

Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

DRAFT

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Roger D. Harr
City Manager
Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801-5079

Re: Permit Amendment No. 1050004-010-AC (PSD-FL-245C)
Amendment to Permit No. 1050004-04-AC (PSD-FL-245)
C. D. McIntosh, Jr. Power Plant

Dear Mr. Harr:

The Department has reviewed Lakeland Electric's request of February 20, 2001 requesting an amendment to its permit (1050004-004-AC, PSD-FL-245) to increase the maximum heat input rate to McIntosh Unit 5 when firing natural gas. This request is acceptable and the permit is hereby amended as follows:

FROM:

8. Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Unit 5 at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 2,174 million Btu per hour (mmBtu/hr) when firing natural gas, nor 2,236 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
[1050004-004-AC]

21. Nitrogen Oxides (NO_x) Emissions:

- When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
- Until May 1, 2002, the concentration of NO_x in the exhaust gas shall not exceed 237 lb/hr (at ISO conditions) on a 24 hr block average (basis 25 ppm @ 15% O₂, full load) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average) except during periods of startup, shutdown, malfunction or fuel switching, as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 25 ppm @ 15% O₂ nor 237 lb/hr (gas) and shall exceed neither 42 ppm @ 15% O₂ nor 413 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- Not later than May 1, 2002, the concentration of NO_x concentrations in the exhaust gas shall not exceed 85 lb/hr (at ISO conditions) on a 24 hr block average (basis 9 ppm @ 15% O₂) when firing natural gas and 42

"More Protection. Less Process."

ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average except during periods of startup, shutdown, malfunction or fuel switching, as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 9 ppm @15% O₂ nor 85 lb/hr (gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]

- If Hot SCR is installed, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 9 ppmvd at 15% O₂ when firing natural gas. NO_x emissions shall not exceed 9 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3-hr average (except during periods of startup, shutdown, malfunction or fuel switching), as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 85 lb/hr (gas) and 148 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If conventional SCR is installed in conjunction with conversion to combined cycle operation, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 7.5 ppmvd at 15% O₂ when firing natural gas. If conventional SCR catalyst is installed, NO_x emissions shall not exceed 7.5 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of 3-hr average (except during periods of startup, shutdown, malfunction or fuel switching), as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 71.1 lb/hr (gas) and 148 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]

[1050004-004-AC]

22. Carbon Monoxide (CO) emissions: Prior to May 1, 2002, the concentration of CO (@15% O₂ in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 145 lb/hr (gas) and 539 lb/hr (oil). [Rule 62-212.400, F.A.C.]

After May 1, 2002, the concentration of CO in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 106 lb/hr (gas) and 386 lb/hr (oil). [Rule 62-212.400, F.A.C.]

[1050004-004-AC]

23. Sulfur Dioxide (SO₂) emissions: SO₂ emissions (at ISO conditions) shall not exceed 7.2 pounds per hour when firing pipeline natural gas and 127 pounds per hour when firing maximum 0.05 percent sulfur No. 2 or superior grade distillate fuel oil as measured by applicable compliance methods described below. Emissions of SO₂ shall not exceed 38.4 tons per year. [Rules 62-4.070 and 62-212.400, F.A.C. to avoid PSD Review]

[1050004-004-AC]

25. Volatile Organic Compounds (VOC) Emissions: The concentration of VOC in the exhaust gas when firing natural gas shall not exceed 4 ppmvd when firing natural gas and 10 ppmvd when firing fuel oil as assured by EPA Methods 18, and/or 25 A. VOC emissions (at ISO conditions) shall not exceed 10 lb/hr (gas) and 25 lb/hr (oil). [Rule 62-212.400, F.A.C.]

[1050004-004-AC]

TO:

8. Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Unit 5 at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 2,407 million Btu per hour (mmBtu/hr) when firing natural gas, nor 2,236 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

[1050004-010-AC]

21. Nitrogen Oxides (NO_x) Emissions:

- When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
- Until May 1, 2002, the concentration of NO_x in the exhaust gas shall not exceed 262 lb/hr (at ISO conditions) on a 24 hr block average (basis 25 ppm @ 15% O₂, full load) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average) except during periods of startup, shutdown, malfunction or fuel switching, as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 25 ppm @15% O₂ nor 262 lb/hr (gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- Not later than May 1, 2002, the concentration of NO_x concentrations in the exhaust gas shall not exceed 85 lb/hr (at ISO conditions) on a 24 hr block average (basis 9 ppm @ 15% O₂) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average except during periods of startup, shutdown, malfunction or fuel switching, as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 9 ppm @15% O₂ nor 85 lb/hr (gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If Hot SCR is installed, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 9 ppmvd at 15% O₂ when firing natural gas. NO_x emissions shall not exceed 9 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3-hr average (except during periods of startup, shutdown, malfunction or fuel switching), as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 85 lb/hr (gas) and 148 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If conventional SCR is installed in conjunction with conversion to combined cycle operation, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 7.5 ppmvd at 15% O₂ when firing natural gas. If conventional SCR catalyst is installed, NO_x emissions shall not exceed 7.5 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of 3-hr average (except during periods of startup, shutdown, malfunction or fuel switching), as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 71.1 lb/hr (gas) and 148 lb/hr (oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
[1050004-010-AC]

22. Carbon Monoxide (CO) emissions: Prior to May 1, 2002, the concentration of CO (@15% O₂ in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 161 lb/hr (gas) and 539 lb/hr (oil). [Rule 62-212.400, F.A.C.]

After May 1, 2002, the concentration of CO in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 106 lb/hr (gas) and 386 lb/hr (oil). [Rule 62-212.400, F.A.C.]
[1050004-010-AC]

23. Sulfur Dioxide (SO₂) emissions: SO₂ emissions (at ISO conditions) shall not exceed 8 pounds per hour when firing pipeline natural gas and 127 pounds per hour when firing maximum 0.05 percent sulfur No. 2 or superior grade distillate fuel oil as measured by applicable compliance methods described below. Emissions of SO₂ shall not exceed 38.4 tons per year. [Rules 62-4.070 and 62-212.400, F.A.C. to avoid PSD Review]
[1050004-010-AC]

25. Volatile Organic Compounds (VOC) Emissions: The concentration of VOC in the exhaust gas when firing natural gas shall not exceed 4 ppmvd when firing natural gas and 10 ppmvd when firing fuel oil as assured by EPA Methods 18, and/or 25 A. VOC emissions (at ISO conditions) shall not exceed 11 lb/hr (gas) and 25 lb/hr (oil). [Rule 62-212.400, F.A.C.]
[1050004-010-AC]

A copy of this letter shall be filed with the referenced permit (1050004-004-AC, PSD-FL-245) and shall become part of the permit.

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/es

Enclosures

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. Applicant

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

Authorized Representative: Roger D. Harr, City Manager

2. Source Name and Location

C. D. McIntosh, Jr. Power Plant
3030 East Lake Parker Drive
Lakeland, Florida 33805

UTM Coordinates: Zone 17, 409.0 km East and 3106.2 km North

3. Source Description

The C. D. McIntosh, Jr. Power Plant consists of three fossil fuel fired steam generators, two diesel powered generators, and two gas turbines. Fossil fuel fired steam generators 1 and 2 are fired with No. 6 fuel oil and natural gas with distillate oil used as an ignitor. Fossil fuel fired steam generator 3 is primarily fired with coal, refuse derived fuel and petroleum coke. Gas Turbine Peaking Unit 1 is primarily fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. McIntosh Unit 5, a 250 MW simple cycle stationary combustion turbine, fired with natural gas, or No. 2 or superior grade fuel oil with a maximum sulfur content of 0.05 percent by weight. The three fossil fuel fired steam generators and the simple cycle gas turbine are Acid Rain Units. Also included in this permit are several unregulated emissions units including storage tanks, a coal handling system and a wastewater treatment plant. Based on the Title V application, this facility is a major source of hazardous air pollutants (HAPs).

McIntosh Unit 1 is a forced draft boiler rated at a nominal load of 90 megawatts. The unit is fired with natural gas at a maximum heat input rate of 985 million Btu per hour (approximately 970 million cubic feet per hour), or No. 6 fuel oil, having a maximum sulfur content of 2.5 percent by weight, at a maximum heat input rate of 950 million Btu per hour (approximately 6,300 gallons per hour). This unit is also permitted to burn "on-specification" used oil generated by the City of Lakeland, at a maximum heat input rate of 950 million Btu per hour. McIntosh Unit 1 began commercial service in February, 1971.

McIntosh Unit 2 is a nominal 114.7 megawatt (electric) fossil fuel fired steam generator. The unit is fired on low sulfur No. 6 or No. 2 fuel oil with a maximum heat input of 1,115 million Btu per hour, or natural gas with a maximum heat input of 1,184.5 million Btu per hour. McIntosh Unit 2 began commercial service in June, 1976.

McIntosh Unit 3 is a nominal 364 megawatt (electric) dry bottom wall-fired fossil fuel fired steam generator. The unit is fired on coal, residual oil, natural gas and co-fires refuse derived fuel (RDF) and petroleum coke. The maximum heat input rate is 3,640 million Btu per hour. Unit 3 is equipped with an electrostatic precipitator (ESP), a flue gas desulfurization system (FGD), and low-NO_x burners to control emissions. McIntosh Unit 3 began commercial service in September, 1982.

McIntosh Unit 5 is a Westinghouse 501G combustion turbine operating in a simple cycle, once through steam generator. The turbine is fired with natural gas or a maximum 0.05 percent, by weight, sulfur content No. 2 or superior grade of distillate fuel oil. Emissions are initially controlled using Dry Low NO_x combustion when firing natural gas; water injection when firing distillate fuel oil; use

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

of inherently clean fuels; and, good combustion practices. Ultimately the combustors will be replaced and nitrogen oxides emissions will be reduced by the use of either Ultra Low NO_x burners or the addition of a selective catalytic reduction (SCR) system. Conditions are included for possible future conversion to a 350 megawatt combined cycle installation including a heat recovery steam generator provided there are no increases in emissions associated with the conversion.

Diesel Engine Peaking Units 2 and 3 are diesel fired internal combustion engines which each drives a generator capable of producing electric power at a maximum rating of 2.5 megawatts. These units are each fired on No. 2 fuel oil, with a maximum sulfur content of 0.5 percent by weight, at a maximum firing rate of 201.6 gallons per hour. This corresponds to a maximum heat input of 28 million Btu per hour. Diesel Engine Peaking Units 2 and 3 began commercial service in 1970.

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating of 20 megawatts. The gas turbine is fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. The maximum fuel firing rate is 320 million cubic feet per hour of natural gas (approximately 330 million Btu per hour) or 2,310 gallons per hour of No. 2 fuel oil (approximately 320 million Btu per hour). Gas Turbine Peaking Unit 1 began commercial service in 1973.

4. Current Permit and Major Regulatory Program Status

Lakeland Electric's C. D. McIntosh, Jr. Power Plant Units 1 and 2, Diesel Engines Units 2 and 3; and, Gas Turbine Peaking Unit 1 were granted operating permits as existing units by the Department. Construction of McIntosh Unit 3 was authorized by the Department under permit PSD-FL-008 and PA74-06SR. Unit 3 was modified by permits PSD-FL-008A, and again by permit PSD-FL-008B on December 11, 1995. Construction of McIntosh Unit 5 was authorized by the Department under permit PSD-FL-245 on July 10, 1998.

The facility operated under Title V Air Operation Permit No. 1050004-003-AV effective January 1, 1999. This initial permit was revised to include McIntosh Unit 5 and the facility currently operates under Title V Air Operation Permit No. 1050004-009-AV, which became effective November 19, 2000. This facility is a major source of hazardous air pollutants (HAPs) based on information submitted in the Title V application.

McIntosh Unit 1 is regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input.

McIntosh Unit 2 is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.

McIntosh Unit 3 is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(6), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination.

McIntosh Unit 5 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(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated July 10, 1998.

Diesel Engine Peaking Units 2 and 3 are regulated under Rule 62-210.300, F.A.C., Permits Required.

Gas Turbine Peaking Unit 1 is regulated under Rule 62-210.300, F.A.C., Permits Required. This unit is not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.

5. Permit Modification Request

On July 29, 2000 the Department received a request from Lakeland Electric for modification of its permits to increase the allowable heat input, when operating on natural gas, to Combustion Turbine (CT) Unit 5 (ARMS Emissions Unit 028). Unit 5 is a Siemens-Westinghouse 501G combustion turbine, rated at 250 megawatts, and is the first of this frame to be constructed and operated in the United States. During testing, it was discovered by the applicant that the turbine was capable of operation at higher heat inputs than the performance expectations of the technology from the engineering design.

The currently permitted maximum heat input rates, based on the lower heating value (LHV) of each fuel to Unit 5 at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure, are 2,174 million Btu per hour when firing natural gas, and 2,236 million Btu per hour when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. The applicant has requested that the maximum heat input rate, when firing natural gas, be increased to 2,407 million Btu per hour at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure.

6. Emissions Increases Due to Modification/Method of Operation

The allowable emissions rates established for this emissions unit by permit PSD-FL-254, through a determination of Best Available Control Technology, are stated in units of parts per million. Since this unit description is a concentration, the mass emission rate will be dependent upon the mass flow rate in the exhaust stack. By increasing the maximum heat input, the maximum exhaust flow rate will then increase, thereby increasing the short-term emission rates for nitrogen oxides, carbon monoxide, sulfur dioxide and volatile organic compounds. The applicant estimates the emissions rates will increase, as follows:

TOTAL EMISSIONS INCREASES DUE TO INCREASE IN HEAT INPUT

Pollutant	Emission Rate lb/hour	Annual Increase tons/vr	PSD Threshold tons/vr
NO _x	262	18.0	40
CO	161	47.0	100
SO ₂	8	13.5	40
VOC	11	1.7	40

Source: Response to request for additional information received February 20, 2001.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

7. Evaluation of PSD Applicability

As a major source, a modification or change in method of operation of Unit 5 resulting in **significant net emissions increases** is subject to PSD review. Significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

Significant Net Emissions Increase – A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates.

