

Jeb Bush Governor

# Department of Environmental Protection

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

# P.E. Certification Statement

Permittee:

City of Lakeland, Lakeland Electric Winston Peaking Station

**DRAFT Permit No.:** 1050352-004-AC

Facility ID No.: 1050352

**Project:** The Department is issuing this construction permit in order to correct minor inconsistencies, between the original permit application information and the limitations of permit 1050352-001-AC, that were discovered during the processing of the Title V air operation permit. Making these changes will allow the Title V air operation permit to be issued with limitations that will meet the US EPA's eriteria for being practically enforceable and assure that the facility maintains the requested non-PSD classification. In addition, this action will be used to respond to a recent request by Ms. Farzie Shelton to make changes to the visible emissions testing requirements contained in permit 1050352-001-AC, which expired on June 30, 2002.

I HEREBY CERTIFY that the engineering features described in the above referenced application and related additional information submittals, if any, 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, and geological features).

Jonathan K. Holtom, P.E.

Registration Number: 0052664

Date

Permitting Authority:

Florida Department of Environmental Protection Division of Air Resources Management

Bureau of Air Regulation

Mail Station #5505

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

Telephone: 850/488-0114

Fax: 850/922-6979

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# Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

June 2, 2004

Mr. Timothy Bates
Director of Energy Supply
Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801-5079

Re:

Revised Air Construction Permit, DRAFT Permit No.: 1050352-004-AC Title V Air Operation Permit, DRAFT Permit No.: 1050352-002-AV

Winston Peaking Station

Dear Mr. Bates:

One copy of the Technical Evaluation and Preliminary Determination, the combined Public Notice, the Draft Air Construction Permit, and the DRAFT Title V Air Operation Permit for the Winston Peaking Station, located at 1200 Airport Road, Lakeland, Polk County, is enclosed. The permitting authority's "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT" and the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT" are also included.

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

"http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp"

The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Jonathan Holtom, P.E., at the above letterhead address. If you have any other questions, please contact Jonathan Holtom, P.E., at (850) 921-9531.

Sincerely,

Trina L. Vielhauer

Chief, Bureau of Air Regulation

Zwi L Viehan

TLV/jkp/h

Enclosures

cc: U.S. EPA, Region 4 (INTERNET E-mail)

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In the Matter of an Application for Permits by:

Lakeland Electric 501 East Lemon Street Lakeland, Florida 33801-5079 Draft Air Construction Permit No.: 1050352-004-AC DRAFT Title V Air Operation Permit No.: 1050352-002-AV

Winston Peaking Station

Polk County

# INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit and the initial Title V Air Operation Permit (copies of the Draft Air Construction Permit and DRAFT Title V Air Operation Permit attached) for the Title V source detailed in the applications specified above, and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Lakeland Electric, applied on April 1, 2002 to the permitting authority for a Title V Air Operation Permit for the Winston Peaking Station located at 1200 Airport Road, Lakeland, Polk County.

The construction permit is being issued to correct minor inconsistencies, between the original permit application information and the limitations of permit 1050352-001-AC, that were discovered during the processing of the Title V air operation permit. Making these changes will allow the Title V air operation permit to be issued with limitations that will meet the US EPA's criteria for being practically enforceable and assure that the facility maintains the requested non-PSD classification. In addition, this action will be used to respond to a recent request by Ms. Farzie Shelton to make changes to the visible emissions testing requirements contained in permit 1050352-001-AC.

The Title V air operation permit is being issued to allow commercial operation of the facility, as authorized by the initial air construction permit 1050352-001-AC, and as revised by air construction permit 1050352-004-AC.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212 and 62-213. This source is not exempt from construction and Title V permitting procedures. The permitting authority has determined that an Air Construction Permit and a Title V Air Operation Permit are required to construct and to commence or continue operations at the described facility.

The permitting authority intends to issue the Air Construction Permit and the Title V Air Operation Permit based on the belief that reasonable assurances have been provided to indicate that the construction activity and operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT." The 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. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting 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

City of Lakeland, Lakeland Electric Winston Peaking Station Page 2 of 5 Draft Air Construction Permit No.: 1050352-004-AC DRAFT Title V Air Operation Permit No.: 1050352-002-AV

authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. 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.

The permitting authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit and subsequent FINAL Title V Air Operation Permit, in accordance with the conditions of the attached Draft Air Construction Permit and the DRAFT Title V Air Operation Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The permitting authority will accept written comments concerning the proposed Title V Air Operation Permit Revision issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Title V Air Operation Permit, the permitting authority shall issue a Revised DRAFT Title V Air Operation Permit and require, if applicable, another Public Notice.

