This revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.

City of Lakeland Electric  
C. D. McIntosh, Jr. Power Plant  
**Facility ID No. 1050004**  
Polk County

**Title V Air Operation Permit Revision**

**Permit No. 1050004-029-AV**  
(1<sup>st</sup> Revision of Title V Air Operation Permit No. 1050004-023-AV)

**Permitting Authority**

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
Title V Section

Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Telephone: 850/717-9000  
Fax: 850/717-9097

**Compliance Authority**

State of Florida  
Department of Environmental Protection  
Southwest District Office

13051 N. Telecom Parkway  
Temple Terrace, Florida 33637-0926

Telephone: 813/632-7600  
Fax: 813/744-6084

Title V Air Operation Permit Renewal  
Permit No. 1050004-029-AV

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# DRAFT/PROPOSED

**PERMITTEE:**

City of Lakeland Electric  
501 East Lemon Street  
Lakeland, Florida 33801-5079

Permit No. 1050004-029-AV  
C. D. McIntosh, Jr. Power Plant  
Facility ID No. 1050004  
Title V Air Operation Permit Revision

The purpose of this permit is to renew the revise Title V Air Operation Permit No. 1050004-023-AV for the above referenced facility in order to incorporate the terms and conditions of Air Construction Permit Nos. 1050004-019-AC and 1050004-026-AC, which authorized the construction of a selective catalytic reduction (SCR) system to reduce NO<sub>x</sub> emissions and the installation of a sorbent injection system to reduce the emissions of sulfuric acid mist.

The existing C. D. McIntosh, Jr. Power Plant is located at 3030 East Lake Parker Drive, Lakeland, Polk County; UTM Coordinates: Zone 17, 409.0 km East and 3106.2 km North; Latitude: 28° 04' 50" North and Longitude: 81° 55' 32" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

1050004-023-AV Effective Date: January 1, 2009

1050004-029-AV Effective Date: *(Day 55)*

Renewal Application Due Date: May 20, 2013

Expiration Date: December 31, 2013

*(Draft/Proposed)*

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Trina Vielhauer, Acting Director  
Division of Air Resource Management

TLV/jkh/adb

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection E. Emissions Unit -006**

**The specific conditions in this section apply to the following emission units:**

<b>E.U. ID No.</b>	<b>Brief Description</b>
-006	McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

McIntosh Unit 3 is a nominal 364 megawatt (electric) dry bottom wall-fired fossil fuel fired steam generator. The unit is fired on coal, residual oil, natural gas and co-fires refuse derived fuel (RDF) and petroleum coke. The maximum heat input rate is 3,640 million Btu per hour. Unit 3 is equipped with an electrostatic precipitator (ESP), a flue gas desulfurization system (FGD), and low NO<sub>x</sub> burners (LNB) and an overfire air (OFA) system to control emissions. McIntosh Unit 3 began commercial service in September, 1982. Compliance Assurance Monitoring (CAM) requirements for the ESP are included in Appendix CAM. The FGD is exempted from CAM because the Acid Rain SO<sub>2</sub> continuous emissions monitor will be used to demonstrate continuous compliance. The stack parameters are: height, 250 feet; diameter, 18 feet; exit temperature, 125 degrees F; and, actual stack gas flow rate, 1,260,536 acfm.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; Rule 62-296.405(2), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(8)(b)1., F.A.C.; Rule 212.400(6), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

In addition to the requirements listed below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).

**Essential Potential to Emit (PTE) Parameters**

**E.1. Capacity.** The maximum heat input rate is 3,640 MMBtu per hour. The Acid Rain CEMS will not be a method of compliance for the determination of the heat input rate. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

**E.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**E.3. Methods of Operation - Fuels.** The only fuels allowed to be burned are:

- a. Coal only;
- b. Low sulfur fuel oil only (≤ 0.5 percent sulfur by weight);

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection E. Emissions Unit -006**

- c. Coal and up to 10 percent refuse (based on heat input);
- d. Low sulfur fuel oil and up to 10 percent refuse (based on heat input);
- e. Coal and up to 20 percent petroleum coke (based on weight);
- f. Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input);
- g. High sulfur fuel oil (> 0.5 percent sulfur by weight); and,
- h. Natural gas or propane only, or in combination with any of the other fuels or fuel combinations listed above.

