## Memorandum

# Florida Department of Environmental Protection

To:

Trina Vielhauer, Bureau of Air Regulation

Through:

Jeff Koerner, New Source Review Section

From:

Christy DeVore, New Source Review Section

Date:

September 7, 2010

Subject:

Draft Air Permit No. 1050003-016-AC

PSD-FL-166E

Lakeland Electric, Charles Larsen Memorial Power Plant

PSD Air Construction Permit Revision

Attached for your review is a draft PSD air construction permit revision package for the existing Charles Larsen Memorial Power Plant, which is located in Polk County at 2002 Highway 92 East in Lakeland, Florida. Briefly, the draft permit revision for Emissions Unit 8 requires annual tests for carbon monoxide and opacity only for fuels fired 400 hours or more during the federal fiscal year. The applicant withdrew a request to identify the NO<sub>X</sub> CEMS as the compliance method. This is a revised draft permit package. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance. The project is not considered a new source review reform project. I recommend your approval of the attached draft permit package.

Attachments

TLV/jfk/scd

## P.E. CERTIFICATION STATEMENT

#### **PERMITTEE**

Lakeland Electric 501 E. Lemon Street Lakeland, FL 33801

Draft Permit No. 1050003-016-AC/PSD-FL-166E Charles Larsen Memorial Power Plant Air Construction Permit Revision Polk County, Florida

## PROJECT DESCRIPTION

The permit is revised such that annual tests for carbon monoxide and opacity are now only required for fuels fired 400 hours or more in Unit 8 during the federal fiscal year.

This project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code (F.A.C.) and is a revision of the original Prevention of Significant Deterioration (PSD) air construction permit. The Department's full review of the project and rationale for issuing the draft permit is provided in the Technical Evaluation and Preliminary Determination.

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 any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological secological and meteorological features).

S. Christy DeVore, P.E.

Registration Number 63119



## Florida Department of Environmental Protection

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

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

September 9, 2010

Sent by Electronic Mail -- Received Receipt Requested

Thomas J. Trickey, P.E., Plant Manager Lakeland Electric 501 E. Lemon Street Lakeland, FL 33801

Re: Draft Air Permit No. 1050003-016-AC / PSD-FL-166E

Charles Larsen Memorial Power Plant PSD Air Construction Permit Revision

Dear Mr. Trickey:

On June 1, 2010, you submitted an application for an air construction permit revision subject to the preconstruction review requirements of Rule 62-212.300, Florida Administrative Code. The project is also a revision of the original PSD air construction Permit No. 1050003-012-AC (PSD-FL-166D) such that annual tests for carbon monoxide and opacity are now only required for fuels fired 400 hours or more in Unit 8 during the federal fiscal year. The existing Charles Larsen Memorial Power Plant is located in Polk County at 2002 Highway 92 East in Lakeland, Florida. Enclosed are the following documents: Written Notice of Intent to Issue Air Permit; Public Notice of Intent to Issue Air Permit; Technical Evaluation and Preliminary Determination; and Draft Permit with Appendices.

The Department rescinds the previous permit package issued on July 20, 2010 and replaces it with this revised drat permit package. 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. If you have any questions, please contact the Project Engineer, Christy DeVore, at 850/921-8968.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

**Enclosures** 

TLV/jfk/scd

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an Application for Air Permit by:

Lakeland Electric 501 E. Lemon Street Lakeland, FL 33801

Authorized Representative:
Thomas J. Trickey, P.E., Plant Manager

Draft Permit No. 1050003-016-AC PSD-FL-166E

Charles Larsen Memorial Power Plant Air Construction Permit Revision Polk County, Florida

**Facility Location**: Lakeland Electric operates the existing Charles Larsen Memorial Power Plant, which is located in Polk County at 2002 Highway 92 East in Lakeland, Florida.

**Project**: The air construction permit is revised such that annual tests for carbon monoxide and opacity are now only required for fuels fired 400 hours or more in Unit 8 during the federal fiscal year. The Department rescinds the previous permit package issued on July 20, 2010 and replaces it with this revised draft permit package. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

**Permitting Authority**: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114.

**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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice 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 address or phone number listed above. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**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 (Telephone: 850/245-2241; Fax: 850/245-2303). 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 fourteen 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; (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 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.

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Executed in Tallahassee, Florida.

Bureau of Air Regulation

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on to the persons listed below.