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 (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who a sked the permitting authority for notice of a gency action may file a petition within fourteen 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 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 how and when each petitioner received notice of the agency action or proposed action;
- (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, as well as the rules and statutes, which entitle the petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action 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 notice of intent. 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 will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
  - (c) Each rule or portion of a rule from which a variance or waiver is requested;
  - (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
  - (e) The type of action requested;
  - (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

City of Lakeland, Lakeland Electric Winston Peaking Station Page 4 of 5 Draft Air Construction Permit No.: 1050352-004-AC DRAFT Title V Air Operation Permit No.: 1050352-002-AV

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 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this 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.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Trina L. Vielhauer

Chief, Bureau of Air Regulation

Draft Air Construction Permit No.: 1050352-004-AC DRAFT Title V Air Operation Permit No.: 1050352-002-AV

## **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT (including the combined PUBLIC NOTICE, the Draft Air Construction Permit, the Technical evaluation and Preliminary Determination and the DRAFT Title V Air Operation Permit) and all copies, were sent by certified mail before the close of business on to the person(s) listed:

Mr. Timothy Bates

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT (including the combined PUBLIC NOTICE, the Draft Air Construction Permit, the Technical evaluation and Preliminary Determination and the DRAFT Title V Air Operation Permit) were sent by U.S. mail on the same date—to the person(s) listed or as otherwise noted:

Ms. Farzie Shelton, Lakeland Electric

Mr. Kennard Kosky, P.E.

U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

Mr. Gerald Kissel, P.E., DEP-SWD (e-mail)

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 AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT

• 4

#### DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Construction Permit No.: 1050352-004-AC
DRAFT Title V Air Operation Permit Project No.: 1050352-002-AV
Winston Peaking Station
Polk County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V Air Operation Permit to Lakeland Electric for the Winston Peaking Station located at 1200 Airport Road, Lakeland, Polk County. The applicant's name and address are: Mr. Timothy Bates, Lakeland Electric, 501 East Lemon Street, Lakeland, Florida 33801-5079.

The construction permit is being issued to correct minor inconsistencies, between the original permit application information and the limitations of permit 1050352-001-AC, that were discovered during the processing of the Title V air operation permit. Making these changes will allow the Title V air operation permit to be issued with limitations that will meet the US EPA's criteria for being practically enforceable and assure that the facility maintains the requested non-PSD classification. In addition, this action will be used to respond to a recent request by Ms. Farzie Shelton to make changes to the visible emissions testing requirements contained in permit 1050352-001-AC.

The Title V air operation permit is being issued to allow commercial operation of the facility, as authorized by the initial air construction permit 1050352-001-AC, and as revised by air construction permit 1050352-004-AC.

The permitting authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit and subsequent FINAL Title V Air Operation Permit, in accordance with the conditions of the Draft Air Construction Permit and the DRAFT Title V Air Operation Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Draft Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979). Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The permitting authority will accept written comments concerning the proposed DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. W ritten comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979). Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

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, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3),

Note to Newspaper: DO NOT PRINT THIS FOOTER! Page numbers are only included for administrative purposes.

F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, 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 fourteen 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 applicable 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 will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, Florida Administrative Code (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; 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 petitioner's substantial rights will be affected by the agency determination;
- (c) A statement of how and when the petitioner received notice of the agency action or proposed action:
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so state;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes, which entitle petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action 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 notice of intent. 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 is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this 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.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114

Fax: 850/922-6979

Affected District/Local Program:
Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100

Fax: 813/744-6084

The complete project file includes the DRAFT Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Mr. Jonathan Holtom, P.E., at the above address, or call 850-921-9531 for additional information.

# TECHNICAL EVALUATION

## **AND**

## PRELIMINARY DETERMINATION

City of Lakeland, Lakeland Electric Winston Peaking Station Facility ID No.: 1050352 Polk County

Draft Air Construction Permit Project No.: 1050352-004-AC

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

May 19, 2004

#### 1. APPLICATION INFORMATION.

Applicant Name and Address: City of Lakeland, Lakeland Electric Winston Peaking Station 501 E. Lemon Street Lakeland, Florida 33801-5079

Responsible Official:

Mr. Timothy Bates, Director of Energy Supply

#### 2. FACILITY INFORMATION.

#### 2.1. Facility Location:

Lakeland Electric's Winston Peaking Station is located one-mile southeast of the intersection of Airport Road and Old Tampa Highway, Lakeland, Florida.

The UTM coordinates of this facility are: Zone 17; 4400.20 km East; and, 3100.60 km North.