[Rules 62-4.160(2), 62-210.200 (Definitions - PTE), and 62-213.440(1), F.A.C.; and, PSD-FL-008(B)]

**E.4. Hours of Operation.** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - PTE), F.A.C.]

**Emission Limitations and Standards**

Unless otherwise specified, the averaging times for Specific Conditions **E.5.-E.7.**; **E.9.-E.11.**; and, **E.13.-E.14.** are based on the specified averaging time of the applicable test method.

**E.5. Particulate Matter.** Particulate matter emitted to the atmosphere from the boiler shall not exceed:

<u>Mode of Firing</u>	<u>Pound / MMBtu Heat Input</u>
Coal	0.044
Coal/Petroleum Coke	0.044
Coal/Refuse	0.050
Coal/Petroleum Coke/Refuse	0.050
Oil	0.070
Oil/Refuse	0.075

[40 CFR 60.42(a)(2); and, PSD-FL-008(B)]

**E.6. Visible Emissions.** Visible emissions shall not exceed 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.42(a)(2); and, PSD-FL-008(B)]

**E.7. Sulfur Dioxide.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of: (1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue, or (2) 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in 40 CFR 60.43(e). [40 CFR 60.43(a)(1) and (2)]

**E.8. Sulfur Dioxide.** When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PSSO_2 = [y(340) + z(520)] / (y+z)$$

where:

PSSO<sub>2</sub> is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired, y is the percentage of total heat input derived from liquid fossil fuel, and z is the percentage of total heat input derived from solid fossil fuel.

[40 CFR 60.43(b)]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection E. Emissions Unit -006**

Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR 60.43(c)]

- E.9. Sulfur Dioxide.** A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide gases discharged to the atmosphere from the boiler shall not exceed 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction) when emissions are less than 0.75 pound per million Btu heat input. Compliance with the percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of five years and made available by the City upon request of the Department. Whenever blends of petroleum coke with other fuels are co-fired, sulfur dioxide emissions shall not exceed 0.718 pound per million Btu heat input based on a 30-day rolling average and shall comply with the reduction requirements given above. [PSD-FL-008(B); and, Rule 62-213.440, F.A.C.]
- E.10. Sulfur Dioxide.** The burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse as an emergency fuel without the use of the SO<sub>2</sub> scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition. [PSD-FL-008(B)]
- E.11. Sulfur Dioxide.** During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO<sub>2</sub> scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition. [PSD-FL-008(B)]
- E.12. Sulfur Dioxide.** Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of the SO<sub>2</sub> scrubber will be allowed. [PSD-FL-008(B)]
- E.13. Nitrogen Oxides.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of:
- a. 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
  - b. 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.
  - c. 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).
- [40 CFR 60.44(a)(1), (2) & (3)]
- E.14. Nitrogen Oxides.** Except as provided under paragraphs 40 CFR 60.44(c) and (d), when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PSNO_x = \frac{w(260)+x(86)+y(130)+z(300)}{w+x+y+z}$$

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection E. Emissions Unit -006

where:

PSNO<sub>x</sub> = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[40 CFR 60.44(b)]

#### E.15. Carbon Monoxide (CO).

a. Emissions of CO shall not exceed 0.20 lb/mmBtu heat input on a 30 operating day rolling average as demonstrated by the required CEMS. This CO emission limit may be adjusted downward to make this limit more stringent based on the Department's reassessment of BACT during the subsequent phase of this project involving installation of selective catalytic reduction.

b. Emissions of CO shall not exceed 0.20 lb/mmBtu on a 3 hr average during the initial compliance demonstration.

[Rules 62-210.200(BACT) and 62-212.400(PSD), F.A.C.; and, PSD-FL-387.]

E.16. Emissions Limits Subject to Revision. Emissions of CO from Unit 3 shall not exceed the limitations specified in this permit. Based on results of compliance tests and continuous monitoring data, the Department will reassess the BACT determination in conjunction with the subsequent phase of the project which will include installation of selective catalytic reduction. The emission limit may be adjusted downward to make this limit more stringent provided that overall control attained for all air pollutants including CO, SO<sub>2</sub>, NO<sub>x</sub>, PM/PM<sub>10</sub>, sulfuric acid mist and VOC is optimized. Such revision shall be based on data that represents a full range of operating conditions and a representative period of time. Such revision, if required by the Department, shall be in the form of a federally enforceable permit and shall be publicly noticed by the permittee. [Rules 62-4.070(3), 62-210.200(BACT) and 62-212.400(PSD), and 62-212.400(7)(a), F.A.C.; and, PSD-FL-387.]