Mr. Thomas J. Trickey, P.E., Lakeland Electric (tom.trickey@lakelandelectric.com)

Ms. Farzie Shelton, Lakeland Electric (farzie shelton@lakelandelectric.com)

Mr. Ken Kosky, P.E., Golder Associates, Inc. (ken kosky@golder.com)

Ms. Mara Nasca, South District Office (mara.nasca@dep.state.fl.us)

Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)

Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)

Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

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)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection Division of Air Resource Management, Bureau of Air Regulation

Draft Air Permit No. 1050003-016-AC / PSD-FL-166E Lakeland Electric, Charles Larsen Memorial Power Plant Polk County, Florida

**Applicant**: The applicant for this project is Lakeland Electric. The applicant's authorized representative and mailing address is: Thomas J. Trickey, P.E., Plant Manager, Lakeland Electric, Charles Larsen Memorial Power Plant, 501 E. Lemon Street, Lakeland, Florida 33801.

**Facility Location**: Lakeland Electric operates the existing Charles Larsen Memorial Power Plant, which is located in Polk County at 2002 Highway 92 East in Lakeland, Florida.

**Project**: This project revises Permit No. 1050003-012-AC (PSD-FL-166D) such that annual tests for carbon monoxide and opacity are now only required for fuels fired 400 hours or more in Unit 8 during the federal fiscal year.

**Permitting Authority**: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114.

**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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site by entering draft permit number: http://www.dep.state.fl.us/air/emission/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**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 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

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 this 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 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; (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 in this proceeding.



## TECHNICAL EVALUATION & PRELIMINARY DETERMINATION

## **APPLICANT**

Lakeland Electric 501 E. Lemon Street Lakeland, Florida 33801

Charles Larsen Memorial Power Plant Facility ID No. 1050003

## **PROJECT**

Project No. 1050003-016-AC (PSD-FL-166E) Application for PSD Air Construction Permit Revision

## **COUNTY**

Polk County, Florida

## PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
New Source Review Section
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

September 7, 2010

## 1. GENERAL PROJECT INFORMATION

## **Air Pollution Regulations**

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

## **Facility Description and Location**

The Charles Larsen Memorial Plant is an existing power plant, which is categorized under Standard Industrial Classification Code No. 4911. The existing Charles Larsen Memorial Plant is located in Polk County at 2002 Highway 92 East in Lakeland, Florida. The UTM coordinates of the existing facility are Zone 17, 408.9 km East, and 3102.5 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

## **Facility Regulatory Categories**

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

## **Project Description**

On June 1, 2010 the Department received a complete application for a minor source air pollution construction permit. For Unit 8, the applicant requested a change in annual compliance testing requirements with no testing for each fuel fired less than 400 hours per year, change in annual compliance method for  $NO_X$  from compliance testing to compliance by CEMS, no monitoring of the water-to-fuel ratio for  $NO_X$  emissions and the removal of the CAM requirements for Emissions Unit 8, a combined cycle combustion turbine. After the Draft Permit was issued the applicant withdrew the request to change the  $NO_X$  compliance method.

## 2. PSD APPLICABILITY

## **General PSD Applicability**

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

applicability review to determine whether potential emissions from the proposed project itself will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO<sub>x</sub>); sulfur dioxide (SO<sub>2</sub>); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H<sub>2</sub>S); total reduced sulfur (TRS), including H<sub>2</sub>S; reduced sulfur compounds, including H<sub>2</sub>S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as particulate matter; municipal waste combustor acid gases measured as SO<sub>2</sub> and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and mercury (Hg). In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 µg/m<sup>3</sup>, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

## **PSD** Applicability for Project

This permit revision is a revision of the original PSD air construction permit to establish annual compliance testing requirements with no testing for each fuel fired less than 400 hours per year.

## 3. DEPARTMENT REVIEW

The emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Prevention of Significant Deterioration (PSD), Permit No. PSD-FL-166, and as amended (A through D); and, Best Available Control Technology (BACT), signed July 26, 1991.

The applicant requested the following changes to Permit No. 1050003-012-AC/PSD-FL-166D.

<u>Applicant Request</u>: Annual compliance testing for carbon monoxide and opacity should only be required for fuels fired 400 hours or more in Unit 8 during a federal fiscal year.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Department Conclusion: Rule 62-297.310(7)(a)3.b., F.A.C. does not require emission compliance tests for emissions units on long-term shutdown that during the year prior to renewal burned liquid and/or solid fuel for a total of no more than 400 hours. Similarly, Rule 62-297.310(7)(a)5. F.A.C. does not require annual particulate matter emission compliance tests for emissions units that do not burn liquid and/or solid fuel, other than during startup, for more than 400 hours. Pursuant to Rule 62-297.310(7)(a)4 the Department may determine by permit a different compliance testing schedule. For Emissions Unit 8, in 2009 the operating hours for oil-firing was zero, in 2008 less than 19 hours per year and overall, the data for the past five years shows oil was fired much less than 400 hours per year. To date all CO emissions testing has shown compliance with the standards. The permit will be revised to require annual compliance tests for opacity and CO for each fuel fired for 400 hours or more during the federal fiscal year. The permit requires a PM test only if the opacity standard is exceeded. There is no change in VOC compliance testing requirements as VOC emissions are assumed to be in compliance when compliance is met for CO emissions.