The significant emission rates are included (see PSD Threshold) in the Table above. The meaning of a net emissions increase is given in Rule 62-212.400, F.A.C. as:

Net Emissions Increase - A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.

The definition of actual emissions is given in Rule 62-210.200, F.A.C. (definitions) as follows:

Actual Emissions - The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

- (a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.*
- (b) The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that, for any regulated air pollutant, such unit-specific allowable emissions limits are federally enforceable.*
- (c) For any emissions unit (other than an electric utility steam-generating unit specified in subparagraph (d) of this definition) which has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.*
- (d) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following a physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the owner or operator submits to the Department on an annual basis, for a period of 5 years representative of normal post-change operations of the unit, within the period not longer than 10 years following the change, information demonstrating that the physical or operational change did not*

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

result in an emissions increase. The definition of "representative actual annual emissions" found in 40 CFR 52.21(b)(33) is adopted and incorporated by reference in Rule 62-204.800, F.A.C.

The term electric utility steam-generating unit is defined as:

Electric Utility Steam Generating Unit – Any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the unit.

Since the net emissions increase for each pollutant is below the significant rate of those pollutants, the permitting action will not be subject to PSD review.

8. Proposed Addition of New Conditions to PSD-FL-245

The combustion turbine was constructed under the authority of PSD permit No. PSD-FL-245 issued on July 10, 1998. The PSD permit will be changed for natural gas combustion, as follows:

The maximum heat input specified in specific condition 8 will be changed to 2,407 million Btu per hour at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure; the nitrogen oxides emission rate of specific condition 21, in effect until May 1, 2002, will increase to 262 pounds per hour; the carbon monoxide emission rate of specific condition 22, in effect until May 1, 2002, will increase to 161 pounds per hour; the sulfur dioxide emission rate of specific condition 23 will increase to 8 pounds per hour; and, the volatile organic compounds emission rate of specific condition 25 will increase to 11 pounds per hour. In addition, the permit will incorporate the new curve of the maximum heat input as a function of compressor inlet temperature dated January 5, 2001, and supplied by the applicant in the permit application.

9. Conclusions

The project will increase the maximum short-term emission rates for nitrogen oxides, carbon monoxide, sulfur dioxide and volatile organic compounds. However, these increases are all below the significant net emission rates.

The Department concludes that PSD is not applicable to this project since this project as presented will not result in significant net emissions increase to major facility. The changes will not cause a significant impact or cause or contribute to a violation of any ambient air quality standard or PSD increment.

For further details regarding this review, contact:

*Scott Sheplak, P.E. Administrator
Edward Svec, Review Engineer
Title V Section
Bureau of Air Regulation
850/488-1344*



Jeb Bush
Governor

Department of Environmental Protection

PSD-245C

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David B. Struhs
Secretary

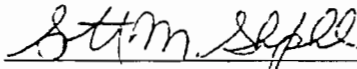
P.E. Certification Statement

Permittee:
Lakeland Electric & Water Utilities
C. D. McIntosh, Jr. Power Plant

DRAFT Permit Revision No.: 1050004-010-AV
Permit No.: 1050004-011-AC

Project type: Combined AC/Title V Permit Revision - Unit No. 5 Heat Input

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



Scott M. Sheplak, P.E.

05/16/01
date

Registration Number: 0048866

Permitting Authority:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 904/921-9532
Fax: 904/922-6979



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

ATC

FEB 14 2001

RECEIVED

FEB 16 2001

BUREAU OF AIR REGULATION

4APT-ARB

Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Department of Environmental Protection
Division of Air Resource Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Initial Performance Test Extension Request Submitted by Lakeland Electric for McIntosh Power Plant Unit No. 5

Dear Mr. Fancy:

The purpose of this letter is to provide you with a written determination regarding the referenced request that was sent to U.S. Environmental Protection Agency (EPA) Region 4 and to you in an October 23, 2000, letter from the City of Lakeland. Unit No. 5 is a 250 megawatt combustion turbine which is subject to 40 C.F.R Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). Lakeland requested an extension of the deadline for completing testing under New Source Performance Standards (NSPS) because it has experienced several operating problems that are preventing it from firing the turbine with fuel oil at the present time.

Because of these operating problems, an extension of the deadline for testing would be acceptable to Region 4, and based upon the information provided by Lakeland, an appropriate duration for the extension would be 720 unit operating hours after Unit No. 5 resumes firing fuel oil. Details regarding the specific operating problems experienced by Lakeland and the basis for our determination are provided in the remainder of this letter.

Under the provisions of 40 C.F.R. §60.8(a), an initial performance test must be conducted on facilities subject to NSPS no later than 60 days after reaching maximum capacity or 180 days after startup, whichever comes first. Based upon these provisions and the April 14, 1999, startup date for Unit No. 5, the deadline for completing an initial performance test on the turbine would have been October 11, 1999. Because the turbine had to be shut down for extensive repairs on July 30, 1999, and was not scheduled to resume operation prior to the deadline for testing, Lakeland requested an extension of this deadline. This request was made in a letter dated September 16, 1999, and in an October 18, 1999, letter to the Florida Department of Environmental Protection we approved this request and granted an extension of 60 days

following the restart of the unit to complete the performance test. Although Lakeland successfully completed an initial performance test while firing natural gas on March 2, 2000, the City has not been able to sustain firing on fuel oil long enough to conduct an initial test while burning this fuel. Therefore, the company's October 23, 2000, letter asked for approval of an additional extension that would give it up to 90 days following the restart of the turbine to complete an initial performance test during fuel oil firing.

Included with Lakeland's request for an extension of the deadline for testing was an October 19, 2000, Siemens Westinghouse, Incorporated letter which provided details about the problems that have prevented Unit No. 5 from achieving sustained operation on fuel oil. According to this letter, problems with igniters, fuel injectors, other mechanical components, and the generator have all contributed to the company's inability to achieve sustained operation on fuel oil. Due to this combination of problems, the maximum firing rate achieved during shake down testing on the unit while firing fuel oil was 25 percent of capacity, and the unit operated on oil for a total of only about 13 hours during this testing. Since the amount of time needed to correct all of the operating problems encountered by Lakeland will prevent it from completing an initial performance test under the terms of the extension we granted in October 1999, the City has requested an additional 90-day extension following the completion of repairs and the restart of the unit on fuel oil.

Since the City has been able to fire Unit No. 5 with fuel oil for such a small amount of time so far, extending the deadline for completing an initial performance test during oil firing is acceptable to Region 4. Because the operation on oil up to this point has been so limited, it is possible that Lakeland may encounter additional operating problems when the unit resumes operation. Because this factor makes it difficult to predict the number of days it will take to successfully bring the unit back on line and prepare it for testing, granting an extension based upon hours of operation will be a better approach than granting one based upon calendar days in Lakeland's case. Another advantage of basing the extension on operating hours, instead of operating days, is that it will reduce the likelihood that the City will need to submit any further requests for a testing extension on Unit No. 5

Based upon extensions that we have approved for other facilities that have not been able to operate on the deadline for testing, giving Lakeland up to 720 operating hours following the restart of Unit No. 5 on oil to complete an initial performance would be reasonable. The majority of the extensions we have granted in the past has given owners and operators 30 calendar days following the restart of an affected facility to complete testing. If the restart of Unit No. 5 on oil is relatively trouble free, extending the testing deadline by 720 operating hours will ensure that testing is completed within roughly the same number of calendar days following the restart as other facilities for which we have granted extensions in the past. In the event that any unexpected problems are encountered following the restart of Unit No. 5, extending the deadline beyond 30 calendar days would be acceptable since expediting the completion of the testing will not be a high priority if the unit is running only intermittently while any new problems are being resolved.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at 404/562-9102.

Sincerely,

A handwritten signature in cursive script, appearing to read "Paul Stagner".

R. Douglas Neeley, Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: Mr. Martin Costello, FL DEP

Ms. Farzie Shelton
City of Lakeland
Department of Electric
501 East Lemon Street
Lakeland, Florida 33801-5050



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 18, 2000

Mr. Hamilton Oven P.E.
Administrator
Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Rd
MS-48
Tallahassee Fl 32399-2400

RECEIVED

AUG 21 2000

BUREAU OF AIR REGULATION

Dear Mr. Oven:

**Re: C. D. McIntosh, Jr. Power Plant Unit No. 5; PA 74-06SR2
Construction Commencement Notification**

In compliance with the above reference Site Certification, and 40 CFR Part 60 § 60.7 we are writing to notify you that on July 27, 2000 we commenced construction for the above referenced unit. We would be forwarding a copy of this communication to Mr. Clair Fancy (Chief of the Bureau of Air Management), and Mr. William C. Thomas (Administrator Division of Air - Southwest District).

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

cc: Mr. Clair Fancy P.E. ✓
Chief of the Bureau of Air Management
Division of Air Resources Management
Florida Department of Environmental Protection
111 S. Magnolia
Suite 4
Tallahassee, Fl 32301

Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa Fl 33619

City of Lakeland ● Department of Electric Utilities



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

HAND DELIVERD

December 20, 1999

Mr. Clair Fancy P.E
Chief of the Bureau of Air Management
Division of Air Resources Management
Florida Department of Environmental Protection
111 S. Magnolia
Suite 4
Tallahassee, Fl 32301

**RE: C.D. McIntosh, Jr. Power Plant, Unit No. 5 Steam Cycle
Site Certification, PA 74-06SR2**

Dear Clair:

This correspondence is submitted on behalf of Lakeland Electric regarding the proposed Specific Conditions to the Site Certification for McIntosh Unit 5 Steam Cycle. In addition to the Air Construction Permit and Prevention of Significant Deterioration (PSD) Approval (DEP File 1050004-004-AC; PDS-FL-245), which Lakeland Electric believes is appropriate, two additional specific conditions were also added. These conditions and Lakeland Electric's comments follow:

Additional Specific Condition B. 1. - "If selective catalytic reduction (SCR) technology is installed, the concentration of ammonia in the exhaust gas shall not exceed 5 ppmvd. [Rule 62-212.400 F.A.C.] "

Comment: The requirement for an ammonia slip of 5 ppmvd was not included in the Air Construction Permit and PSD Approval provided for the steam cycle for Unit 5 when the permit was issued in June 1998. Information in the BACT evaluation and the Department's Best Available Control technology (BACT) Analysis was based on an ammonia slip of 10 ppmvd @ 15 percent oxygen that was provided by SCR vendors. Indeed, the Department obtained an independent vendor budgetary cost estimate related to SCR, which was based on 10 ppmvd @ 15 percent oxygen (see attached). At the time Unit 5 was permitted and throughout 1998 and early 1999, the Department suggested limits of 9 ppmvd at 15 percent oxygen (i.e., Duke New Smyrna and KUA Projects). In addition, the establishment of an emission limit for a non-regulated pollutant, such as ammonia, under the authority of the Department's PSD Rules is inappropriate. Given these facts, Lakeland Electric requests that the conditions be modified as follows: "If selective catalytic reduction (SCR) technology is installed, the SCR system shall be designed with a concentration of ammonia in the exhaust gas no greater than that evaluated in the Air Construction Permit and PSD Approval."

Additional Specific Condition B. 2. - "If power augmentation is implemented: a. Installation of the oxidation catalyst to control CO (and reduce VOC) will be required; b. Modification of these Conditions of Certification will be required."

City of Lakeland ● Department of Electric Utilities

Mr. Clair Fancy P.E
Chief of the Bureau of Air Management
December 20, 1999
Page 2

Comment: The combustion turbine for the project, the Westinghouse Frame 501G, is unique in the industry in that steam is used to cool critical components in the combustor. For simple cycle operation, the steam used to cool the combustor is discharged through the turbine since there is no mechanism for steam recovery. This steam produces additional power that would otherwise be wasted if not allowed to be discharged through the expansion part of the turbine. The BACT Analysis issued by the Department contemplated both this mode of operation as well as combined cycle mode where steam can be recovered. The BACT emission limits for CO and VOC established by the Department did not vary between simple cycle and combined cycle and were more stringent than the combustion turbine vendor estimated. Also, these BACT limits were similar to that established for another recent project that was also a combined cycle project (i.e., the City of Tallahassee Purdom Repowering Project). Given that the BACT established at the time contemplated both injection of steam during simple cycle operation and combined cycle mode, Lakeland Electric requests that this condition be deleted. The only reason that the injection of steam was included in the Site Certification Application was to address consumptive water use. A conservative estimate of 3,000 hours for power augmentation was assumed to evaluate annual consumptive water use. The water evaluation demonstrated that combined cycle operation would have much lower service water use than simple cycle operation.

Lakeland Electric appreciates this opportunity to provide these comments. Please call if you have any questions.