#### 2.2. Standard Industrial Classification Code (SIC):

Major Group No.	49	Electric, Gas, and Sanitary Services
Group No.	491	Electric Services
Industry No.	4911	Electric Services

#### 2.3. Facility Category:

Lakeland Electric's Winston Peaking Station is classified as a major air pollutant emitting facility pursuant to Rule 62-210.200, F.A.C. - Definitions. This facility is classified as a Title V facility. The permittee requested limitations in the original air construction permit to avoid being classified as a PSD major source. As such, the facility is considered a synthetic non-PSD source and is subject to the source obligation provisions of Rule 62-212.400(2)(g), F.A.C.

#### 3. PROJECT DESCRIPTION.

During the processing of the initial Title V permit for this facility, minor inconsistencies were discovered in the air construction permit that would prevent the Title V permit from meeting EPA's requirement to be practically enforceable and that failed to properly assure the desired synthetic non-PSD status. This permit is being issued to assure the non-PSD classification, to correct the inconsistencies for practical enforceability and to make minor changes to the visible emissions testing requirements (at the applicant's request).

The permitting authority intends to issue the Air Construction Permit based on the belief that reasonable assurances have been provided to indicate that operation of the facility will not adversely impact air quality, and the facility will be in compliance with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

#### 4. RULE APPLICABILITY.

The proposed project is <u>not</u> subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, because the revision is for a reduction in the allowable NO<sub>X</sub> emission limits and for minor changes to operating parameters. Therefore, the proposed project is not a modification by definition because it is not a change in the method of operation nor is there an actual emissions increase.

In accordance with Rule 62-204.340, F.A.C., this facility is located in an Attainment Area (Polk County) for all pollutants. The proposed project is subject to permitting under Rule 62-212.300, F.A.C., Permits Required, for purposes of establishing federal enforceability of the reduced facility-wide allowable NO<sub>X</sub> emission limit and for the change to the visible emissions testing requirements and minor changes to the operating parameter limitations, that were established in air construction permit, No. 1050352-001-AC.

## 5. SOURCE IMPACT ANALYSIS.

#### 5.1. Emission Limitations:

This permitting action is for the reduction of the facility-wide NO<sub>X</sub> allowable emission limitation.

#### 5.2. Control Technology Review:

A control technology review is not required under this permitting action.

#### 5.3. Air Quality:

Air quality modeling is not required under this permitting action.

#### 6. CONCLUSION.

Based on the foregoing technical evaluation, the Department has made a preliminary determination that the proposed project will be in compliance with all applicable state and federal air pollution regulations. The changes are provided in the attached proposed Draft air construction permit.

Permit Engineer: Jonathan Holtom, P.E.

Reviewed and Approved by: James K. Pennington, P.E.



# Department of **Environmental Protection**

leb Bush Governor

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

#### PERMITTEE:

City of Lakeland; Lakeland Electric Winston Peaking Station 501 E. Lemon Street Lakeland, Florida 33801-5079

Authorized Representative: **Timothy Bates** Director of Energy Supply ARMS Permit No. 1050352-004-AC

Facility ID No. 1050352 SIC No. 4911

Expires: December 31, 2004

#### PROJECT AND LOCATION

Construction permit number 1050352-001-AC authorized the installation of 20 internal combustion engines with electrical generator sets. The 20 engines are capable of producing a nominal 50 MW (55 MW at peak load) of electricity. The Department is issuing this construction permit in order to correct minor inconsistencies between the original permit application information and the limitations of permit 1050352-001-AC that were discovered during the processing of the Title V air operation permit. Making these changes will allow the Title V air operation permit to be issued with limitations that will meet the US EPA's criteria for being practically enforceable and assure that the facility maintains the requested non-PSD classification. In addition, this action will be used to respond to a recent request by Ms. Farzie Shelton to make changes to the visible emissions testing requirements contained in permit 1050352-001-AC, which expired on June 30, 2002.

The facility is located in Polk County, one-mile southeast of the intersection of Airport Road and Old Tampa Highway, Lakeland, Florida. The UTM coordinates are Zone 17, 400.2 km E, 3100.6 km N.

#### 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.). The permittee is authorized to make changes in accordance with the conditions of this permit.

#### **APPENDICES**

The following documents are attached and are incorporated as part of this permit:

Initial Air Construction Permit 1050352-001-AC

Construction Permit General Conditions Appendix GC

> Michael G. Cooke, Director Division of Air Resource Management

"More Protection, Less Process"

- Printed on recycled paper.