## 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Christy DeVore is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

## DRAFT PERMIT REVISION

#### **PERMITTEE**

Lakeland Electric 501 E. Lemon Street Lakeland, FL 33801

Authorized Representative: Thomas J. Trickey, P.E., Plant Manager Air Permit No. 1050003-016-AC / PSD-FL-166E Charles Larsen Memorial Power Plant Existing Emissions Unit 8 Air Construction Permit Revision

## **PROJECT**

This is the final air construction permit, which revises Permit No. 1050003-012-AC (PSD-FL-166D) such that annual tests for carbon monoxide and opacity are now only required for fuels fired 400 hours or more during the federal fiscal year. The Charles Larsen Memorial Plant is a power plant categorized under Standard Industrial Classification No. 4911. The existing facility is located in Polk County at 2002 Highway 92 East in Lakeland, Florida. The UTM coordinates are Zone 17, 408.9 km East, and 3102.5 km North.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions).

#### STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is a revision of the original PSD air construction permit. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

(DRAFT)	
Joseph Kahn, Director	(Date)
Division of Air Resource Management	·

## CERTIFICATE OF SERVICE

The undersigned duly designated depu	ity agency clerk hereby certifies that this Final Air	Permit package		
(including the Final Determination and	d Final Permit Revision) was sent by electronic ma	il, or a link to these		
documents made available electronica	ally on a publicly accessible server, with received r	eceipt requested before		
the close of business on	DRAFT) to the persons listed below.			
Ms. Farzie Shelton, Lakeland Electric Mr. Ken Kosky, P.E., Golder Associat Ms. Mara Nasca, South District Office Ms. Kathleen Forney, EPA Region 4 ( Ms. Heather Abrams, EPA Region 4 ( Ms. Ana M. Oquendo, EPA Region 4	e (mara.nasca@dep.state.fl.us) forney.kathleen@epa.gov) abrams.heather@epa.gov)	,		
•	Clerk Stamp			
	pursuant to Section 120.52(7), Florida S	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.		
	(DRAFT)	•		
	(Clerk)	(Date)		

## **FACILITY DESCRIPTION**

The existing facility is a power plant, which consists of the following emissions units and activities: one fossil fuel-fired steam generator (EU 007), two simple cycle combustion turbine (CT) peaking units (EUs 002 and 003), one simple and combined cycle CT (EU 008), some fuel oil storage tanks and associated equipment.

## FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

## PROPOSED PROJECT

This project revises Air Permit No. 1050003-012-AC, PSD-FL-166D for existing Emissions Unit 8 such that annual tests for carbon monoxide and opacity are now only required for fuels fired 400 hours or more during the federal fiscal year.

## **SECTION 2. PERMIT REVISIONS (DRAFT)**

The following permit conditions of Air Permit No. 1050003-012-AC (PSD-FL-166D) are revised as indicated. Strikethrough is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permit Being Modified: Permit No. 1050003-012-AC (PSD-FL-166D)

Affected Emissions Units: EU-008

Subsection 3A, Specific Conditions 8 and 9: These conditions are revised as follows.

- 8. Particulate Matter/Opacity: The stack opacity shall be determined by conducting EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources." This test shall serve as a surrogate for particulate matter compliance testing. If 10% opacity is exceeded, the Department may require the permittee to determine particulate matter emissions by conducting EPA Reference Methods 5, 5B or 17, "Determination of Particulate Matter emissions from Stationary Sources." Annual compliance testing for opacity shall be performed for each fuel fired for 400 hours or more during the federal fiscal year. [PSD-FL-166E]
- 9. <u>Carbon Monoxide (CO)</u>: CO emissions shall be determined by conducting EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources." <u>Annual compliance testing shall</u> be performed for each fuel fired for 400 hours or more during the federal fiscal year: [PSD-FL-166E]

Subsection 3A, Specific Condition 15: The following new condition is added.

<u>Title V Source: A Title V source may immediately implement such changes after they have been incorporated</u> into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. [Rule 62-213.412(2), F.A.C.]

From:

Livingston, Sylvia

Sent: To: Friday, September 10, 2010 8:01 AM 'tom.trickey@lakelandelectric.com'

Cc:

'farzie.shelton@lakelandelectric.com'; 'ken kosky@golder.com'; Nasca, Mara;

'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; Gibson,

Victoria; DeVore, Christy; Koerner, Jeff; Walker, Elizabeth (AIR)

Subject:

LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT; 1050003-016-

AC/ PSD-FL-166E - Rev Draft

Attachments:

1050003-016-AC Revised Intent.pdf

## Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** 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".