Sincerely,



Farzie Shelton

Enclosures

cc: Kennard F. Kosky, P.E., Golder Associates
Teresa Heron, DEP-BAR
Steve Palmer, DEP-Siting Coordination
Ronald Tomlin, Lakeland Electric
Doug Roberts, HGSS

City of Lakeland ● Department of Electric Utilities

ENGELHARD

Best Available Copy

ENGELHARD CORPORATION
 2205 CHEQUERS COURT
 BEL AIR, MD 21015
 PHONE 410-569-0297
 FAX 410-569-1841
 E-Mail Fred_Booth@ENGELHARD.COM

April 10, 1998

Florida DEP

ATTN: Alvaro Linero via e-mail
 RE: Westinghouse 501G / Simple Cycle
 SCR Catalyst System
 Engelhard Budgetary Proposal EPB98154

Dear Mr. Linero,

We enclose Engelhard Budgetary Proposal EPB98154 for Engelhard NOxCAT™ ZNX™ High Temperature SCR Catalyst System.

This Proposal includes:

- Engelhard NOxCAT™ ZNX™ High Temperature SCR Catalyst System;
- Catalyst is sized NOx reduction from 25 ppmvd @ 15%O₂ to 9 ppmvd @ 15%O₂ with ammonia slip of 10 ppmvd @ 15%O₂ for natural gas; performance is estimated during oil firing; reduction at Full Load (Oil);
- Aqueous Ammonia (28% Solution to skid) Delivery System;
- Internally insulated ductwork;
- Guaranteed Performance Data based on the design basis noted;
- Assumed OTSG downstream of gas turbine.
- Dimensions illustrated per enclosed sketches are duct - inside liner dimensions. These dimensions were estimated based on square cross section from OTSG discharge and estimated inlet transitions (2W = 1H) to SCR reactor inlet.

Sincerely yours,

ENGELHARD CORPORATION



Frederick A. Booth
 Sales Engineer

cc: Lorraine Pierson - Proposal Administrator

Post-it® Fax Note	7671	Date	4/15	# of pages	4
To	Ken Kosky	From	al linero		
Co./Dept	Golden JSEC	Co.	DEP-DARM		
Phone #		Phone #			
Fax #		Fax #			



Best Available Copy

Westinghouse 501G Turbine - Simple Cycle
NOxCAT™ ZNX™ SCR Catalyst System
Engelhard Budgetary Proposal EPB98154
April 10, 1998

ENGELHARD CORPORATION
NOxCAT™ ZNX™ HIGH TEMPERATURE SCR NOx ABATEMENT CATALYST SYSTEM

Engelhard Corporation ("Engelhard") offers to supply the NOxCAT™ ZNX™ High Temperature Ceramic Substrate SCR system herein.

Scope of Supply

1. Engelhard NOxCAT™ ZNX™ SCR catalyst modules;
2. Internal support structures for catalyst modules; includes all hardware and gaskets for catalyst module installation;
3. Internally insulated Ductwork with stainless steel liner to house AIG and SCR catalyst;
4. Ammonia Injection Grid (AIG);
5. External AIG manifold with flow control valves;
6. NH₃ Vaporization / Air dilution skid; 28% Aqueous Ammonia to skid

940,000
Catalyst 2,000,000

<u>BUDGET PRICE:</u> Per Unit	FOB, shipping point	SCR Catalyst System	\$2,700,000
		Replacement SCR Catalyst	\$1,600,000

WARRANTY AND GUARANTEE:

Mechanical Warranty: One year of operation* or 18 months after delivery, whichever occurs first.
Performance Guarantee: Three (3) years of operation* or thirty-six (36) months after catalyst delivery, whichever occurs first. Catalyst warranty is prorated over the guaranteed life.

*Operation is considered to start when exhaust gas is first passed through the catalyst.

Typical, useful catalyst life is 5 - 7 years.

DOCUMENT / MATERIAL DELIVERY SCHEDULE

Drawings / Documentation - 10 weeks after notice to proceed and receipt of engineering specifications and details

Material Delivery 24 - 30 weeks after approval and release for fabrication

QUALITY ASSURANCE and SAFETY

Engelhard's manufacturing is carried out under strict adherence to published quality control and statistical process control programs, and strict adherence to Corporate safety practices and procedures.

SCR SYSTEM DESIGN BASIS:

Gas Flow from:	Westinghouse 501G Combustion Turbine
Gas Flow:	Assumed Horizontal
Fuel:	Natural Gas and Oil (design for Natural Gas)
Gas Flow Rate (At catalyst face):	See Performance Data
Temperature (At catalyst face):	See Performance Data
CO Concentration (At catalyst face):	See Performance Data
NOx Concentration (At catalyst face):	See Performance Data
NH ₃ Slip	10 ppmvd @ 15% O ₂
Pressure Drop	Nom. 4.0 "WG



Westinghouse 501G Turbine - Simple Cycle
 NOxCAT™ ZNX™ SCR Catalyst System
 Engelhard Budgetary Proposal EPB98154
 April 10, 1998

Performance Data

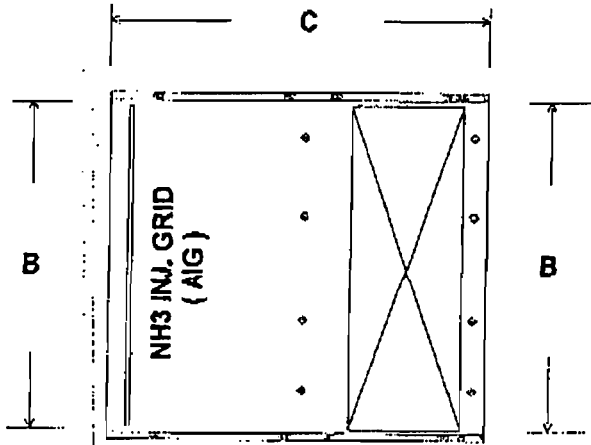
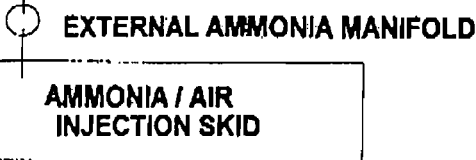
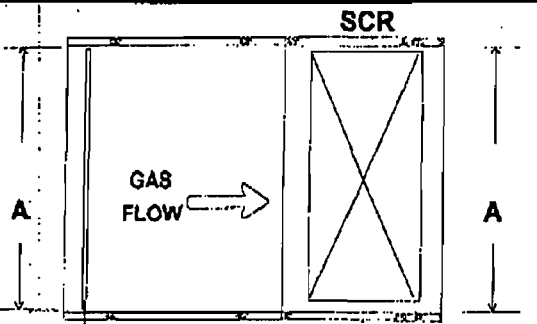
<u>GIVEN / CALC. DATA</u>					<u>GIVEN / CALC. DATA</u>		
	LOAD	BASE	BASE	BASE	LOAD	BASE	
	AMBIENT	90	59	30	AMBIENT	30	
	FUEL	NG	NG	NG	FUEL	OIL	
TURBINE EXHAUST FLOW, lb/hr	4,224,240	4,581,360	4,790,880		TURBINE EXHAUST FLOW, lb/hr	4,901,040	
TURBINE EXHAUST TEMPERATURE, °F	1147	1114	1099		TURBINE EXHAUST TEMPERATURE, °F	1056	
TURBINE EXHAUST GAS ANALYSIS, % VOL. - N ₂	69.07	71.36	72.21		TURBINE EXHAUST GAS ANALYSIS, % VOL. - N ₂	71.25	
	O ₂	10.66	11.23	11.40		O ₂	11.30
	CO ₂	4.03	4.06	4.09		CO ₂	5.51
	H ₂ O	15.35	12.44	11.38		H ₂ O	11.03
	Ar	0.87	0.90	0.91		Ar	0.89
GIVEN: TURBINE NO _x , ppmvd @ 15%O ₂	25	26	25		GIVEN: TURBINE NO _x , ppmvd @ 15%O ₂	42	
GIVEN: TURBINE NO _x , lb/hr	220	237	249		GIVEN: TURBINE NO _x , lb/hr	433	
CALCULATED FLUE GAS MOL. WT.	27.65	27.97	28.09		CALCULATED FLUE GAS MOL. WT.	28.35	
GAS TEMP. @ SCR CATALYST, °F (+/-20)	1018	1014	994		GAS TEMP. @ SCR CATALYST, °F (+/-20)	959	
<u>DESIGN REQUIREMENTS</u>					<u>DESIGN REQUIREMENTS</u>		
NO _x OUT, ppmvd@15%O ₂	9	9	9		NO _x OUT, ppmvd@15%O ₂	ADVISE	
NH ₃ SLIP, ppmvd@15%O ₂	10	10	10		NH ₃ SLIP, ppmvd@15%O ₂	10	
SCR PRESSURE DROP, Nom. 4.0 "WG - Max.					SCR PRESSURE DROP, Nom. 4.0 "WG - Max.		
<u>GUARANTEED PERFORMANCE DATA</u>					<u>EXPECTED PERFORMANCE DATA</u>		
NO _x CONVERSION, % - Min.	84.0%	84.0%	84.0%		NO _x CONVERSION, % - Min.	89.0%	
Nox OUT, ppmvd@15%O ₂ - Max.	9	9	9		NO _x OUT, ppmvd@15%O ₂ - Max.	13	
NO _x OUT, lb/hr - Max.	79.1	85.4	89.5		NO _x OUT, lb/hr - Max.	134.3	
EXPECTED AQ. NH ₃ (28% SOL.) FLOW, lb/hr	287	310	325		EXPECTED AQ. NH ₃ (28% SOL.) FLOW, lb/hr	506	
NH ₃ SLIP, ppmvd@15%O ₂ - Max.	10	10	10		NH ₃ SLIP, ppmvd@15%O ₂ - Max.	10	
SCR PRESSURE DROP, "WG - Max.	3.5	3.5	3.5		SCR PRESSURE DROP, "WG - Max.	3.5	

Scope of Supply: The equipment supplied is installed by others in accordance with the Engelhard design and installation instructions.

- Engelhard NOxCAT™ ZNX™ SCR catalyst modules;
- Internal support structures for catalyst modules; includes all hardware and gaskets for catalyst module installation;
- Internally insulated Ductwork with stainless steel liner to house CO catalyst, AIG, and SCR catalyst;
- Ammonia Injection Grid (AIG);
- External AIG manifold with flow control valves;
- NH₃/Air dilution skid: Pre-piped & wired (including all valves and fittings)
 - Two (2) dilution air fans, one for back-up purposes
 - Panel mounted system controls for:
 - Fans (on/off/flow indicators)
 - Air/ammonia flow indicator and controller
 - System pressure indicators
 - Main power disconnect switch

Excluded from Scope of Supply:

- Ammonia storage and pumping
- Inlet and Outlet transitions including any flow models and flow straighteners
- Electrical grounding equipment
- Foundations
- All other items not specifically listed in Scope of Supply



Dimensions: Estimated
 Reactor Inside Liner Width (A) 63'-0"
 Reactor Inside Liner Height (B) 37'-0"
 Reactor Depth - Total (C) 12'-0"

Note: Cross section - dimensions can vary due to site

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Farzie Shelton
 City of Lakeland, Dept. of Electric Utilities
 501 East Lemon Street
 Lakeland, FL 33801-5050

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) *Bonnie Brenn* B. Date of Delivery *11/5/01*
 C. Signature: *X Bonnie Brenn* Agent Addressee
 D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2. Article Number (Copy from service label)

7000 2870 0000 7028 2799

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Farzie Shelton, Manager
 Environmental Affairs
 City of Lakeland
 Department of Electric Utilities
 501 East Lemon St.
 Lakeland, FL 33801-5050

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) *Bonnie Brenn* B. Date of Delivery *11/5/01*
 C. Signature: *X Bonnie Brenn* Agent Addressee
 D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2.

P.

102595-99-M-1789

**U.S. Postal Service
 CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)**

OFFICIAL USE

7000 2870 0000 7028 2799

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark
Here

Sent To
 Farzie Shelton
 Street, Apt. No., or PO Box No.
 501 E. Lemon St.
 City, State, ZIP+4
 Lakeland, FL 33801-5050

PS Form 3800, May 2000

See Reverse for Instructions

RECEIVED

JUN 02 2000

BUREAU OF AIR REGULATION

STATE OF FLORIDA
SITING BOARD

IN RE: CITY OF LAKELAND)	
C.D. McINTOSH, JR. POWER PLANT)	OGC CASE NO. 99-0993
UNIT NO. 5)	DOAH CASE NO. 99-2739EPP
APPLICATION PA74-06SR2)	

FINAL ORDER APPROVING LAND USE AND CERTIFICATION

On March 2, 2000, an Administrative Law Judge with the Division of Administrative Hearings (hereafter "DOAH") submitted his Recommended Order to the Department of Environmental Protection (hereafter "DEP") in this consolidated land use and certification proceeding. The Recommended Order indicates that copies were served upon the attorneys for the East Lake Parker Residents, City of Lakeland, Department of Electric Utilities (hereafter "Lakeland" or "Lakeland Utilities"), and various other governmental entities.¹ On March 8, 2000, DOAH submitted a "corrected copy of page 11" of the Recommended Order rectifying a "scrivener's error" in Finding of Fact No. 25. A copy of the Recommended Order, containing the "corrected" page 11, is attached as Exhibit A. The matter is now before the Governor and Cabinet, sitting as the Siting Board, for final agency action under the Florida Electrical Power Plant Siting Act (hereafter "PPSA") embodied in Sections 403.501-403.518, Florida Statutes.

BACKGROUND

Lakeland Utilities is a municipal utility supplying electric service to over 100,000 customers in its service area within Polk County. Lakeland Utilities currently operates power plants at two locations in the City of Lakeland. The McIntosh Power Plant site is the larger power plant site and contains six electrical generating units. McIntosh Unit 3 is a 365-megawatt, coal-fired electrical generating unit originally certified under the PPSA in 1978.