E.15. Ammonia Emissions (Slip). Subject to the requirements of Condition 36 in this section, the SCR system shall be operated for an ammonia slip target of less than 5 ppmv based on the average of three, 1-hour test runs. [Air Construction Permit No. 1050004-026-AC, Specific Condition 12.]

E.16. CO Emission Limit Subject to Revision. Emissions of carbon monoxide (CO) from Unit 3 shall not exceed 0.20 pounds per million Btu heat input (lb/MMBtu) on a 30-day rolling average as described in air construction permit 1050004-018-AC. Based on results of compliance tests and analysis of 12 months worth of continuous monitoring data, the Department will reassess the previously issued best available control technology (BACT) determination. The emission limit may be adjusted downward to make this limit more stringent provided that overall control attained for all air pollutants including CO, SO<sub>2</sub>, NO<sub>x</sub>, PM/PM<sub>10</sub>, sulfuric acid mist, and VOC is optimized. Such revision shall be based on data that represents a full range of operating conditions and a representative period of time. Such revision, if required by the Department, shall be in the form of an air construction permit following the Department's procedures in Rules 62-210.300 and 62-4.055, F.A.C. [Air Construction Permit Nos. 1050004-019-AC, Specific Condition 13.a and 1050004-026-AC, Specific Condition 13.]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection E. Emissions Unit -006

E.17. NO<sub>x</sub> Emission Limit. NO<sub>x</sub> emissions from Unit 3 shall not exceed 0.22 lb/MMBtu of heat input based on a calendar year average of all periods of operation, including startup, shutdown and malfunction. The permittee shall begin collecting and averaging data towards a demonstration of compliance with the new NO<sub>x</sub> emissions limitation beginning January 1, 2011. [Air Construction Permit No. 1050004-026-AC, Specific Condition 13.b.]

#### Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS, NESHAP, or Acid Rain program provision.

E.178. Excess Emissions Allowed. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted providing (1) that best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

E.189. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

#### Monitoring of Operations

E.1920. CAM Plan. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM for the controlled emissions of particulate matter. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

E.201. Use of SO<sub>2</sub> CEMS For Continuous Compliance. Pursuant to 40 CFR 64.2(b)(1)(vi), the applicant has elected to use the existing certified Acid Rain SO<sub>2</sub> continuous emissions monitor for continuous compliance in order to be exempted from the Compliance Assurance Monitoring (CAM) requirements contained in 40 CFR 64. [40 CFR 64.2(b)(vi); and, Applicant request]

#### Continuous Monitoring Requirements

E.242. Performance Specifications and Quality Assurance. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A within 180 calendar days of commencing operation following installation of the Low-NO<sub>x</sub> burners and overfire air system. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards. [Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.; and, PSD-FL-387.]

E.223. CEMS Data Requirements for CO BACT Standard.

- a. *Data Collection.* The CO CEMS shall monitor and record emissions during all operations and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection E. Emissions Unit -006

data shall be used, except for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments, and span adjustments.

- b. *Operating Hours and Operating Days.* An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from midnight to midnight. Any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
- c. *Valid Hourly Averages.* The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
  - (1) Hours that are not operating hours are not valid hours.
  - (2) For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as "monitor unavailable."
- d. *Rolling 30-day average.* Compliance shall be determined after each operating day by calculating the arithmetic average of all the valid hourly averages from that operating day and the prior 29 operating days.
- e. *Monitor Availability.* The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter in which the unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

[Rules 62-4.070(3) and 62-210.200(BACT), F.A.C.; and, PSD-FL-387.]

**E.234.** CEM Requirements. Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, an ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel data shall be used in conjunction with emissions factors and the continuous monitoring data to calculate SO<sub>2</sub> reduction. [PSD-FL-008(B)]

**E.245.** CEMS Annual Emissions Requirement. The owner or operator shall use data from the CO CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rule 62-210.370(3), F.A.C. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit. [Rules 62-210.200, and 62-210.370(3), F.A.C.; and, PSD-FL-387.]