#### **FACILITY DESCRIPTION**

The facility is located on a 6-acre parcel adjacent to an existing Lakeland Electric substation. Lakeland Electric owns the property and owns/controls the operation of the facility. Lakeland Electric owns the equipment and dispatches the units to supply electric power. The facility consists of twenty nominal 2.5-MW GM EMD 20/645/E4B diesel engines and one 294,000-gallon fuel oil storage tank. The engines use selective catalytic reduction, oxidation catalyst, and an air/fuel ratio regulator for emission reduction control. The units are designed for peaking service. The fuel for the engines is distillate fuel oil with natural gas. Fuel oil contains a maximum sulfur content of 0.05 percent. The 20 internal combustion engines with generators are capable of providing a nominal 50 MW (55 MW at peak load) of electrical power.

#### REGULATORY CLASSIFICATION

Title V Major Source: This facility is a Title V major source of air pollution.

<u>PSD Major Source</u>: Each pollutant with potential emissions greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a PSD review and Best Available Control Technology (BACT) determination. For this project, emissions of no pollutant are significant or subject to BACT standards, provided that the Emissions Units are operated as specified in this permit.

#### RELEVANT DOCUMENTS

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- 1050352-001-AC issued 8-20-01
- Company letters dated 8-26-03 and 2-23-04
- Technical Evaluation and Preliminary Determination dated 5-19-04

- 1. All of the terms and conditions of the attached air construction permit, No. 1050352-001-AC, dated August 20, 2001, are incorporated into this air construction permit and remain the same, except for the changes that follow in Specific Conditions 2. through 8., below.
- 2. In keeping with the permit application information and to assure PSD avoidance, Specific Condition 6. is changed:

#### From:

6. Nitrogen Oxides (NO<sub>X</sub>): NO<sub>X</sub> emissions from each internal combustion engine shall not exceed 13.9 lb/hr while in peak load operation firing distillate oil, 11.6 lb/hr while in base load operation firing distillate oil and 5.6 lb/hr in base load operation firing natural gas. Annual emissions of NO<sub>X</sub> in tpy from these emission units shall be calculated by using the NO<sub>X</sub> emission rate in lb/hr for each mode of operation multiplied by the total operating hours for each mode of operation for the 20 engines divided by 2000. This NO<sub>X</sub> emission in tpy shall not exceed 250 TPY, based upon a consecutive 12-month period. This facility-wide annual emissions cap of 250 TPY shall become effective on the first day of the month following the initial compliance test of the first internal combustion engine, and compliance shall begin based upon the first twelve months of operation thereafter.

[Rule 62-212.400, F.A.C. (PSD avoidance)]

#### To:

6. Nitrogen Oxides (NO<sub>X</sub>): NO<sub>X</sub> emissions from each internal combustion engine shall not exceed 13.9 lb/hr while in peak load operation firing distillate oil, or 11.6 lb/hr while in base load operation firing distillate oil, or 5.58 lb/hr in base load operation firing natural gas. Annual emissions of NO<sub>X</sub> in tpy from these emission units shall be calculated by using the allowable NO<sub>X</sub> emission rate in lb/hr for each mode of operation multiplied by the total operating hours for each mode of operation for the 20 engines divided by 2000. (See Specific Condition 32.) This NO<sub>X</sub> emission in tpy shall not exceed 249.4 TPY, based upon a consecutive 12-month period. This facility-wide annual emissions cap of 249.4 TPY shall become effective upon the issuance date of this permit modification and shall be demonstrated based on the preceding 12-month period.

[Rule 62-212.400, F.A.C. (PSD avoidance)]

3. In keeping with the permit application information and to maintain practical enforceability, Specific Condition 12. is changed:

#### From:

12. <u>Fuel Oil Consumption</u>: The maximum No. 2 fuel oil allowed to be burned in the twenty internal combustion engines combined is 8,184,480 gallons per year, which is equivalent to 43,000 engine-hours per year at 100% load. The maximum natural gas that can be burned in the twenty internal combustion engines combined is 2,240 MMCF per year, which is equivalent to 89,200 engine-hours per year at 100% load. [Rule 62-210.200, F.A.C. (Definitions – PTE)]

#### To:

12. <u>Fuel Oil Consumption</u>: The maximum No. 2 fuel oil allowed to be burned in the twenty internal combustion engines combined is 7,789,855 gallons per year, which is equivalent to 43,000 engine-hours per year at 100% load (25 MMBtu/hr/engine & 138,000 Btu/gallon of oil). The maximum natural gas that can be burned in the twenty internal combustion engines combined is 2,240 MMCF per year, which

is equivalent to 89,200 engine-hours per year at 100% load (26.35 MMBtu/hr/engine & 1,050 Btu/CF of gas). [Rule 62-210.200, F.A.C. (Definitions – PTE)]