In 1998, Lakeland obtained approvals to construct McIntosh Unit 5, a new 250-megawatt, simple-cycle combustion turbine ("CT") at the McIntosh site. These approvals consisted of a modification of the site certification for McIntosh Unit 3 and a separate Prevention of Significant Deterioration Permit, both issued by DEP. The modification of the

¹ The Recommended Order reflects that copies thereof were furnished to counsels for Polk County, Florida Dept. of Transportation, Florida Fish and Wildlife Conservation Commission, Florida Dept. of Community Affairs, Florida Public Service Commission, Southwest Florida Water Management District, Orlando Utilities Commission, and the Central Florida Regional Planning Council.

site certification for McIntosh Unit 5 was required because the new CT was to be located within the site certified for McIntosh Unit 3. Approvals for modification of the site certification for the new McIntosh Unit 5 CT were required under the modification provisions of the PPSA. The McIntosh Unit 5 CT is completing construction and will be placed into service in the near future. The original permits for the new McIntosh Unit 5 CT anticipated that the simple-cycle CT would later be converted to a combined cycle configuration.

Under the proposed McIntosh Unit 5 Steam Cycle Project (the "Project"), the combined cycle configuration involves the construction of a heat recovery steam generator ("HRSG").² The HRSG captures the exhaust gas from the CT and produces steam by extracting the heat from the flue gases. In the HRSG, the hot gases are used to convert water into steam in a closed system of piping. The steam is then used to turn a new steam turbine, which provides the power for an electrical generator. The proposed combined cycle Project will be fired primarily with natural gas, with fuel oil as a backup fuel. Natural gas will be supplied by an existing 10-mile long pipeline owned by the City of Lakeland, which connects to the Florida Gas Transmission gas pipeline system. No alterations to those pipelines are required for the project. Fuel oil for the unit will be delivered by truck and stored in an existing on-site fuel storage tank.

The Project site is a three-acre tract of land within the larger 530-acre McIntosh Power Plant site located in the eastern portion of the City of Lakeland, along the northern shore of Lake Parker. The Project site is generally surrounded by undeveloped lands, including reclaimed and vacant phosphate lands. There are no residential or commercial properties adjacent to the Project site, and the nearest residence is over one mile away.

DOAH PROCEEDINGS

A DOAH formal hearing was held in this PPSA proceeding before Administrative Law Judge J. Lawrence Johnston (hereafter "ALJ") in Lakeland, Florida, on January 11, 2000. Pursuant to the consent of the parties, this DOAH hearing served as a consolidated land use and certification hearing under § 403.508, Florida Statutes. Evidence was presented at the hearing by Lakeland Utilities and by DEP. The record indicates that no additional

² The Project's proposed addition of the new HRSG steam turbine and electrical generator to McIntosh Unit 5 will produce an incremental 100 megawatts of electricity produced through the use of steam. Thus, Lakeland Utilities was required to submit a new PPSA application for site certification of the Project.

governmental agencies or other parties appeared or presented evidence at the DOAH hearing. At the time set aside for receiving public comment, the Mayor of Lakeland commented in support of the Project, but no other members of the general public appeared.

RECOMMENDED ORDER

Included in the Recommended Order are the following findings of fact of the ALJ:

1. The Project site contains no significant environmental features, and no archaeological or historical resources were found. No sensitive local, regional federal parks, wilderness areas, forests, or areas of critical concern are located within five miles of the Project site. No threatened, endangered, or protected plant or animal species are known to be present at or near the Project site.
2. There is no direct discharge of wastewater from McIntosh Unit 5 to adjacent surface waters, and the Project will not have any effect on area surface waters.
3. Air emissions from the Project will not have a significant impact on air quality and will comply with all applicable federal and state air quality standards, including the conditions contained in the PSD Permit for McIntosh Unit 5 and DEP's proposed Conditions of Certification in this PPSA proceeding.

The ALJ concluded in the Recommended Order that, when converted to combined cycle operation, the Project will be consistent and in compliance with the land use plans and zoning ordinances of the City of Lakeland. The ALJ further concluded that Lakeland Utilities has established that the Project will produce minimal adverse affects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. The ALJ ultimately recommended that a final order be entered by the Siting Board finding that the Project site is consistent with the existing land use plans and zoning ordinances of the City of Lakeland and granting certification of the location and operation of the Project under the PPSA, subject to the Conditions of Certification proposed by DEP.

CONCLUSION

Pursuant to subsection 120.57(1)(i), Florida Statutes, the parties to this proceeding were provided fifteen days in which to file Exceptions to the Recommended Order. Nevertheless, no Exceptions to the Recommended Order have been filed by any governmental agencies or private citizens challenging any of the ALJ's factual findings, legal conclusions, or recommendations. The record also reflects that written reports on the Project were prepared by DEP, Dept. of Community Affairs, Southwest Florida Water Management District, Florida Dept. of Transportation, and the Florida Fish and Wildlife Conservation Commission, and that all of these agencies recommended certification of the Project. The record further indicates

that the Central Florida Regional Planning Council entered into a prehearing stipulation submitted to the ALJ asserting that the Project would be consistent with the Council's Strategic Regional Policy Plan. There is no evidence of record in this PPSA proceeding that any state, regional, or local agency has recommended denial of certification of the Project. Based on a review of the record in these consolidated proceedings, the Siting Board concludes that the Project site is consistent and in compliance with the existing land use plans and zoning ordinances of the City of Lakeland, and that certification of the Project under the PPSA serves and protects the broad interests of the public and should be approved.

Having reviewed the Recommended Order and other matters of record and being otherwise duly advised, it is ORDERED that:

A. The ALJ's Recommended Order, as corrected, is adopted in its entirety and incorporated herein by reference.

B. Pursuant to § 403.508(2), Florida Statutes, the site of the Project as described in the Site Certification Application and the evidence presented at the DOAH hearing is determined to be consistent and in compliance with applicable existing land use plans and zoning ordinances of the City of Lakeland.

C. Certification under the PPSA of the location and operation of the Project as proposed in the Site Certification Application and the evidence presented at the DOAH hearing is APPROVED, subject to the Conditions of Certification attached hereto as Exhibit B.

D. Authority to assure and enforce compliance by the City of Lakeland or Lakeland Utilities and their agents with all of the Conditions of Certification imposed by this Final Order is hereby DELEGATED to DEP, except that any proposed Project modification to burn a fuel other than natural gas or fuel oil shall be reviewed by the Siting Board.

Any party to this certification proceeding has the right to seek judicial review of this Final Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, 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 of Appeal must be filed within 30 days from the date this Final Order is filed with the Clerk of the Department.

DONE AND ORDERED this 1ST day of June 2000, in Tallahassee, Florida, pursuant to a vote of the Governor and Cabinet, sitting as the Siting Board, at a duly noticed and constituted Cabinet meeting held on April 25, 2000.

THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD

BY: Jeb Bush
THE HONORABLE JEB BUSH
GOVERNOR

Katherine Harris
KATHERINE HARRIS
SECRETARY OF STATE

Bob Butterworth
BOB BUTTERWORTH
ATTORNEY GENERAL

Robert F. Milligan
ROBERT F. MILLIGAN
COMPTROLLER

Bill Nelson
BILL NELSON
TREASURER

Bob Crawford
BOB CRAWFORD
COMMISSIONER OF AGRICULTURE

Tom Gallagher
TOM GALLAGHER
COMMISSIONER OF EDUCATION

FILED AND ACKNOWLEDGMENT: FILED, ON THIS DATE,
PURSUANT TO §120.52 FLORIDA STATUTES, WITH THE
DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH IS
HEREBY ACKNOWLEDGED.

Ruby Carter
CLERK
6/1/00
DATE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Final Order Approving Land Use and Certification has been sent by United States Postal Service to:

Ann Cole, Clerk and
J. Lawrence Johnston, Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, FL 32399-1550

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Office of County Attorney
Post Office Box 9005
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Southwest Florida Water
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2379 Broad Street
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Fish and Wildlife Conservation
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Douglas Roberts, Esquire
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Thomas B. Tart, Esquire
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500 South Orange Street
Orlando, Florida 32801

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Andrew R. Reilly, Esquire
East Lake Parker Residents
95 South 10th Street
Post Office Box 2039
Haines City, Florida 33845-2039


Norman White, Esquire
Central Florida Regional Planning Council
555 East Church Street
Bartow, Florida 33830

and by hand delivery to:

Scott A. Goorland, Esquire
Department of Environmental Protection
3900 Commonwealth Blvd., M.S. 35
Tallahassee, FL 32399-3000

this 1st day of June, 2000.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


for J. TERRELL WILLIAMS
Assistant General Counsel

3900 Commonwealth Blvd., M.S. 35
Tallahassee, FL 32399-3000
Telephone (850) 488-9314

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: CITY OF LAKELAND)
C.D. McINTOSH, JR. POWER PLANT)
UNIT NO. 5) DOAH CASE NO. 99-2739EPP
APPLICATION PA94-35)
_____)

RECOMMENDED ORDER ON
LAND USE AND CERTIFICATION HEARING

Pursuant to notice, the Division of Administrative Hearings, by its duly-designated Administrative Law Judge, J. Lawrence Johnston, held a formal hearing in the above-styled case on January 11, 2000, in Lakeland, Florida.

APPEARANCES

For City of Lakeland
Department of
Electric Utilities: Douglas S. Roberts, Esquire
Angela R. Morrison, Esquire
Hopping Green Sams & Smith, P.A.
Post Office Box 6526
Tallahassee, Florida 32314

For Florida Department
of Environmental
Protection: Scott A. Goorland, Esquire
Department of Environmental
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Twin Tower Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

STATEMENT OF THE ISSUES

The principal issues to be resolved in this proceeding concern whether certification should be issued to the City of Lakeland, Department of Electric Utilities (Lakeland or Lakeland Electric) to construct and operate the steam electric equipment needed to create a nominal 350-megawatt combined-cycle generating unit located at Lakeland's McIntosh Power Plant site in Lakeland, Florida in accordance with the provisions of Section 403.502, et seq., Florida Statutes. The related issues concern whether the

site for the McIntosh Unit 5 Steam Cycle Project is consistent and in compliance with the applicable land use plans and zoning ordinances of the City of Lakeland, pursuant to Section 403.508(2), Florida Statutes.

PRELIMINARY STATEMENT

This proceeding was conducted pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Chapter 403, Part II, Florida Statutes, and Chapter 62-17, Florida Administrative Code, to consider Lakeland Electric's application for power plant site certification of the McIntosh Unit 5 Steam Cycle Project.

On May 10, 1999, pursuant to Section 403.519, Florida Statutes, the Florida Public Service Commission (PSC) issued its determination of need for the McIntosh Unit 5 Steam Cycle Project.

On June 14, 1999, Lakeland Electric filed with the Florida Department of Environmental Protection (FDEP) an application for site certification for the McIntosh Unit 5 Steam Cycle Project.

By consent among the parties, the land use hearing, under Section 403.508(2), Florida Statutes and the certification hearing under Section 403.508(4), Florida Statutes, were consolidated for purposes of this hearing and for entry of recommended and final orders.

On December 22, 1999, FDEP issued its written analysis of the project as required by Section 403.507(4), Florida Statutes. FDEP's written analysis contained reports from other agencies and proposed conditions of certification for the McIntosh Unit 5 project.

On January 14, 2000, FDEP submitted its revised written analysis to, as Amended FDEP Exhibits, update and correct various matters in the earlier version of its written analysis.

After proper notice by the Applicant and by FDEP, a consolidated land use and certification hearing was held in Lakeland, Florida, on January 11, 2000, as required by the PPSA. The hearing was conducted for the purpose of receiving evidence as to whether the project was in compliance with the criteria for certification set forth in Section 403.502, Florida Statutes. The hearing also served as the land use hearing required by Section 403.508(2), Florida Statutes.

Lakeland Electric presented the testimony of three witnesses and had Lakeland Exhibits numbered 1-23 and 25-28 admitted into evidence. The FDEP presented the testimony of Steven Palmer of the FDEP's Siting Coordination Office and had FDEP Exhibits numbered 1-4 admitted into evidence. No other agency or party appeared at the hearing. The Mayor of Lakeland offered comments in support of the project; no other member of the general public testified at the public hearing.

Prior to the certification hearing, Lakeland Electric and several agencies entered into stipulations that there were no issues of dispute between Lakeland and those agencies concerning the certification of the proposed project. Those agencies were the Department of Community Affairs, the Southwest Florida Water Management District, the Department of Transportation, and the Central Florida Regional Planning Council.

Following the conclusion of the hearing, a Transcript of the hearing was filed. The Joint Proposed Recommended Order of Lakeland and FDEP was timely submitted and has been adopted, with minor modifications, in the rendition of this Recommended Order.

FINDINGS OF FACT

Project Operations and Impacts

Project Overview

1. The City of Lakeland, Department of Electric Utilities is a municipal utility that supplies electric service to approximately 106,000 customers, which represents approximately 200,000 residents in its service area within Polk County.

Lakeland's electric utility commenced operation in 1891, making Lakeland one of only three Florida cities with electricity at that time. Lakeland currently operates power plants at two locations in the City of Lakeland with a combined generating capacity of 785 megawatts (MW). The McIntosh Power Plant site is the larger power plant site and contains six electrical generating units. McIntosh Unit 3 is a 365-megawatt, coal-fired electrical generating unit, which was originally certified under the Florida Electrical Power Plant Siting Act in 1978.