**E.26.** Ammonia Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall calibrate, operate, and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. [Air Construction Permit No. 1050004-019-AC, Specific Condition 22.]

#### **Test Methods and Procedures**

**E.257.** Test Methods. Required tests shall be performed in accordance with the following reference methods:

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection E. Emissions Unit -006**

<b>Method(s)</b>	<b>Description of Method(s) and Comment(s)</b>
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 17, 5, 5B or 5F	Methods for Determining Particulate Matter Emissions
EPA Methods 6, 6A, 6B or 6C	Methods for Determining Sulfur Dioxide Emissions
Method 7, Method 7A, 7C, 7D or 7E	Determination of Nitrogen Oxide Emissions
10	Determination of Carbon Monoxide Emissions
EPA Method 19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

**E.268. Annual Compliance Tests.** Unless otherwise specified by this permit, during each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), this emissions unit shall be tested to demonstrate compliance with the emission limitations and standards for particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>) and visible emissions (VE). The NO<sub>x</sub> and SO<sub>2</sub> RATA test data may be used to demonstrate compliance with the annual test requirement, provided the testing requirements (notification, procedures & reporting) of Chapter 62-297, F.A.C. are met. [Rule 62-297.310(7), F.A.C.]

**E.279. Compliance Tests Prior To Renewal.** Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE, PM, SO<sub>2</sub> and NO<sub>x</sub>. [Rule 62-297.310(7)(a)3., F.A.C.]

**E.2830. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

**E.2931. Continuous Compliance with CO limits.** Compliance with the 30 operating day rolling average shall be demonstrated using data collected from the required CEMS. [Rule 62-4.070(3), F.A.C.; and, PSD-FL-387.]

**E.302. VE Tests Not Required.** By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

See Specific Condition **TR7**. [Rule 62-297.310(7)(a)4., F.A.C.]

**E.313. PM Tests Not Required.** Annual and permit renewal compliance testing for particulate matter emissions is not required for this emissions unit while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or



## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection E. Emissions Unit -006

c. only liquid fuel(s) for less than 400 hours per year.

See Specific Condition TR7. [Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

E.34. Determining Actual SAM Emissions. On an annual basis, the permittee must demonstrate that SAM emissions increases as a result of this project are less than 7 TPY. The permittee shall operate the sorbent injection system at a frequency and injection rate for SAM control to satisfy this requirement. An automated control system will be used to adjust the sorbent flow rate for the given set of operating conditions based on the most recent performance test results. Actual SAM emissions shall be calculated using the information available for the given operating conditions (e.g., the sulfur content of fuel blend, the SO<sub>2</sub> emission rate prior to the SCR catalyst, the unit load, the flue gas flow rate, the sorbent injection rate and the current catalyst oxidation rate). If performance testing shows that it is unnecessary to operate the sorbent injection system for a given coal blend or the sorbent injection system is removed, the permittee shall determine actual SAM emissions based on emissions factors developed through the performance tests. [Air Construction Permit No. 1050004-026-AC, Specific Condition 16.]

E.35. SAM Performance Tests and Sorbent Injection for SAM Emissions Control. The permittee conducted stack tests to determine the uncontrolled sulfuric acid mist emission rate, the controlled sulfuric acid mist emission rate, and actual control efficiency of the installed sorbent injection system. Tests were conducted while firing the fuel blend with the highest sulfur content that will be fired in the unit. During each test run, the permittee continuously monitored and recorded the sorbent injection rate. The purpose of these tests were to determine actual control efficiency of the installed systems and to establish the correlation between SAM emissions and the sorbent injection rate, which will be used to calculate the actual annual emissions. If the permittee desires to alter the injection rate of the system that has been previously determined (due to lower sulfur coal being burned, to turn off the system, or any other situation the permittee feels the system can be adjusted for), then the following tests shall be conducted. Within 45 days of firing a fuel blend with a sulfur content that is 0.20% sulfur by weight (based on a 14-operational day rolling average) higher than the maximum sulfur content previously tested or if the permittee desires a new injection rate, then the permittee shall conduct the following additional SAM performance tests.