4. In keeping with the permit application information and to maintain practical enforceability, Specific Condition 13. is changed:

#### From:

13. <u>Permitted Capacity</u>: The heat input to each internal combustion engine from firing No. 2 fuel oil shall not exceed 25 MMBtu per hour at 100% load or 28 MMBTU per hour at peak load. The heat input to each internal combustion engine from firing natural gas shall not exceed 29 MMBTU per hour at 100% load. [Design, Rule 62-210.200, F.A.C. (Definition - PTE)]

#### To:

- 13. Permitted Capacity: The heat input to each internal combustion engine from firing No. 2 fuel oil shall not exceed 25 MMBtu per hour at 100% load or 28 MMBTU per hour at peak load. The heat input to each internal combustion engine from firing natural gas shall not exceed 26.35 MMBTU per hour at 100% load. [Design, Rule 62-210.200, F.A.C. (Definition PTE)]
- 5. For practical enforceability, Specific Condition 14. is changed:

#### From:

14. <u>Hours of Operation</u>: The twenty internal combustion engines shall operate no more than 43,000 engine-hours when firing fuel oil at 100% load, 17,520 engine-hours at peak load and 89,200 engine-hours when firing natural gas during any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure the hours of operation for each fuel on each internal combustion engine. [Rule 62-210.200, F.A.C. (Definitions - PTE)]

#### To:

- 14. Hours of Operation: The twenty internal combustion engines shall operate no more than 43,000 engine-hours when firing fuel oil at 100% load, or 17,520 engine-hours at peak load or 89,200 engine-hours when firing natural gas during any consecutive 12-month period. If multiple fuels are used during a 12-month period, the allowable hours for each fuel type shall be prorated so as not to exceed the facility-wide NO<sub>X</sub> cap. The permittee shall install, calibrate, operate and maintain a monitoring system to measure the hours of operation for each fuel on each internal combustion engine. Compliance with the facility-wide NO<sub>X</sub> cap shall be demonstrated using the equation contained in Specific Condition 32. [Rule 62-210.200, F.A.C. (Definitions PTE)]
- 6. At applicant request, to require annual visible emissions testing only on units that operate more than 400 hours per year, Specific Condition 20. is changed:

#### From:

20. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for visible emissions on emissions unit that operated in the preceding 12-month period. Annual performance tests for NO<sub>X</sub> shall be conducted on the emission units that emitted more than 100 tons per year of NO<sub>X</sub> in the preceding 12-month period. The facility will be required to keep 12-month emission totals of NO<sub>X</sub> in tons per year for each internal combustion engine during each federal fiscal year (October 1- September 30). Tests required on an

annual basis shall be conducted at least once during each federal fiscal year. [Rule 62-297.310(7)(a)4., and 62-297.310(7)(c), F.A.C.]

To:

- 20. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for visible emissions on each emissions unit that operated for more than 400 hours in the preceding 12-month period. Annual performance tests for NO<sub>X</sub> shall be conducted on the emission units that emitted more than 100 tons per year of NO<sub>X</sub> in the preceding 12-month period. The facility will be required to keep 12-month emission totals of NO<sub>X</sub> in tons per year for each internal combustion engine during each federal fiscal year (October 1- September 30). Tests required on an annual basis shall be conducted at least once during each federal fiscal year. [Rule 62-297.310(7)(a)4., and 62-297.310(7)(c), F.A.C.]
- 7. To provide a cross-reference to Specific Condition 32., Specific Condition 29. is changed:

#### From:

29. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the 12- month hours of operation of the internal combustion engines, 12-month emission totals for NO<sub>X</sub> and amount of the No. 2 fuel oil and natural gas fired in the internal combustion engines. The information shall be recorded in a written or electronic log and shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]

To:

- 29. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the 12- month hours of operation of the internal combustion engines, 12-month emission totals for NO<sub>X</sub> (see Specific Condition 32.), and amount of the No. 2 fuel oil and natural gas fired in the internal combustion engines. The information shall be recorded in a written or electronic log and shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]
- 8. To provide a method for assuring compliance with the facility-wide  $NO_X$  emissions cap based on records of fuel usage and hours of operation, the following Specific Condition 32. is added:
  - 32. Compliance Assurance Demonstration Method: Using the information required by Specific Conditions 14. & 29., compliance with the 12-month facility-wide NO<sub>X</sub> emissions cap shall be demonstrated by using the following equation:

 $[(X * 11.6 \text{ lbs/hr}) + (Y * 13.9 \text{ lbs/hr}) + (Z * 5.6 \text{ lbs/hr}) / (2000 \text{ lbs/ton})] = \text{Calculated tons of NO}_X.$ 

Where:

X = Documented hours per year firing oil at 100% load (total of all 20 engines)

Y = Documented hours per year firing oil at peak load (total of all 20 engines)

Z = Documented hours per year firing natural gas at 100% load (total of all 20 engines)

[Rule 62-4.070(1), F.A.C.]

#### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

9. For clarification purposes, Specific Condition 21. is changed:

#### From:

21. <u>Tests Prior to Permit Renewal</u>: Prior to renewing the air operation permit, the permittee shall conduct performance tests for NO<sub>X</sub> and visible emissions on one of the internal combustion engines. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3., F.A.C.]

#### To:

21. <u>Tests Prior to Permit Renewal</u>: Prior to renewing the air operation permit, the permittee shall conduct performance tests for NO<sub>X</sub>, visible emissions and ammonia on one of the internal combustion engines. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. All tests shall be conducted while separately firing oil and gas (when available). [Rule 62-297.310(7)(a)3., F.A.C.]



# Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

#### PERMITTEE:

City of Lakeland; Lakeland Electric Winston Peaking Station 501 E. Lemon Street Lakeland, Florida 33801-5079

Authorized Representative: Roger D. Harr City Manager ARMS Permit No. 1050352-001-AC

Facility ID No. 1050352 SIC No. 4911

Expires: June 30, 2002

#### PROJECT AND LOCATION

The proposed project authorizes the installation of 20 internal combustion engines with electrical generator sets. The 20 engines are capable of producing a nominal 50 MW (55 MW at peakload) of electricity.

The project will be located in Polk County, one-mile southeast of the intersection of Airport Road and Old Tampa Highway, Lakeland, Florida. The UTM coordinates are Zone 17, 400.2 km E, 3100.6 km N.

# 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.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

#### **APPENDICES**

The following Appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Howard L. Rhodes, Director

Division of Air Resources Management

"More Protection, Less Process"

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#### **FACILITY DESCRIPTION**

The facility will be located on a 6-acre parcel adjacent to an existing Lakeland Electric substation. Lakeland Electric will own the property and own/control the operation of the facility. Lakeland Electric will own the equipment and dispatch the units to supply electric power. The Project consists of the construction and operation of twenty nominal 2.5-MW GM EMD 20/645/E4B diesel engines and one 294,000-gallon fuel oil storage tank. The engines will use selective catalytic reduction, oxidation catalyst, and an air/fuel ratio regulator for emission reduction control. The units are designed for peaking service. The fuel for the engines will be distillate fuel oil with natural gas. Fuel oil will contain a maximum sulfur content of 0.05 percent. Completion of this project will result in the installation of 20 internal combustion engines with generators capable of providing a nominal 50 MW (55 MW at peakload) of electrical power.

# REGULATORY CLASSIFICATION

Title V Major Source: This facility is a Title V major source of air pollution.

PSD Major Source: Each pollutant with potential emissions greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. requires a PSD review and Best Available Control Technology (BACT) determination. For this project, emissions of no pollutant are significant or subject to BACT standards, provided that the Emission Unit is operated as specified in this permit.

#### PERMIT SCHEDULE

- 05-14-01: Date of Receipt of Permit Application
- 07-19-01: Application deemed complete
- 07-27 -01: Intent issued
- 08-01-01: Notice published in the Lakeland Ledger

#### RELEVANT DOCUMENTS

The documents listed form the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received 5-14-01
- Department letters dated 5-24-01 and 7-10-01
- Company letters dated 6-12-01 and 7-14-01.
- Technical Evaluation and Preliminary Determination dated 7-24-01

# GENERAL AND ADMINISTRATIVE REQUIREMENTS

- 1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.
- Compliance Authority: All documents related compliance activities such as reports, tests, and notifications should be submitted to the FDEP Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318. The phone number is 813/744-6100 and the fax number is 813/744-6084.
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.
- 4. General Conditions: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in Appendix GC of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 8. Expiration: This air construction permit shall expire on June 30, 2002. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C]
- 9. <u>Title V Permit</u>: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a Title V operation permit at least ninety days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and a copy sent to the Department's Southwest District office. [Rules 62-4.030, 62-4.050, 62-4.220, and 62-213.420, F.A.C.]

This permit addresses the following emissions units.

EU ID No.	EMISSIONS UNIT DESCRIPTION
001 – 020	20 GM EMD 20/645/E4B diesel engines and associated electric generators. Each Power Module consists of one General Motors (GM) Electro Motive Division (EMD) 20-cylinder Model 645 E4B, 2-cycle turbocharged internal combustion (IC) engine and one Baylor-Stallion Model G8558RNV electric generator. The GM EMD IC engine has a power rating of 3,600 brake horsepower (bhp) at 100 percent load. The Baylor-Stallion generator has a power output rating of 2,500 kilowatt (continuous rating) and 2,750 kilowatts (kW) under peak load conditions. The IC engines will be fired with low-sulfur (maximum of 0.05 weight percent sulfur) diesel fuel oil and natural gas (with 6 percent diesel fuel for ignition).