2. In 1998, Lakeland obtained approvals to construct a new 250-megawatt, simple-cycle combustion turbine (CT) at the McIntosh site. These approvals consisted of a modification of the site certification for McIntosh Unit 3 and a separate Prevention of Significant Deterioration (PSD) Permit, both issued by FDEP. That modification of the site certification for the new Unit 5 CT was required because the new CT was to be located

within the site certified for McIntosh Unit 3. Pursuant to FDEP rules, the approval for that new unit was required to be obtained under the PPSA's modification rules.

3. The new McIntosh Unit 5 CT is completing construction and will be placed into service in the near future. The original permits for the Unit 5 CT anticipated that the CT would later be converted to a combined cycle configuration.

4. The City of Lakeland considered a number of generating options before selecting the Unit 5 project to meet the City's required 15 percent reserve margin. Siemens Westinghouse submitted a proposal to the City that Lakeland be the host site for the first 501G simple-cycle combustion turbine. The City concluded that this proposal was the best alternative available to meet the City's needs for additional electricity. The conversion of Unit 5 to combined cycle operation will expand Lakeland's natural gas-fired generating capacity to 76 percent of Lakeland's total electrical generating capacity. No energy conservation measures exist that would affect the need for the plant.

5. The 250-megawatt CT in Unit 5 is one of the most efficient generating units currently operating. In the CT, compressed air is introduced into a combustion zone and fuel, typically natural gas, is combusted within the forward portion of the CT. The resulting hot gases expand in the turbine and turn an electrical generator. For Unit 5, this electrical generator produces approximately 250 MW of electricity. The hot exhaust gases then are exhausted out the existing stack.

6. Under the proposed Unit 5 Steam Cycle Project, the combined cycle configuration for Unit 5 involves the construction of a heat recovery steam generator (HRSG), which captures the exhaust gas from the CT and produces steam by extracting the heat from the flue gases. In the HRSG, the hot gases are used to convert water into steam in a closed system of piping. The steam is then used to turn a new steam turbine, which then turns an electrical generator. Other equipment required for the steam cycle project includes: a new, taller exhaust stack; a new cooling tower; and other plant equipment.

7. The addition of the new HRSG steam turbine and electrical generator to McIntosh Unit 5 will produce an incremental 100 MW of electricity produced through the use of steam. The PPSA requires an increase of steam-generating capacity at the McIntosh site to undergo the full permitting proceedings of the PPSA. Therefore, Lakeland was required to submit its application for site certification to add the steam cycle to Unit 5.

8. The McIntosh Unit 5 will be located on a 3-acre tract of land within the larger 530-acre McIntosh Power Plant site. The site is located in the eastern portion of the City of Lakeland, along the northern shore of Lake Parker.

9. The McIntosh plant site is generally surrounded by undeveloped lands, including reclaimed and vacant phosphate lands used, in part, as a recreational and fishing area managed by the Florida Fish and Wildlife Conservation Commission (FWCC). There are no residential or commercial properties adjacent to the

project site. The nearest residence to the project site is over one mile away.

10. The site for the McIntosh Unit 5 contains no significant environmental features. No wetlands are found within the site. The Unit 5 site is an open field, containing grasses and low-quality, weedy vegetation. Further, no archaeological, or historical resources were found on the site. No sensitive local, regional, state or federal parks, wilderness areas, forests, or areas of critical concern are located within 5 miles of the site. No threatened, endangered, or protected plant or animal species are known to be present at or near the project site.

11. The combined cycle unit will be fired primarily with natural gas, with fuel oil as a backup fuel. Natural gas is supplied by a 10-mile long pipeline owned by the City of Lakeland, which connects to the Florida Gas Transmission gas pipeline system. No alterations to those pipelines are required for the project. Fuel oil for the unit will be delivered by truck and stored in an existing on-site fuel storage tank.

12. The capture and utilization of waste heat from the CT exhaust in the new heat recovery steam generator will significantly increase the efficiency of the electrical generation process for Unit 5. Use of the waste heat will not require any increase in fuel use and will not result in any increase in air emissions from the power plant. When considered on the basis of electrical output, the amount of emissions per megawatt hour of electricity will actually decrease by

approximately 30 percent. All of the air emissions from Unit 5 are associated with the operation of the combustion turbine; and the addition of the heat recovery steam generator does not result in any increase in those emissions.

Water Use, Wastewaters and Other Impacts

13. The addition of the HRSG requires the use of a cooling tower to remove the heat from the circulating steam. Once the steam exits the steam turbine, it passes through a condenser in which the heat from the steam is transferred to circulating cooling water. The steam is condensed back to water and then recycled into the HRSG in a closed loop system. The heated cooling water is then routed to the cooling tower where forced air evaporation removes the heat.

14. Periodically, a portion of the cooling water in the cooling tower system is removed to prevent the buildup of solids and other constituents which could impair the performance of the cooling tower. Replacement of this "blowdown water" and of the water lost through evaporation will be achieved through the use of treated domestic waste water (reuse water) supplied from the City of Lakeland's wastewater treatment plants, including a plant adjacent to the McIntosh plant site. The cooling tower will require approximately 3.24 million gallons per day (mgd) to replace water lost in the cooling process.

15. FDEP adopted Rule 62-610, Florida Administrative Code, to encourage the beneficial use of reuse water from domestic wastewater systems as a means of water conservation. The rule sets out certain treatment and design criteria that must be met

when reuse water is used, including water used in cooling towers. The Lakeland Unit 5 cooling tower meets these rule requirements because the cooling tower is located more than 300 feet from the nearest property boundary, and the reuse water receives secondary treatment by the City of Lakeland.

16. In the event reuse water is not available because of supply or quality problems, groundwater from on-site wells will be used as a backup source of cooling water makeup until reuse water is available again. The needed quantity of groundwater, up to 3.24 mgd, has been approved by the Southwest Florida Water Management District (SWFWMD) under the existing consumptive use permit issued by SWFWMD for the McIntosh plant site. That quantity of water has been shown to not have adverse effects on area users of groundwater.

17. In addition to cooling water, the plant requires high quality service water to replace water lost in the operation of the HRSG and for other plant processes, including control of nitrogen oxide (NOx) emissions during oil firing. This water is obtained from groundwater wells and is treated in on-site water treatment facilities. Conversion of Unit 5 to combined cycle operation will reduce the use of groundwater by approximately 250,000 gallons per day during normal operations due to increased recycling of water within the unit.

18. Wastewater from the plant is generated from the cooling tower, as a result of the periodic blowdown of the water in the cooling tower. This blowdown water is routed to an on-site collection sump and then routed to the City of Lakeland

wastewater treatment system. Industrial-related wastewaters from plant operations, including wastewaters from plant water treatment, are also collected and routed to the City of Lakeland Wastewater Treatment system. There is no direct discharge of wastewater from McIntosh Unit 5 to adjacent surface waters. The project will not have any effect on area surface waters.

19. There will be no increase in the need for potable water or domestic wastewater treatment. The addition of the new HRSG and related equipment for the steam-cycle project will not require an increase in permanent employment at the project site. The on-site stormwater management system is already sized to accommodate the addition of the steam-cycle equipment

20. Minor amounts of solid and hazardous wastes will be generated by the project, mainly during construction. Any hazardous wastes will consist mainly of small amounts of spent solvent. Systems are already in place to dispose of these wastes in an approved manner.

21. Electricity generated at the site is distributed from an on-site switchyard into the City of Lakeland transmission system. This system is interconnected to other Florida utilities. The addition of the Unit 5 Steam Cycle Project will not require any changes to the existing electrical transmission system.

22. The McIntosh Unit 5 will be compatible with the other surrounding land uses in the vicinity of the project site. The project represents a logical expansion of the existing power plant site. It is well buffered from residential land uses.

23. Noise from Plant construction and operation will not adversely impact nearby residents. Existing noise levels in the residential areas near the plant are low, even with the existing generating units at the McIntosh site in operation. Noise levels during construction and operation will comply with the applicable local noise ordinance, as well as the existing noise limitations in the McIntosh site certification conditions. Construction will generally occur during daylight hours, and construction equipment has to comply with noise limits set by the manufacturers. Addition of the new HRSG and other equipment will act to buffer noise from the existing CT. Operation of the plant will not be noticeable at the nearest residence, which is almost one mile away.

Air Quality

Analyses Required

24. Polk County has not been designated by the U.S. Environmental Protection Agency (EPA) or FDEP as a nonattainment area for any federal or Florida ambient air quality standards.

25. Federal and state Prevention of Significant Deterioration (PSD) program requirements applied to the simple cycle portion of McIntosh Unit 5. Because it was a major source of air pollution Because there were no significant net emission increases of any regulated air pollutants due to the conversion of McIntosh Unit 5 to combined-cycle operation, the PSD requirements did not apply to the addition of the steam cycle to Unit 5.

26. Under the PPSA, air quality impacts associated with the new, taller stack and the new cooling tower associated with the combined-cycle operation of Unit 5 were required to be evaluated. However, no changes to the PSD permit itself were necessary to address the addition of the steam cycle to Unit 5, although some updated information reflecting the increased stack height and the addition of the cooling tower was provided to FDEP.

Emission Impacts

27. Under FDEP's rules, air emissions from McIntosh Unit 5 must not cause or contribute to a violation of federal and state ambient air quality standards or PSD increments. Polk County is classified as a Class II area for PSD purposes. The nearest Class I area to the McIntosh Power Plant is the Chassahowitska National Wilderness Area, located approximately 90 kilometers (60 miles) from the Plant.

28. The ambient air quality analysis demonstrated that McIntosh Unit 5's emissions, including operations in combined-cycle mode with the taller stack and cooling tower, will not have a significant impact on air quality near the McIntosh Plant or in the Chassahowitska Class I area. The maximum predicted impacts from Unit 5 in combined-cycle mode are below the EPA and FDEP significant impact levels. Unit 5's emissions will not cause or contribute to an exceedance of any state or federal ambient air quality standards.

29. The 250-foot stack height for McIntosh Unit 5 in combined-cycle mode represents "good engineering practice" (GEP), calculated in accordance with FDEP and EPA rules.

30. McIntosh Unit 5's air emissions are not expected to cause any adverse impacts on vegetation, soils, or visibility in the McIntosh Power Plant site vicinity or in the Chassahowitska National Wilderness Area, the nearest PSD Class I area. Air emission impacts of McIntosh Unit 5 on water bodies in the vicinity of the McIntosh Power Plant will be insignificant.

31. No adverse air emission impacts are expected to result off-site during the construction of the steam cycle portion of Unit 5, and appropriate control methods will be used to minimize emissions during construction activities.

32. The cooling tower plume could cause temporary and localized ground-level fog on occasion. The majority of these relatively rare instances will be of short duration and occur when fog is already naturally occurring.

BACT and Emission Rates

33. A Best Available Control Technology (BACT) analysis, required under the PSD program, is intended to ensure that the air emissions control systems selected for a new project reflect the latest in control technologies used in a particular industry based on a cost-benefit approach, taking into account technical, economic, energy, and environmental considerations. A BACT determination was made for emissions from Unit 5, including operation of the unit in combined-cycle mode, as part of the PSD permit previously issued for the simple-cycle operation on the Unit 5 CT.

34. High efficiency drift eliminators are being installed on the McIntosh Unit 5 cooling tower to minimize particulate

matter emissions from solids contained in the water released from the cooling tower.

35. While the NOx emission limits in the PSD permit will not change due to the addition of the steam cycle portion of Unit 5, the projected emission rate in terms of pound-per-megawatt-hour (lb/mwhr) are actually lower when in combined-cycle mode because of the increase in electricity generated with no additional emissions being created.

Compliance

36. McIntosh Unit 5 in the combined-cycle mode will comply with all applicable federal and state air quality standards, including the conditions contained in the PSD Permit for Unit 5 and in FDEP is proposed conditions of certification.

Consistency with Local Land Use Plan and Zoning Ordinances

37. The Lakeland McIntosh Unit 5 project site, as well as the entire McIntosh Plant Site, is located in a future land use map designation of "Industrial" on the City of Lakeland's Future Land Use Map. That map is part of the locally-adopted Comprehensive Plan for the City of Lakeland. Electrical power plants are a permitted use in that Industrial land use category. McIntosh Unit 5 meets the locational criteria in the future land use element, in that it is well buffered and served by adequate, available public facilities.

38. The McIntosh Unit 5 Steam Cycle project site is zoned I-3, or Heavy Industrial under the City of Lakeland's zoning regulations. That zoning district allows electrical power plants, subject to further review under the City's zoning

requirements. This additional zoning review consists of a conditional use permit, which is intended to provide an additional layer of review for these types of facilities.

39. On September 7, 1999, the City of Lakeland City Council issued a conditional use permit for the entire McIntosh plant site, which includes the site for McIntosh Unit 5.

40. McIntosh Unit 5, when converted to combined-cycle operation, will be consistent and in compliance with the City of Lakeland's land use plans and zoning designations for the project. Further, the project will be consistent with the conditional use permit issued for the project site.

41. McIntosh Unit 5 will also be consistent with the other provisions of the City of Lakeland Comprehensive Plan. The project meets the local Plan's concurrency requirements, promotes the use of treated wastewater for cooling of power plants, and meets the provisions for protection of local air quality.