a. Conduct the SAM performance tests in accordance with the following requirements, or

- (1) For each set of operating conditions being evaluated, the permittee shall conduct at least a 1-hour test run to determine SAM emissions. At least nine such test runs shall be conducted to evaluate the effect on SAM emissions from such parameters as the SO<sub>2</sub> emission rate prior to the SCR catalyst (and FGD system), the unit load, the flue gas flow rate, the sorbent injection rate and the current catalyst oxidation rate.
- (2) Tests shall be conducted under a variety of fuel blends and load rates that are representative of the actual operating conditions. Sufficient tests shall be conducted to establish the SAM emissions rates for the following scenarios: SCR reactor in service (ammonia injection) without sorbent injection, and SCR reactor in service (ammonia injection) under varying operating conditions and levels of sorbent injection.
- (3) At least 15 days prior to initiating the performance tests, the permittee shall submit a test notification, preliminary test schedule and test protocol to the Bureau of Air Regulation and the Compliance Authority.
- (4) Within 45 days following the last test run conducted, the permittee shall provide a report summarizing the emissions tests and results. All SAM emissions test data shall be provided with this report.
- (5) Within 45 days following the submittal of the emissions test report and no later than 90 days following the last test run conducted, the permittee shall submit a project report summarizing the following:
  - (a) Identify each set of operating conditions evaluated;

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection E. Emissions Unit -006**

- (b) Identify each operating parameter evaluated;
- (c) Identify the relative influence of each operating parameter, describe how the automated control system will adjust the sorbent injection rate based on the selected parameters;
- (d) Identify the frequency with which operational parameters will be reevaluated and adjusted within the automated control system;
- (e) Provide the algorithm used for the automated control system or a series of related performance curves; and
- (f) Provide details for calculating and estimating the SAM emissions rate based on the level of sorbent injection and operating conditions. The test results shall be used to adjust the sorbent injection control system and estimate SAM emissions.

b. If the sorbent injection system is removed or is determined to be unnecessary for a given coal blend, conduct at least three, 1-hour test runs at permitted capacity to determine the SAM emissions rate. The permittee shall use the data collected to calculate the actual SAM emissions when operating under the given conditions, including the period of time from first fire of the fuel blend until the performance test results are known. [Air Construction Permit No. 1050004-026-AC, Specific Condition 15.]

**E.36. Ammonia Slip Tests.** Annual compliance with the ammonia (NH<sub>3</sub>) slip target shall be determined using EPA conditional test method (CTM-027), EPA method 320, or other methods approved by the Department. If the tested ammonia slip rate exceeds 5 ppmv during the test, the permittee shall:

- a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
- b. Before the ammonia slip exceeds 7 ppmv, take corrective actions that result in lowering the ammonia slip to less than 5 ppmv; and
- c. Test and demonstrate that the ammonia slip is less than 5 ppmv within 30 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmv, testing and reporting shall resume on an annual basis. [Air Construction Permit No. 1050004-026-AC, Specific Condition 18.]

**Recordkeeping and Reporting Requirements**

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

**E.327. Reporting Schedule.** The following report shall be submitted to the Compliance Authority:

<b>Report</b>	<b>Reporting Deadline(s)</b>	<b>Related Condition(s)</b>
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	<b>E.37. &amp; E.39.</b>
Quarterly Excess Emissions	Every 3 months (quarter)	<b>E.33., E.34., E.35.</b>
Monthly CO CEMS		<b>E.36.</b>

{Note: If there are no periods of excess emissions as defined in 40 CFR 60 Subpart D, a statement to that effect may be submitted with the SIP Quarterly Excess Report to suffice for the NSPS Report.}  
[40 CFR 60 Subpart A; and, Rule 62-210.700(6), F.A.C.]

**E.338. Excess Emissions Reports - Malfunctions.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection E. Emissions Unit -006

report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

**E.349. Quarterly Excess Emissions Reports.** Submit to the Department a written report of emissions in excess of emission limiting standards for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-210.700(6), F.A.C.]

**E.3540. Excess Emissions Reporting- SIP Quarterly Report.** Within 30 days following the end of each calendar-quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of CO emissions in excess of the BACT permit standard following the NSPS format in 40 CFR 60.7(c), Subpart A. In addition, the report shall summarize the CO CEMS system monitor availability for the previous quarter. [Rules 62-4.130, 62-210.700(6) and 62-212.400(BACT), F.A.C.]