# The following Specific Conditions apply to the new emission units 001-020:

#### PERFORMANCE RESTRICTIONS

- 1. Internal Combustion Engines: The permittee is authorized to install, tune, operate and maintain 20 new internal combustion engines with electrical generator sets (GM EMD 20/645/E4B diesel engines and Baylor-Stallion Model G8558RNV electric generator). The 20 generators are designed to produce a nominal 50 MW (55 MW at peakload) of electrical power. [Applicant Request]
- 2. Future PSD Review: The internal combustion engines shall not exceed the permitted hours of operation, nor the permitted NO<sub>x</sub> emission limits allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD non-applicability determination and resulted in the emission standards specified in this permit. For any request to modify this emission unit (whether a physical or operational modification, including a change in the allowable hours of operation or heat input) the permittee shall submit a full PSD permit application, if required under the Department's rules. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]
- 3. Allowable Fuel: The internal combustion engine shall be fired primarily with No. 2 fuel oil and natural gas (with 6 percent diesel fuel for ignition). The permittee shall demonstrate compliance with the fuel oil sulfur limit by keeping the records specified in this permit. [Applicant Request, Rule 62-210.200, F.A.C. (Definition PTE)]
- 4. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

#### **EMISSIONS CONTROLS**

- 5. Unconfined Emissions of Particulate Matter: [Rule 62-296.320(4)(c), F.A.C.]
  - (a) No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration,

demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

- (b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
- (c) Reasonable precautions include the following:
  - Paving and maintenance of roads, parking areas and yards.
  - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
  - Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
  - Removal of particulate matter from roads and other paved areas under the control of the owner or
    operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent
    particulate from becoming airborne.
  - Landscaping or planting of vegetation.
  - Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
  - · Confining abrasive blasting where possible.
  - · Enclosure or covering of conveyor systems.
- (d) In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

#### **EMISSION STANDARDS**

## 6. Nitrogen Oxides (NO<sub>x</sub>):

NO<sub>x</sub> emissions from each internal combustion engine shall not exceed 13.9 lb/hr while in peakload operation firing distillate oil, 11.6 lb/hr while in baseload operation firing distillate oil and 5.6 lb/hr in baseload operation firing natural gas. Annual emissions of NO<sub>x</sub> in tpy from these emission units shall be calculated by using the NO<sub>x</sub> emission rate in lb/hr for each mode of operation multiplied by the total operating hours for each mode of operation for the 20 engines divided by 2000. This NO<sub>x</sub> emission in tpy shall not exceed 250 TPY, based upon a consecutive 12-month period. This facility-wide annual emissions cap of 250 TPY shall become effective on the first day of the month following the initial compliance test of the first internal combustion engine, and compliance shall begin based upon the first twelve months of operation thereafter.

# [Rule 62-212.400, F.A.C. (PSD avoidance)]

#### 7. General Visible Emissions Standard:

Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density if which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity). The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1, F.A.C.]

# 8. Ammonia Emissions:

The concentration of ammonia in the exhaust gas from each internal combustion engine shall not exceed 10 ppmvd @15% O<sub>2</sub> while firing natural gas or fuel oil. [Rule 62-4.070, F.A.C.]

#### **EXCESS EMISSIONS**

- 9. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) 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.]
- 10. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. [Rule 62-210.700(4), F.A.C.]

#### **OPERATIONAL LIMITATIONS**

- 11. Fuel Oil Specification: No. 2 fuel oil and natural gas can be fired in the internal combustion engines. Only No. 2 fuel oil will be fired in the engines for the first two years of operation. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. [Rule 62-210.200, F.A.C. (Definitions PTE)]
- 12. Fuel Oil Consumption: The maximum No. 2 fuel oil allowed to be burned in the twenty internal combustion engines combined is 8,184,480 gallons per year, which is equivalent to 43,000 engine-hours per year at 100% load. The maximum natural gas that can be burned in the twenty internal combustion engines combined is 2,240 MMCF per year, which is equivalent to 89,200 engine-hours per year at 100% load. [Rule 62-210.200, F.A.C. (Definitions PTE)]
- 13. Permitted Capacity: The heat input to each internal combustion engine from firing No. 2 fuel oil shall not exceed 25 MMBtu per hour at 100% load or 28 MMBTU per hour at peak load. The heat input to each internal combustion engine from firing natural gas shall not exceed 29 MMBTU per hour at 100% load. [Design, Rule 62-210.200, F.A.C. (Definition PTE)]
- 14. Hours of Operation: The twenty internal combustion engines shall operate no more than 43,000 engine-hours when firing fuel oil at 100% load, 17,520 engine-hours at peak load and 89,200 engine-hours when firing natural gas during any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure the hours of operation for each fuel on each internal combustion engine. [Rule 62-210.200, F.A.C. (Definitions PTE)]