Agency Positions and Stipulations

42. The FDEP, the Florida Department of Community Affairs, the Southwest Florida Water Management District, the Florida Department of Transportation and the Fish and Wildlife Conservation Commission each prepared written reports on the project, and all recommended approval of the City of Lakeland McIntosh Unit 5 Steam Cycle Project. (Amended FDEP Exhibit 3). FDEP has proposed Conditions of Certification for the project, which Lakeland agrees to accept and comply with in plant construction and operation. The Department of Community Affairs determined that the project, if certified, would be consistent

with the State Comprehensive Plan. The Central Florida Regional Planning Council (CFRPC) did not submit a report to FDEP as part of its review of the project. However, CFRPC entered into a prehearing stipulation with the City of Lakeland in which it stated that the project would be consistent with the CFRPC's Strategic Regional Policy Plan. DCA entered a similar stipulation indicating its agreement that the project was consistent with the State Comprehensive Plan. The Department of Transportation entered into a prehearing stipulations indicating it did not object to certification of the project. No state, regional, or local agency has recommended denial of certification of the project.

CONCLUSIONS OF LAW

43. The Division of Administrative Hearings has jurisdiction of the parties to and the subject matter of this proceeding. The proceeding was conducted in accordance with Chapter 403, Part II, Florida Statutes, the Florida Electrical Power Plant Siting Act, and Chapter 62-17, Part I, Florida Administrative Code, addressing power plant siting proceedings.

44. In accordance with Chapters 120 and 403, Florida Statutes, and Chapter 62-17, Florida Administrative Code, proper notice was accorded all persons, entities, and parties entitled to such notice, as well as appropriate notice being provided to the general public. All necessary and required governmental agencies participated, or had the opportunity to participate in the certification process. Reports and studies were issued by

FDEP, DCA, SWFWMD, FWCC, and FDOT, in accordance with their various statutory duties.

45. The Public Service Commission has determined a need exists for the electrical generating facility, as required by Sections 403.508(3) and 403.519, Florida Statutes.

46. Unrebutted evidence at the hearing demonstrate that the site for the McIntosh Unit 5 Steam Cycle Project is consistent and in compliance with the land use plans and zoning ordinances of the City of Lakeland, Florida.

47. Competent, substantial evidence produced by Lakeland Electric at the certification hearing demonstrated that Lakeland has met its burden of proof that the McIntosh Unit 5 Steam Cycle Project is entitled to certification under the PPSA. Competent, substantial evidence produced at the hearing demonstrate that the construction and operational safeguards for the McIntosh Unit 5 are technically sufficient for the welfare and protection of the citizens of Florida, and are reasonable and available methods to achieve that protection. The McIntosh Unit 5 will produce minimal adverse affects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. The proposed project will not conflict with the goals established by the local comprehensive plan of the City of Lakeland. If operated and maintained in accordance with this Recommended Order and the FDEP's recommended Conditions of Certification, McIntosh Unit 5 will comply with the applicable non-procedural requirements of all agencies. Certification of the project will fully balance the demand for

electrical power plant location and operation with the broad interests of the public.

RECOMMENDATION

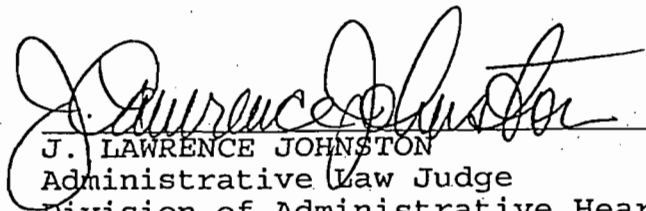
Based on the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that

A. The City of Lakeland, Department of Electric Utilities be granted certification, pursuant to Chapter 403, Part II, Florida Statutes, for the location and operation of the McIntosh Unit 5 Steam Cycle Project, representing an expansion of the electrical generating capacity of the existing McIntosh Unit 5, as proposed in the Site Certification Application and the evidence presented at hearing, and subject to the Conditions of Certification contained in Amended FDEP Exhibit 3, and subject to the Conditions of Certification attached hereto;

B. The Siting Board find that the site of the McIntosh Unit 5 Steam Cycle Project, as described in the Site Certification Application and the evidence presented at the hearing, is consistent and in compliance with the existing land use plans and zoning ordinances of the City of Lakeland as they apply to the site, pursuant to Section 403.508(2), Florida Statutes.

DONE and ENTERED this 2nd day of March, 2000, in
Tallahassee, Leon County, Florida.



J. LAWRENCE JOHNSTON
Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
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(850) 488-9675 SUNCOM 278-9675
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Filed with the Clerk of the
Division of Administrative Hearings
this 2nd day of March, 2000.

COPIES FURNISHED:

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Teri Donaldson, General Counsel
Office of the General Counsel
Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Station 35
Tallahassee, Florida 32399-3000

NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.

State of Florida
Division of Administrative Hearings

Sharyn L. Smith
Director and Chief Judge
Ann Cole
Clerk of the Division



The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida
32399-3060

March 8, 2000

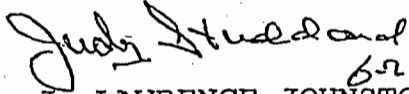
Kathy Carter, Agency Clerk
Office of the General Counsel
Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Station 35
Tallahassee, Florida 32399-3000

Re: In Re: City of Lakeland C.D. McIntosh, Jr. Power Plant
Unit No. 5 Application PA94-35, DOAH Case No. 99-2739EPP

Dear Ms. Carter:

Enclosed is a corrected copy of page 11. Number 25 had a scrivener's error that now has been corrected.

Sincerely,


62
J. LAWRENCE JOHNSTON
Administrative Law Judge

JLJ/js

Enclosure

cc: Mark Carpanini, Esquire
Douglas S. Roberts, Esquire
Scott A. Goorland, Esquire
Sheauching Yu, Esquire
James V. Antista, Esquire
Andrew S. Grayson, Esquire
Robert V. Elias, Esquire
Frank Anderson, Esquire
Thomas B. Tart, Esquire
Andrew R. Reilly, Esquire
Norman White, Esquire
Teri Donaldson, General Counsel

23. Noise from Plant construction and operation will not adversely impact nearby residents. Existing noise levels in the residential areas near the plant are low, even with the existing generating units at the McIntosh site in operation. Noise levels during construction and operation will comply with the applicable local noise ordinance, as well as the existing noise limitations in the McIntosh site certification conditions. Construction will generally occur during daylight hours, and construction equipment has to comply with noise limits set by the manufacturers. Addition of the new HRSG and other equipment will act to buffer noise from the existing CT. Operation of the plant will not be noticeable at the nearest residence, which is almost one mile away.

Air Quality

Analyses Required

24. Polk County has not been designated by the U.S. Environmental Protection Agency (EPA) or FDEP as a nonattainment area for any federal or Florida ambient air quality standards.

25. Federal and state Prevention of Significant Deterioration (PSD) program requirements applied to the simple cycle portion of McIntosh Unit 5 because it was a major source of air pollution. Because there were no significant net emission increases of any regulated air pollutants due to the conversion of McIntosh Unit 5 to combined-cycle operation, the PSD requirements did not apply to the addition of the steam cycle to Unit 5.

RECEIVED
MAR - 9 2000
DEPT OF ENVIRONMENTAL PROTECTION
OFFICE OF GENERAL COUNSEL



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

RECEIVED

David B. Struhs
Secretary

June 13, 2000

JUN 15 2000

BUREAU OF AIR REGULATION

RE: City of Lakeland, C.D. McIntosh, Jr., Power Plant, Unit No. 5, Application PA 74-06SR2, OGC Case No. 99-0993, Final Order Approving Land Use and Certification

To addressees listed below:

On June 1, 2000, the Siting Board issued the Final Order Approving Land Use and Certification for the above named facility. Attached is the Conditions of Certification for the facility, which was issued as an attachment to, and part of the Final Order as Exhibit (B). The Exhibit was inadvertently left off of the Final Order when initially sent out.

Should you have any questions, please call me at 850/488-9314.

Sincerely,

SCOTT A. GOORLAND, ESQUIRE
Senior Assistant General Counsel

Ann Cole, Clerk and
J. Lawrence Johnston, Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, FL 32399-1550

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Office of County Attorney
Post Office Box 9005
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Tallahassee, Florida 32399-0450

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Florida Public Service Commission
Gerald Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Andrew R. Reilly, Esquire
East Lake Parker Residents
95 South 10th Street
Post Office Box 2039
Haines City, Florida 33845-2039

Norman White, Esquire
Central Florida Regional Planning
Council
555 East Church Street
Bartow, Florida 33830

Enclosures

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RE:

City of Lakeland Department of Electric Utilities

C. D. McIntosh, Jr. Power Plant Unit No. 5; PA 74-06SR2

CONDITIONS OF CERTIFICATION

I. GENERAL

Under the control of these Conditions of Certification the City of Lakeland Department of Electric Utilities (Lakeland) will operate a 370 MW (nominal) facility consisting of one existing combustion turbine generator (250 MW), one heat recovery steam generator, one steam turbine electric generator (120 MW), and ancillary equipment. This facility is located at Lakeland's C. D. McIntosh, Jr. Power Plant on the northeastern shore of Lake Parker in the City of Lakeland, Polk County, Florida. The UTM coordinates are 3106.8 km North and 17,408.8 km East.

The general and specific conditions contained in these Conditions of Certification shall apply to the construction and operation of the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility (McIntosh No. 5), and replace all prior conditions for McIntosh No. 5's simple cycle operation.

A. Definitions

The meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, 378, 373, 372, and 253, Florida Statutes (F.S.), and any regulation adopted pursuant thereto and the statutes and regulations of any agency party to the certification proceedings. In the event of any dispute over the meaning of a term used in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department. As used herein:

1. "Application" shall mean the Site Certification Application (SCA) for the City of Lakeland Department of Electric Utilities' (Lakeland) C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility (McIntosh No. 5), filed with the Department on June , 1999 as supplemented or subsequently amended.

2. "DEP" or "Department" shall mean the Florida Department of Environmental Protection.
3. "Emergency conditions" shall mean urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity.
4. "Facility" shall mean the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility and all associated structures, including but not limited to: the combustion turbine generators, the heat recovery steam generators, the steam turbine generator, transformers, associated transmission lines, substation, fuel and water storage tanks, natural gas delivery metering station, air pollution control equipment, storm water control facilities, the cooling towers and related structures.
5. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.
6. "Permittee" shall mean the City of Lakeland Department of Electric Utilities (Lakeland) or their successors and or assigns.
7. "Power plant" shall mean the electrical power generating plant and appurtenances to be operated on the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility (McIntosh No. 5) site in Polk County, as generally depicted in the Application.
8. "Project" or "McIntosh No. 5" shall mean the C. D. McIntosh, Jr. Power Plant Unit No. 5 Electrical Power Generation Facility and all associated facilities.
9. "SWFWMD" shall mean the Southwest Florida Water Management District.

B. Applicable Rules

The construction and operation of the McIntosh No. 5 facility shall be in accordance with all applicable provisions of at least the following regulations: Chapters 40D-2, 40D-8, 40D-21, 62-4, 62-17, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-600, 62-601, 62-604, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, 62-762, 62-767, 62-769, 62-770, and 62-25, Florida Administrative Code (F.A.C.), or their successors as they are renumbered.

II. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions beyond the certified initial generating capacities of the existing unit, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, or expansion in steam generation capacity shall be reported by submission of an application for amendment or modification pursuant to Chapter 403, F.S.

III. GENERAL CONDITIONS

A. Facilities Operation

1. The Permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used to achieve compliance with the conditions of this certification, and are 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 approval and when required by Department rules.

2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of air pollution control equipment, operation may be allowed to resume and continue to take place under an appropriate Department order, provided that the Permittee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the facility shall comply with all other requirements of this certification and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown which is the subject of the Department's order.

B. Non-Compliance Notification

If, for any reason, the Permittee does not comply with or will be unable to comply with any limitation specified in this certification, the Permittee shall notify the DEP Southwest District office by telephone at (813) 744-6100 within one business day. After normal business hours, report any condition that poses a public health threat to the State Warning Point under telephone number (850) 413-9911 or (850) 413-9912. Lakeland shall confirm this non-compliance in writing at 3804 Coconut Palm Drive, Tampa, Florida 33619-8218 within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. A description of the discharge and cause of noncompliance; and,
2. The period of non-compliance, including exact 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 noncomplying event.
3. The Permittee shall report all critical (having potential to significantly pollute surface or ground waters) spills of liquid or liquid-solid materials, not confined to a building or similar containment structure, to the Department by telephone immediately after discovery and submit a written report within forty-eight hours, excluding weekends, from the original notification. The telephonic report shall be submitted by calling the DEP Southwest District Industrial Wastewater Compliance/Enforcement Section under telephone number (813) 744-6100. After normal business hours, contact the State Warning Point by calling (850) 413-9911 or (850) 413-9912. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the areal size of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of

the material flow. Any deviation from this requirement must receive prior approval from the Department.

C. Safety

1. The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction. The Safety Standards specified under Section 442.20, F.S., by the Division of Safety of the Florida Department of Labor and Employment Security shall also be complied with.

2. The Permittee shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. The Permittee shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Section 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

D. Enforcement

The Department may take any and all lawful actions as it deems appropriate to enforce any condition of this certification.

E. Design and Performance Criteria

The power plant may be operated at up to the maximum electrical output projected from design information and system capability without the need for modifying these conditions. Treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this certification are not to be bypassed without prior DEP approval. Moreover, the Permittee shall take all reasonable steps to minimize any adverse impacts resulting from noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

F. Certification - General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in these conditions of certification are the same as "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S. Any noncompliance with a condition of certification or condition of a federally delegated or approved permit constitutes a violation of chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. The Permittee is placed on notice that the Department will review this approval periodically and may initiate enforcement action for any violation of these conditions.