**E.3641. Monthly CO CEMS Report.** The permittee shall submit, on a monthly basis, a report in electronic file format which includes Unit 3 CO, NO<sub>x</sub>, and heat input data. The report shall be submitted by the 15<sup>th</sup> of each month by mailing a compact disc to the Department's Bureau of Air Regulation Title V Permitting Section and shall include all hourly readings from the previous month. Alternatively, upon contacting the Bureau's project engineer, the file may be emailed to the appropriate BAR personnel. [Rule 62-4.070(3), F.A.C.; and, PSD-FL-387.]

**E.3742. Excess Emissions Report.** In addition to the requirements of 40 CFR 60.7, each excess emissions report shall include the periods of oil consumption due to flue gas desulfurization system malfunction. [PSD-FL-008]

#### Miscellaneous Requirements

**E.3843. Reporting of Future Increases.** The City shall maintain and submit to the Department on an annual basis for a period of five years from the date that the unit is initially co-fired with petroleum coke, information demonstrating in accordance with 40 CFR 52.21(b)(33) and 40 CFR 52.21(b)(21)(v) that the operational changes did not result in emissions increases of carbon monoxide, nitrogen oxides, or sulfuric acid mist. [PSD-FL-008(B)]

**E.3944. NSPS Requirements - Subpart A.** These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:  
40 CFR 60.7, Notification and Recordkeeping  
40 CFR 60.8, Performance Tests  
40 CFR 60.11, Compliance with Standards and Maintenance Requirements  
40 CFR 60.12, Circumvention  
40 CFR 60.13, Monitoring Requirements  
40 CFR 60.19, General Notification and Reporting requirements,  
which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

**E.405. NSPS Requirements - Subpart D.** Except as otherwise provided in this permit, this fossil-fuel fired steam generator shall comply with all applicable provisions of 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection E. Emissions Unit -006**

by reference in Rule 62-204.800(8)(b)1., F.A.C. This emissions unit shall comply with **Appendix 40 CFR 60 Subpart D** included with this permit. [Rule 62-204.800(8)(b)1., F.A.C.]

**E.46. Future Actual Emissions Reporting.** The permittee shall maintain and submit to the Department on an annual basis for a period of 5 years from the date the SCR systems are initially operated, information demonstrating in accordance with Rule 62-212.300(1)(e), F.A.C., using the emissions computation and reporting procedures in Rule 62-210.370, F.A.C., that the installation of LNB, OFA and SCR did not result in an emissions increase of PM or SAM that would equal or exceed the respective significant emission rates as defined in Rule 62-210.300, F.A.C. The future emissions shall be compared with the baseline actual emissions for the period 2002-2001 for SAM and 2003-2002 for PM as reported in the annual operating reports (AOR) using EPA Method 5B for PM and Method 8A (controlled condensate) for SAM. [Air Construction Permit No. 1050004-019-AC, Specific Condition 14.]

**E.47. New Control Equipment.** In accordance with Rule 62-210.300(1)(a), F.A.C., if the sorbent injection system is removed, the permittee shall obtain an air construction permit to install new acid mist mitigation equipment or to reinstall the sorbent injection system if required to maintain SAM emissions below a 7 TPY increase above the baseline emissions, which were estimated at 136 TPY. [Air Construction Permit No. 1050004-026-AC]

**Friday, Barbara**

---

**To:** tom.trickey@lakelandelectric.com  
**Cc:** Shelton, Farzie; Bret.Galbraith@lakelandelectric.com; Zhang-Torres; Halpin, Mike; Gibson, Victoria; 'Kathleen Forney'; Ana Oquendo; Bass, Andrew; Holtom, Jonathan  
**Subject:** CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV  
**Attachments:** 1050004-029-AV SignedWrittenNoticeofIntent.pdf

Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Andrew Bass

Owner/Company Name: CITY OF LAKELAND ELECTRIC  
Facility Name: C.D. MCINTOSH, JR. POWER PLANT  
Project Number: 1050004-029-AV  
Permit Status: DRAFT/PROPOSED  
Permit Activity: PERMIT REVISION  
Facility County: POLK

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/1050004.029.AV.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1050004.029.AV.D_pdf.zip)

“The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website  at <http://www.dep.state.fl.us/air/emission/apds/default.asp> .”