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

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/1050003.016.AC.R\_pdf.zip\_

Owner/Company Name: LAKELAND ELECTRIC

Facility Name: CHARLES LARSEN MEMORIAL POWER PLANT

Project Number: 1050003-016-AC/ PSD-FL-166E

Permit Status: REV DRAFT

Permit Activity: CONSTRUCTION

Facility County: POLK Processor: Christy DeVore

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 <a href="http://www.dep.state.fl.us/air/eproducts/apds/default.asp">http://www.dep.state.fl.us/air/eproducts/apds/default.asp</a>.

Permit project documents 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

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9561
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Dointernet site: <a href="http://www.adobe.com/products/acrobat">http://www.adobe.com/products/acrobat</a>	cument Format (pdf). Adobe Acro t <u>/readstep.html</u>	bat Reader can be downloaded for fro	ee at the following
Tracking:	2		

Trickey, Tom [Tom.Trickey@lakelandelectric.com] From:

To: Livingston, Sylvia

Sent: Friday, September 10, 2010 10:47 AM

Read: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT; 1050003-016-AC/ PSD-FL-166E - Rev Draft Subject:

Your message was read on Friday, September 10, 2010 10:47:15 AM (GMT-05:00) Eastern Time (US & Canada).

From: Shelton, Farzie [Farzie.Shelton@lakelandelectric.com]

To:

Livingston, Sylvia Friday, September 10, 2010 10:37 AM Sent:

Subject: Read: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT;

1050003-016-AC/ PSD-FL-166E - Rev Draft

Your message was read on Friday, September 10, 2010 10:37:15 AM (GMT-05:00) Eastern Time (US & Canada).

From: Kosky, Ken [Ken\_Kosky@golder.com]

Livingston, Sylvia To:

Sent:

Friday, September 10, 2010 9:25 AM
Read: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT;
1050003-016-AC/ PSD-FL-166E - Rev Draft Subject:

Your message was read on Friday, September 10, 2010 9:24:32 AM (GMT-05:00) Eastern Time (US & Canada).

From:

Livingston, Sylvia

Sent: To: Tuesday, October 05, 2010 2:31 PM 'tom.trickey@lakelandelectric.com'

Subject:

FW: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT;

1050003-016-AC/ PSD-FL-166E - Rev Draft

Attachments:

1050003-016-AC\_Revised Intent.pdf

## Dear Tom Trickery:

We have not received confirmation that you were able to access the documents attached to this September 10th e-mail. Please confirm receipt by opening the attachment and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service. Please let me know if you have any questions.

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9561
sylvia.livingston@dep.state.fl.us

From: Livingston, Sylvia

**Sent:** Friday, September 10, 2010 8:01 AM **To:** 'tom.trickey@lakelandelectric.com'

**Cc:** 'farzie.shelton@lakelandelectric.com'; 'ken\_kosky@golder.com'; Nasca, Mara; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; Gibson, Victoria; DeVore, Christy; Koerner, Jeff; Walker, Elizabeth (AIR)

Subject: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT; 1050003-016-AC/ PSD-FL-166E - Rev Draft

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http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/1050003.016.AC.R pdf.zip

Owner/Company Name: LAKELAND ELECTRIC

Facility Name: CHARLES LARSEN MEMORIAL POWER PLANT

Project Number: 1050003-016-AC/ PSD-FL-166E

Permit Status: REV DRAFT

Permit Activity: CONSTRUCTION

**Facility County:** POLK **Processor:** Christy DeVore

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From: Trickey, Tom [Tom.Trickey@lakelandelectric.com]

Sent: Tuesday, October 05, 2010 8:59 PM

To: Livingston, Sylvia

Subject: RE: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT;

1050003-016-AC/ PSD-FL-166E - Rev Draft

## Received by Tom Trickey.

**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]

**Sent:** Tuesday, October 05, 2010 2:31 PM **To:** 'tom.trickey@lakelandelectric.com'

Subject: FW: LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT; 1050003-016-AC/ PSD-FL-166E -

Rev Draft

## Dear Tom Trickery:

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From: Livingston, Sylvia

**Sent:** Friday, September 10, 2010 8:01 AM **To:** 'tom.trickey@lakelandelectric.com'

**Cc:** 'farzie.shelton@lakelandelectric.com'; 'ken\_kosky@golder.com'; Nasca, Mara; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; Gibson, Victoria; DeVore, Christy; Koerner, Jeff; Walker, Elizabeth (AIR)

**Subject:** LAKELAND ELECTRIC - CHARLES LARSEN MEMORIAL POWER PLANT; 1050003-016-AC/ PSD-FL-166E - Rev Draft

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