2. This approval 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, exhibits, specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(7), 403.511, and 403.722(5), F.S., the issuance of this approval does not convey any 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 approval is not a waiver of any other Department approval that may be required for other aspects of the total project under federally delegated programs which are not addressed in this certification.

4. This certification 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 approved 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. The Permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of these Conditions which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with these Conditions.

5. In accepting this certification, the Permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this approved source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the approved source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.111 or 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

6. This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., Rules 62-17.211(3) and 62-730.300, F.A.C., as applicable. The Permittee shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.

7. These conditions of certification or a copy thereof shall be kept at the work site of the approved activity.

8. 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 approval records of all monitoring information (including all calibration and maintenance records and all

original strip chart recordings for continuous monitoring instrumentation) required by this approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. Data utilized to prepare the application is to be maintained at the following location:

City of Lakeland, Department of Electric Utilities
501 East Lemon Street
Lakeland, Florida 33801-5050

and

C.D. McIntosh, Jr. Power Plant
3030 East Parker Drive
Lakeland, Florida

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used;
- the results of such analyses.

9. These Conditions may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

10. The Permittee, by accepting these Conditions, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to

a. Enter upon the Permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under these Conditions;

b. Have access to and copy any records that shall be kept under the conditions of these Conditions;

c. Inspect the facilities, equipment, practices, or operations regulated or required under these Conditions; and

d. Sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.

11. When requested by the Department, the Permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating these Conditions, or to determine compliance with the permit. The Permittee shall also provide to the Department upon request copies of records required by these Conditions to be kept. If the Permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department.

12. Unless specifically stated otherwise in Department rules, the Permittee, in accepting these Conditions, 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 rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

13. The Permittee, in accepting these Conditions, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C.

14. The Permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.

15. The Permittee shall apply for a revision to any Department issued PSD, Title V, or NPDES permit in accordance with Department Rules in Chapter 62, Florida Administrative Code, before construction of any planned substantial modifications to the permitted facility is to commence or with applicable rules for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in the applicable portions of Chapter 62, F.A.C.

16. The Permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The Permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of these Conditions. The notice shall include the following information:

- a. A description of the anticipated noncompliance;
- b. The period of the anticipated noncompliance, including dates and times; and
- c. Steps being taken to prevent future occurrence of the noncompliance.

17. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in these Conditions shall be submitted no later than 14 days following each schedule date.

G. Laboratories and Quality Assurance

1. The Permittee shall ensure that all laboratory analytical data submitted to the Department, as required by this certification, must be from a laboratory which has a currently valid and Department approved Comprehensive Quality Assurance Plan (CompQAP) [or a CompQAP pending approval] for all parameters being reported, as required by Chapter 62-160, F.A.C.

2. When a contract laboratory is used to analyze samples required pursuant to this certification, the Permittee is required to have the samples taken by appropriately trained personnel following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C.

3. When an in-house laboratory is used to analyze samples required pursuant to this permit, the Permittee is required to have the samples taken by an appropriately trained technician following EPA and Department approved sampling procedures and chain-of-custody requirements. All chain-of-custody records must be retained on-site for at least three (3) years and made available to the Department immediately upon request.

H. Procedures for Post-Certification Submittals

1. *Purpose of Submittals:* Conditions of certification which provide for the post-certification submittal of information to DEP by the Permittee are for the purpose of facilitating DEP's monitoring of the effects arising from the plant facilities. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the conditions of certification, without any further agency action.

2. *Filings:* All post-certification submittals of information by the Permittee are to be filed with DEP. Copies of each submittal shall be simultaneously submitted to any other agency indicated in the specific conditions requiring the post-certification submittals.

3. *Completeness:* The DEP shall promptly review each post-certification submittal for completeness. This review shall include consultation with the other agencies receiving the post-certification submittal. For the purposes of this condition, completeness shall mean that the information submitted is both complete and sufficient. If found to be incomplete, the Permittee shall be so notified. Failure to issue such a notice within forty-five (45) days after filing of the submittal shall constitute a finding of completeness.

4. *Interagency Meetings:* Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which received copies of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether reasonable assurance of compliance with the conditions of certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these conditions nor to delay the time frames for review established by these conditions.

5. *Reasonable Assurance of Compliance:* Within ninety (90) days of the filing of a complete post-certification submittal, or 45 days after a submittal is made by the Permittee, or unless another date is specified herein, DEP shall give written notification to the Permittee and the agencies

to which the post-certification information was submitted of its determination whether there is reasonable assurance of compliance with the conditions of certification. If it is determined that reasonable assurance has not been provided, the Permittee shall be notified with particularity and possible corrective measures suggested. Failure to notify the Permittee in writing within ninety (90) days of receipt of a complete post-certification submittal shall constitute a compliance determination.

IV. ADVERSE IMPACT

The Permittee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

V. RIGHT OF ENTRY

The Permittee shall allow during normal business hours the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, including representatives of the SWFWMD upon the presentation of credentials:

A. To enter upon the Permittee's premises where an emission or effluent source is located or in which records are required to be kept under the terms and conditions of this certification;

B. To have access during normal business hours (Monday-Friday, 7:00 a.m. to 3:30 p.m.) to any records required to be kept under the conditions of this certification for examination and copying;

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, or monitor any substances or parameters at any location reasonably necessary to assure compliance with this certification or Department rules; and,

D. To assess any damage to the environment or violation of ambient standards.

VI. REVOCATION OR SUSPENSION

This certification may be suspended or revoked for violations of any of its conditions pursuant to Section 403.512, F.S.

VII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the Permittee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, F.S., or regulations thereunder.

Subject to Section 403.511, F.S., this certification shall not preclude the institution of any legal action or relieve the Permittee from any responsibilities or penalties established pursuant to any other applicable state statutes or regulations.

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor 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 certification 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.

IX. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstances, is held invalid, the application of such provisions to other circumstances and the remainder of the certification shall not be affected thereby.

X. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five (5) years from the date of issuance of certification the Department may review these conditions of certification and propose any needed changes.

XI. MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S., the Siting Board hereby delegates the authority to the Secretary of the Department to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, boiler capacity, related time schedules, emission limitations (subject to notice and opportunity for hearing), conservation easements, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes. Approval of requests for modifications of monitoring requirements shall not be unreasonably withheld by the Department.

B. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by the Department under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V air permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified facility. The Permittee shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. The Department shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

C. All other modifications to these conditions shall be made in accordance with section 403.516, F.S..

XII. CONSTRUCTION

A. Standards and Review of Plans

1. All construction at the Facility shall be constructed pursuant to the design standards presented in the application or amended application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. Specific DEP Southwest District office acceptance of plans will be required based upon a determination of consistency with approved design concepts, regulations and these conditions prior to initiation of construction of any: industrial waste treatment facilities; domestic waste treatment facilities; potable water treatment and supply systems; ground water monitoring systems and storm water runoff systems; solid waste disposal areas; and hazardous or toxic handling facilities or areas. The Permittee shall present specific Facility plans for these facilities for review by the Southwest District office at least ninety (90) days prior to construction of those portions of the Facility for which the plans are then being submitted, unless other time limits are specified in the following conditions herein. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable.

2. The Department must be notified in writing and prior written approval obtained for any material change, modification, or revision to be made to the project during construction which is in conflict with these conditions of certification. If there is any material change, modification, or revision made to a project approved by the Department without this prior written approval, the project will be considered to have been constructed without departmental approval, the construction will not be cleared for service, and the construction will be considered a violation of the conditions of certification.

3. Ninety (90) days prior to the anticipated date of first operation, the Permittee shall provide the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge as referenced in Condition II. since the time of the approval of these conditions. This pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

B. Control Measures

1. *Storm Water Runoff*: To control runoff during construction which may reach and thereby pollute waters of the state, necessary measures shall be utilized to settle, filter, treat or absorb silt containing or pollutant laden storm water to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units (NTU) above background in waters of the state. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH of the runoff shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with the applicable nonprocedural requirements in Chapter 62-25, F.A.C.

2. *Open Burning*: Any open burning in connection with initial land clearing shall be in accordance with Chapter 62-256, F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable county regulation. Any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., shall be approved by the DEP Southwest District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur if not approved by the appropriate agency or if the Department or the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

3. *Sanitary Wastes*: Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

4. *Solid Wastes*: Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C.

5. *Noise*: Construction noise shall not exceed noise criteria or any applicable requirements of the City of Lakeland or Polk County. The Permittee shall notify area residents in advance of the onset of the steam blowout of the McIntosh Unit No.5 heat recovery steam generator and steam lines phase of construction. Such steam blowout shall be conducted between 7:00 am and sunset.

6. *Dust and Odors*: The Permittee shall employ proper odor and dust control techniques to minimize odor and fugitive dust emissions. The applicant shall employ control techniques sufficient to prevent nuisance conditions which interfere with enjoyment of residents of adjoining property.

7. *Transmission Lines*: Directly associated transmission lines from the facility electric switchyard to existing transmission lines shall be maintained in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. The Permittee shall notify the Department of the type of herbicides to be used at least 60 days prior to their first use.

8. *Protection of Vegetation*: The Permittee shall develop the site so as to retain the buffer of natural vegetation as described in the application.

9. *Dewatering Operations*: Dewatering operations during construction shall be carried out in accordance with Rule 62-621.300(2), F.A.C.

10. *Historical or Archaeological Finds*: If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site, the Permittee shall notify the DEP Southwest District office and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, Tallahassee, Florida 32399, telephone number (850) 487-2073.

C. Environmental Control Program

An environmental control program shall be established under the supervision of a Florida registered professional engineer or other qualified person to assure that all construction activities conform to applicable environmental regulations and the applicable conditions of certification. If a violation of standards, harmful effects or irreversible environmental damage not anticipated by the

application or the evidence presented at the certification hearing are detected during construction, the Permittee shall notify the DEP Southwest District office as required by Condition III.B.

D. Reporting

Notice of commencement of construction shall be submitted to the Siting Coordination Office and the Southwest District office within fifteen (15) days of initiation. Starting three (3) months after construction commences, a quarterly construction status report shall be submitted to the Southwest District office. The report shall be a short narrative describing the progress of construction.

XIII. AIR RESOURCES MANAGEMENT

A. PSD Permit

The Permittee shall comply with all limitations, restrictions, and conditions contained in PSD permit number PSD-FL-245. The PSD permit is included in and made part of these Conditions of Certification as follows:

--- begin PSD permit ---

|



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:

City of Lakeland
Department of Electric & Water Utilities
501 East Lemon Street
Lakeland, FL 33801-5079

File No.	1050004-004-AC
FID No.	1050004-004
SIC No.	4911
Permit No.	PSD-FL-245
Expires:	June 30, 2002

Authorized Representative:

Ronald W. Tomlin
Assistant Managing Director

PROJECT AND LOCATION:

Permit for the construction of 250 megawatt (MW) simple cycle, gas-fired, stationary combustion turbine (CT), a once-through steam generator, and a 1.05 million gallon storage tank for back-up distillate fuel oil. Conditions are included for possible future conversion to a 350 megawatt combined cycle installation including a heat recovery steam generator provided there are no increases in emissions associated with the conversion. The turbine is designated as Unit No. 5 and will be located at the C.D. McIntosh, Jr., Power Plant, 3030 East Lake Parker Drive, Lakeland, Polk County. UTM coordinates are: Zone 17; 409.0 km E; 3106.2 km N.

STATEMENT OF BASIS:

This 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 above named permittee is authorized to modify the facility 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 of Environmental Protection (Department).

Attached appendices and Tables made a part of this permit:

Appendix BD	BACT Determination
Appendix GC	Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

The existing facility includes: two small diesel powered electric generators; one small gas and distillate-fired combustion turbine; one 90 MW gas and fuel oil-fired steam generator; one 115 MW gas and fuel oil-fired steam generator; and one 364 MW multiple (primarily coal) fuel-fired steam generator. This permit is for the installation of: a 250 MW simple cycle, gas-fired, stationary combustion turbine; a once-through steam generator; a 1.05 million gallon storage tank for back-up (0.05 percent sulfur) distillate fuel oil; and an 85-foot stack. It is possible that in the future the turbine will be converted by the addition of a heat recovery steam generator and a new stack to a 350 MW combined cycle operation without increases in emissions.

Emissions from the McIntosh Unit 5 will be initially controlled by Dry Low NO_x combustors, wet injection when firing fuel oil, use of inherently clean fuels, and good combustion practices. Ultimately the combustors will be replaced and nitrogen oxides emissions reduced by more sophisticated Ultra Low NO_x burners. Otherwise emissions will be reduced by the addition of a selective catalytic reduction (SCR) system.