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
(850)717-9095

## Friday, Barbara

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**From:** Galbraith, Bret [Bret.Galbraith@lakelandelectric.com]  
**To:** Friday, Barbara  
**Sent:** Monday, January 24, 2011 12:08 PM  
**Subject:** Read: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Your message was read on Monday, January 24, 2011 12:07:33 PM (GMT-05:00) Eastern Time (US & Canada).

**Friday, Barbara**

---

**From:** Galbraith, Bret [Bret.Galbraith@lakelandelectric.com]  
**Sent:** Monday, January 24, 2011 12:31 PM  
**To:** Friday, Barbara  
**Subject:** RE: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Ms. Friday,

I have forwarded this link and attachment to Mr. Tony Candales, who is are Alternate Responsible Official, as Mr. Tom Trickey is no longer with the City. If you don't receive a reply message from him by tomorrow please contact me and I will make sure he does. Thank you.

**Bret Galbraith, E.I.**

Permitting Engineer | Environmental Permitting | Lakeland Electric  
501 E. Lemon Street, LE-ENVIR, Lakeland, FL 33801  
O: (863) 834-8180 | Fax (863) 834-8187 | C: 813.351.0149  
[bret.galbraith@lakelandelectric.com](mailto:bret.galbraith@lakelandelectric.com)

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**From:** Friday, Barbara [<mailto:Barbara.Friday@dep.state.fl.us>]  
**Sent:** Monday, January 24, 2011 11:44 AM  
**To:** [tom.trickey@lakelandelectric.com](mailto:tom.trickey@lakelandelectric.com)  
**Cc:** Shelton, Farzie; Galbraith, Bret; Zhang-Torres; Halpin, Mike; Gibson, Victoria; Kathleen Forney; Ana Oquendo; Bass, Andrew; Holtom, Jonathan  
**Subject:** CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Dear Sir/ Madam:

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*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

Attention: Andrew Bass

Owner/Company Name: CITY OF LAKELAND ELECTRIC  
Facility Name: C.D. MCINTOSH, JR. POWER PLANT  
Project Number: 1050004-029-AV  
Permit Status: DRAFT/PROPOSED  
Permit Activity: PERMIT REVISION  
Facility County: POLK

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/1050004.029.AV.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1050004.029.AV.D_pdf.zip)

“The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the

engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://www.dep.state.fl.us/air/emission/apds/default.asp> . “

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
(850)717-9095

*The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard, Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.*

PUBLIC RECORDS NOTICE:

All e-mail sent to and received from the City of Lakeland, Florida, including e-mail addresses and content, are subject to the provisions of the Florida Public Records Law, Florida Statute Chapter 119, and may be subject to disclosure.



**Friday, Barbara**

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**From:** Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]  
**To:** forney.kathleen@epa.gov  
**Sent:** Monday, January 24, 2011 11:45 AM  
**Subject:** Relayed: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

[forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov)

Subject: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

**Friday, Barbara**

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**From:** Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]  
**To:** Oquendo.Ana@epamail.epa.gov  
**Sent:** Monday, January 24, 2011 11:45 AM  
**Subject:** Relayed: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

[Oquendo.Ana@epamail.epa.gov](mailto:Oquendo.Ana@epamail.epa.gov)

Subject: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

**Friday, Barbara**

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**From:** Microsoft Exchange  
**To:** Bass, Andrew  
**Sent:** Monday, January 24, 2011 11:44 AM  
**Subject:** Delivered: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

**Your message has been delivered to the following recipients:**

Bass, Andrew

**Subject:** CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

---

Sent by Microsoft Exchange Server 2007

**Friday, Barbara**

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**From:** Bass, Andrew  
**To:** Friday, Barbara  
**Sent:** Tuesday, January 25, 2011 9:09 AM  
**Subject:** Read: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Your message was read on Tuesday, January 25, 2011 9:09:24 AM (GMT-05:00) Eastern Time (US & Canada).