#### **EMISSIONS PERFORMANCE TESTING**

- 15. <u>Sampling Facilities</u>: The permittee shall design the internal combustion engine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. [Rule 62-297.310(6), F.A.C.]
- 16. Performance Test Methods: Initial (I) and Annual (A) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.
  - (a) EPA Method 7 or 7E Determination of Nitrogen Oxide Emissions from Stationary Sources (I, A);
  - (b) EPA Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I, A);

City of Lakeland: Lakeland Electric
Winston Peaking Station
Air Permit No. 1050352-001-AC
Polk County

- (c) Method CTM-027 or equivalent for ammonia slip (l);
- No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator.
- 17. Fuel Monitoring: The fuel oil shall be monitored initially and annually for the sulfur content using ASTM D4294 Method (or equivalent). The permittee shall also maintain daily records of fuel oil and natural gas consumption for the emission units. [Rules 62-297.440, F.A.C., and 62-210.200, F.A.C.]
- 18. <u>Test Notification</u>: The permittee shall notify the Compliance Authority in writing at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9., F.A.C.]
- 19. Initial Tests Required: Initial performance tests to demonstrate compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emissions unit. Initial performance tests shall be conducted for NO<sub>N</sub> and visible emissions on a sample of 5 (five) randomly picked internal combustion engines for the first year. A different set of randomly picked five engines from the remaining internal combustion engines will be tested during subsequent years of operation until all of the engines have completed the initial performance test. Initial performance test while firing natural gas shall be done when the fuel is available to the facility. Initial performance test shall be conducted for ammonia slip for both oil and gas (when available) on only one internal combustion engine. [Rule 62-297.310(7)(a)1., and 62-297.310(7)(c), F.A.C.]
- 20. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for visible emissions on emissions unit that operated in the preceding 12-month period. Annual performance tests for NO<sub>x</sub> shall be conducted on the emission units that emitted more than 100 tons per year of NO<sub>x</sub> in the preceding 12-month period. The facility will be required to keep 12-month emission totals of NO<sub>x</sub> in tons per year for each internal combustion engine during each federal fiscal year (October 1- September 30). Tests required on an annual basis shall be conducted at least once during each federal fiscal year. [Rule 62-297.310(7)(a)4., and 62-297.310(7)(c), F.A.C.]
- 21. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for NO<sub>x</sub> and visible emissions on one of the internal combustion engines. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3., F.A.C.]
- 22. Internal Combustion Engine Testing Capacity: Performance tests for compliance with standards specified in this permit shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit. If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. However, subsequent operation is limited to 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]
- 23. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of

City of Lakeland; Lakeland Electric Winston Peaking Station the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

#### 24. Applicable Test Procedures

- (a) Required Sampling Time.
  - 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. [Rule 62-297.310(4)(a)1., F.A.C.]
  - 2. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]
- (c) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]

#### 25. Determination of Process Variables

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]
- 26. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

# RECORDKEEPING AND REPORTING REQUIREMENTS

- 27. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
- 28. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test

# SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

- results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
- 29. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the 12-month hours of operation of the internal combustion engines, 12-month emission totals for NO<sub>X</sub> and amount of the No. 2 fuel oil and natural gas fired in the internal combustion engines. The information shall be recorded in a written or electronic log and shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]
- 30. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]
- 31. NSPS Requirements: The fuel oil storage tank shall comply with the requirements of 40 CFR 60, Subpart Kb.

#### GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a) Have access to and copy and records that must be kept under the conditions of the permit;
  - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a) A description of and cause of non-compliance; and
  - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

- The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
  - a) Determination of Best Available Control Technology ()
  - b) Determination of Prevention of Significant Deterioration (); and
  - c) Compliance with New Source Performance Standards (x). Subpart Kb requirements
- G.14 The permittee shall comply with the following:
  - a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c) Records of monitoring information shall include:
    - 1. The date, exact place, and time of sampling or measurements;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - 4. The person responsible for performing the analyses;
    - 5. The analytical techniques or methods used; and
    - 6. The results of such analyses.
- G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.