**Friday, Barbara**

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**From:** Microsoft Exchange  
**To:** Zhang-Torres; Halpin, Mike; Holtom, Jonathan; Gibson, Victoria  
**Sent:** Monday, January 24, 2011 11:44 AM  
**Subject:** Delivered: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

**Your message has been delivered to the following recipients:**

Zhang-Torres

Halpin, Mike

Holtom, Jonathan

Gibson, Victoria

**Subject:** CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

---

Sent by Microsoft Exchange Server 2007

**Friday, Barbara**

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**From:** Zhang-Torres  
**To:** Friday, Barbara  
**Sent:** Monday, January 24, 2011 11:49 AM  
**Subject:** Read: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Your message was read on Monday, January 24, 2011 11:48:45 AM (GMT-05:00) Eastern Time (US & Canada).

## Friday, Barbara

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**From:** Halpin, Mike  
**Sent:** Monday, January 24, 2011 11:58 AM  
**To:** Friday, Barbara  
**Subject:** Delivered: CITY OF LAKE LAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV  
**Attachments:** ATT00001

Your message was delivered to the recipient.

## Friday, Barbara

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**From:** Holtom, Jonathan  
**To:** Friday, Barbara  
**Sent:** Monday, January 24, 2011 11:55 AM  
**Subject:** Read: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Your message was read on Monday, January 24, 2011 11:54:57 AM (GMT-05:00) Eastern Time (US & Canada).



**Friday, Barbara**

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**From:** Gibson, Victoria  
**To:** Friday, Barbara  
**Sent:** Monday, January 24, 2011 11:46 AM  
**Subject:** Read: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Your message was read on Monday, January 24, 2011 11:45:54 AM (GMT-05:00) Eastern Time (US & Canada).

**Friday, Barbara**

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**From:** Candales, Tony [Tony.Candales@lakelandelectric.com]  
**Sent:** Tuesday, January 25, 2011 8:26 AM  
**To:** Friday, Barbara  
**Subject:** FW: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV  
**Attachments:** 1050004-029-AV Signed Written Notice of Intent.pdf

Barbara, by this email I'm confirming reception of the subject as the Alternate Responsible Official. Tom Trickey is no longer with City of Lakeland.

Tony Candales  
Assistant General Manager – Production  
Lakeland Electric

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**From:** Galbraith, Bret  
**Sent:** Monday, January 24, 2011 12:12 PM  
**To:** Candales, Tony  
**Cc:** Shelton, Farzie  
**Subject:** FW: CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Tony,

**Bret Galbraith, E.I.**

Permitting Engineer | Environmental Permitting | Lakeland Electric  
501 E. Lemon Street, LE-ENVIR, Lakeland, FL 33801  
O: (863) 834-8180 | Fax (863) 834-8187 | C: 813.351.0149  
[bret.galbraith@lakelandelectric.com](mailto:bret.galbraith@lakelandelectric.com)

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**From:** Friday, Barbara [<mailto:Barbara.Friday@dep.state.fl.us>]  
**Sent:** Monday, January 24, 2011 11:44 AM  
**To:** [tom.trickey@lakelandelectric.com](mailto:tom.trickey@lakelandelectric.com)  
**Cc:** Shelton, Farzie; Galbraith, Bret; Zhang-Torres; Halpin, Mike; Gibson, Victoria; Kathleen Forney; Ana Oquendo; Bass, Andrew; Holtom, Jonathan  
**Subject:** CITY OF LAKELAND - C.D. MCINTOSH, JR. POWER PLANT; 1050004-029-AV

Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

Attention: Andrew Bass

Owner/Company Name: CITY OF LAKELAND ELECTRIC  
Facility Name: C.D. MCINTOSH, JR. POWER PLANT  
Project Number: 1050004-029-AV  
Permit Status: DRAFT/PROPOSED  
Permit Activity: PERMIT REVISION  
Facility County: POLK

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/1050004.029.AV.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1050004.029.AV.D_pdf.zip)

“The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://www.dep.state.fl.us/air/emission/apds/default.asp> . “

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
(850)717-9095

*The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard, Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.*

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PUBLIC RECORDS NOTICE:

All e-mail sent to and received from the City of Lakeland, Florida, including e-mail addresses and content, are subject to the provisions of the Florida Public Records Law, Florida Statute Chapter 119, and may be subject to disclosure.