SUBSECTION B. EMISSION UNITS

This permit addresses the following emission units:

ARMS EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
028	Power Generation	250 Megawatt Combustion Turbine and Once Through Steam Generator
029	Fuel Storage	1.05 Million Gallon Fuel Oil Storage Tank

SUBSECTION C. REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Per Table 62-212.400-2, modifications (such as the construction of Unit 5) at the facility resulting in emissions increases greater than 40 TPY of NO_x or SO₂, 25/15 TPY of PM/PM₁₀, or 3 TPY of fluorides (F) require review per the PSD rules and a determination for Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

This facility is also subject to the provisions of Title IV, Acid Rain, Clean Air Act as amended in 1990.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION I. FACILITY INFORMATION

SUBSECTION D. PERMIT SCHEDULE

- 04/22/98 Notice of Intent published in The Ledger
- 04/23/98 Distributed Intent to Issue Permit
- 04/01/98 Application deemed complete
- 12/08/97 Received Application

SUBSECTION E. RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on December 8, 1997
- Department letters dated January 5, January 12, March 9, 1998, and April 27, 1998
- Comments and letters from the National Park Service dated January 6, January 12, April 2 and April 15, 1998.
- EPA letters dated February 10 and March 6, 1998.
- City of Lakeland letters dated March 4, March 11, March 31, and May 6, 1998.
- Letters from Westinghouse dated March 25, March 30, and March 31, 1998.
- Department's Intent to Issue and Public Notice Package dated April 22, 1998.
- Department's Final Determination and Best Available Control Technology Determination issued concurrently with this permit.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Regulating Agencies: 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 (FDEP), at 2600 Blainstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-1344. All documents related to reports, tests, and notifications should be submitted to the DEP Southwest District office (DEPSW), 3804 Coconut Palm Drive, Tampa, Florida 33619 and phone number 813/744-6100.
2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: 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. [Rule 62-210.900, F.A.C.]
5. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212]
6. Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)].
7. BACT Determination: In accordance with paragraph (4) of 40 CFR 52.21(j) the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a conversion to combined cycle operation. This paragraph states: "For phased construction project, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source."

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

This reassessment will be conducted for this project only if the conversion to combined cycle operation is accompanied by any increases in heat input limits, hours of operation, oil firing, low or baseload operation, short-term or annual emission limits, annual fuel heat input limits or similar changes. At a minimum, conversion to combined cycle operation will require a modification of this permit to reflect the ultimate facility description, the higher power production rates and review of the actual control equipment design. [40 CFR 52.21(j)(4), Rule 62-4.070 F.A.C.]

8. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy to the Department Southwest District office (DEPSW). [Chapter 62-213, F.A.C.]
9. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., 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.]
10. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Southwest District office by March 1st of each year.
11. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
12. Permit Extension: The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.080, F.A.C.).
13. Quarterly Reports: Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1997 version), shall be submitted to the DEP's Southwest District office.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

APPLICABLE STANDARDS AND REGULATIONS:

1. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) 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, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75.
2. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]
3. These emission units shall comply with all applicable requirements of 40CFR60, Subpart A, General Provisions including:
 - 40CFR60.7, Notification and Recordkeeping
 - 40CFR60.8, Performance Tests
 - 40CFR60.11, Compliance with Standards and Maintenance Requirements
 - 40CFR60.12, Circumvention
 - 40CFR60.13, Monitoring Requirements
 - 40CFR60.19, General Notification and Reporting requirements
4. ARMS Emission Unit 028, Power Generation, consisting of a 250 megawatt combustion turbine with a once-through steam generator shall comply with all applicable provisions of 40CFR60, Subpart GG, Standards of performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s).
5. ARMS Emission Unit 029, Fuel Storage, consisting of a 1.05 million gallon distillate fuel oil storage tank shall comply with all applicable provisions of 40CFR60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800, F.A.C.
6. All notifications and reports required by the above specific conditions shall be submitted to the DEP's Southwest District office.

GENERAL OPERATION REQUIREMENTS

7. Fuels: Only pipeline natural gas or maximum 0.05 percent sulfur fuel oil No. 2 or superior grade of distillate fuel oil shall be fired in this unit. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

8. Capacity: The maximum heat input rates, based on the lower heating value (LHV) of each fuel to Unit 5 at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 2,174 million Btu per hour (mmBtu/hr) when firing natural gas, nor 2,236 mmBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.
10. 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 owner or operator shall notify the DEP Southwest District office as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the 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 and the regulations. [Rule 62-4.130, F.A.C.]
11. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
12. Circumvention: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
13. Maximum allowable hours of operation for the stationary gas turbine and once-through steam generator are 8760. Fuel usage as heat input, while burning natural gas in the stationary gas turbine, shall not exceed 15.639×10^{12} BTU (LHV) per year (rolled monthly) until the unit achieves the NO_x emission limits (other than the initial ones) given in Specific Condition 21. Thereafter, only the hourly heat input limits given in Specific Condition 8 apply. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
14. Fuel usage as heat input, while burning fuel oil in the stationary gas turbine, shall not exceed 559×10^9 BTU (LHV) per year (rolled monthly). [Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

Control Technology

15. Westinghouse Dry Low NO_x (DLN) combustors shall be installed on the stationary combustion turbine to control nitrogen oxides (NO_x) emissions while firing natural gas. [Design, Rule 62-4.070, F.A.C.]
16. The Dry Low NO_x (DLN) combustors shall be replaced with Westinghouse Ultra Low NO_x (ULN) combustors to accomplish further NO_x control in order to achieve the emission limits specified in Specific Condition 20 and 21. A high temperature selective catalytic reduction (Hot SCR) system or a low temperature SCR system shall be installed and in operation (together with DLN or ULN combustors) not later than May 1, 2002 if the emission limits specified in Specific Condition No 20 and 21 are not achievable by ULN combustors by this date. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
17. The permittee shall design the stationary gas turbine, ducting, possible future heat recovery steam generator, and stack(s) to accommodate installation of SCR equipment and/or oxidation catalyst in the event that the ULN technology fails to achieve the NO_x limits given in Specific Condition No. 20 and 21 or the carbon monoxide (CO) limits given in Specific Condition 22 are not met. [Rule 62-4.070, F.A.C.]
18. A water injection system shall be installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO_x emissions. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
19. The permittee shall provide manufacturer's emissions performance versus load diagrams for the DLN and ULN systems prior to their installation. DLN and ULN systems shall each be tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize NO_x emissions and CO emissions. Operation of the DLN or ULN systems in the diffusion firing mode shall be minimized when firing natural gas. [Rule 62-4.070, and 62-210.650 F.A.C.]

EMISSION LIMITS AND STANDARDS

20. The following table is a summary of the BACT determination and is followed by the applicable specific conditions. Values for NO_x are corrected to 15% O₂. Values for CO are corrected to 15% O₂ only until May 1, 2002. [Rule 62-212.400, F.A.C.]

Operational Mode	NO _x (ppm)	CO (ppm)	VOC (ppm)	PM/Visibility (% Opacity)	Technology and Comments
Simple Cycle	25 - NG (basis) 237 lb/hr (24-hr avg) 42 - FO (3 hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	DLN on gas, WI on oil. Applies until 05/1/2002. Clean fuels, good combustion.
Simple Cycle	9 - NG (basis) 85 lb/hr (24-hr avg) 42 - FO (3 hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	ULN on gas, WI on oil. Applies after 05/1/2002. Clean fuels, good combustion.
Simple Cycle	9 - NG (3 hr avg) 15 - FO (3-hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	Hot SCR. Applies not later than 05/1/2002 if 9 ppm NO _x not achievable by ULN. Clean fuels, good combustion.
Combined Cycle	7.5 - NG (3 hr avg) 15 - FO (3-hr avg)	25 - NG or 10 - Ox Cat 90 - FO	4 - NG 10 - FO	10	Conventional SCR unless simple cycle limits are achieved on or before 05/01/2002. Clean fuels, good combustion.

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

21. Nitrogen Oxides (NO_x) Emissions:

- When NO_x monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
- Until May 1, 2002, the concentration of NO_x in the exhaust gas shall not exceed 237 lb/hr (at ISO conditions) on a 24 hr block average (basis 25 ppm @ 15% O₂, full load) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 25 ppm @15% O₂ nor 237 lb/hr (when firing natural gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- Not later than May 1, 2002, the concentration of NO_x concentrations in the exhaust gas shall not exceed 85 lb/hr (at ISO conditions) on a 24 hr block average (basis 9 ppm @ 15% O₂) when firing natural gas and 42 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3 hr average as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall exceed neither 9 ppm @15% O₂ nor 85 lb/hr (when firing natural gas) and shall exceed neither 42 ppm @15% O₂ nor 413 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If Hot SCR is installed, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 9 ppmvd at 15% O₂ when firing natural gas. NO_x emissions shall not exceed 9 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of a 3-hr average, as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 85 lb/hr (when firing natural gas) and 148 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]
- If conventional SCR is installed in conjunction with conversion to combined cycle operation, achievable short-term NO_x concentrations in the exhaust gas shall be demonstrated at baseload during the first compliance test following installation not to exceed 7.5 ppmvd at 15% O₂ when firing natural gas. If conventional SCR catalyst is installed, NO_x emissions shall not exceed 7.5 ppmvd at 15% O₂ when firing natural gas and 15 ppmvd at 15% O₂ when firing fuel oil on the basis of 3-hr average, as measured by the CEMS. In addition, NO_x emissions calculated as NO₂ (at ISO conditions) shall not exceed 71.1 lb/hr (when firing natural gas) and 148 lb/hr (when firing fuel oil) to be demonstrated by stack test. [Rule 62-212.400, F.A.C.]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

22. Carbon Monoxide (CO) emissions: Prior to May 1, 2002, the concentration of CO (@15% O₂ in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 145 lb/hr (when firing natural gas) and 539 lb/hr (when firing fuel oil). [Rule 62-212.400, F.A.C.]
- After May 1, 2002, the concentration of CO in the exhaust gas when firing natural gas shall not exceed 25 ppmvd when firing natural gas and 90 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions (at ISO conditions) shall not exceed 106 lb/hr (when firing natural gas) and 386 lb/hr (when firing fuel oil). [Rule 62-212.400, F.A.C.]
23. Sulfur Dioxide (SO₂) emissions: SO₂ emissions (at ISO conditions) shall not exceed 7.2 pounds per hour when firing pipeline natural gas and 127 pounds per hour when firing maximum 0.05 percent sulfur No. 2 or superior grade distillate fuel oil as measured by applicable compliance methods described below. Emissions of SO₂ shall not exceed 38.4 tons per year. [Rules 62-4.070 and 62-212.400, F.A.C. to avoid PSD Review]
24. Visible emissions (VE): VE emissions shall not exceed 10 percent opacity when firing natural gas or No. 2 or superior grade of fuel oil.
25. Volatile Organic Compounds (VOC) Emissions: The concentration of VOC in the exhaust gas when firing natural gas shall not exceed 4 ppmvd when firing natural gas and 10 ppmvd when firing fuel oil as assured by EPA Methods 18, and/or 25 A. VOC emissions (at ISO conditions) shall not exceed 10 lb/hr (when firing natural gas) and 25 lb/hr (when firing fuel oil). [Rule 62-212.400, F.A.C.]

EXCESS EMISSIONS

26. Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration.
27. Excess emissions 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 pursuant to Rule 62-210.700, F.A.C.
28. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Southwest District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. [Rules 62-4.130 and 62-210.700(6), F.A.C.]

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

COMPLIANCE DETERMINATION

29. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, for each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C. Emission limits compliance dates shall conform to the timetable specified on Specific Condition No. 20.
30. Initial (I) performance tests shall be performed on Unit 5 while firing natural gas as well as while firing fuel oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment, including installation of Ultra Low NO_x burners, Hot SCR, or conventional SCR. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on Unit 5 as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.
- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG and (I, A) short-term NO_x BACT limits (Method 7E or RATA test data may be used to demonstrate compliance for annual test requirement)
 - EPA Reference Method 18, and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.
31. Continuous compliance with the NO_x emission limits: Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN or ULN technology) or a 3-hr average (if SCR is used). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period when applicable). Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200 F.A.C., where emissions exceed the applicable NO_x standard. These excess emissions periods shall be reported as required in Condition 28.

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., and 40 CFR 75]

32. Compliance with the SO₂ and PM/PM₁₀ emission limits: Notwithstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas and maximum 0.05 percent sulfur (by weight) No. 2 or superior grade distillate fuel oil, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO₂ standard and the 0.05% S limit, fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule. The applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1997 version).
33. Compliance with CO emission limit: An initial test for CO, shall be conducted concurrently with the initial NO_x test, as required. The initial NO_x and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted concurrent with the annual RATA testing for NO_x required pursuant to 40 CFR 75 (required for gas only).
34. Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the BACT VOC emission limit. Thereafter, CO emission limit will be employed as surrogate and no annual testing is required.
35. Testing procedures: Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 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. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapter 62-204.800 F.A.C.
36. Test Notification: The DEP's Southwest District office shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance test(s).
37. Special Compliance Tests: The DEP may request a special compliance test pursuant to Rule 62-297.310(7), F.A.C., when, after investigation (such as complaints, increased visible

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.

38. Test Results: Compliance test results shall be submitted to the DEP's Southwest District office no later than 45 days after completion of the last test run.

NOTIFICATION, REPORTING, AND RECORDKEEPING

39. Records: All measurements, records, and other data required to be maintained by the City of Lakeland Department of Electric & Water Utilities shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.
40. Emission Compliance Stack Test Reports: A test report indicating the results of the required compliance tests shall be filed with the DEP SW District Office as soon as practical, but no later than 45 days after the last sampling run is completed. [Rule 62-297.310(8), F.A.C.]. 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 results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

MONITORING REQUIREMENTS

41. Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from Unit 5. Periods when NO_x emissions (ppmvd @ 15% oxygen) are above the BACT standards, listed in Specific Condition No 20 and 21, shall be reported to the DEP Southwest District Office pursuant to Rule 62-4.160(8), F.A.C. Following the format of 40 CFR 60.7, periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions when emission levels exceed the BACT standards listed in Specific Condition No. 20 and 21. [Rule 62-204.800 and 40 CFR 60.7 (1997 version)]
42. CEMS in lieu of Water to Fuel Ratio: Subject to EPA approval, the NO_x CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1997 version). Subject to EPA approval, the calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from DEP, the CEMS emission rates for NO_x on Unit 5 shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.
43. Continuous Monitoring System Reports: The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75.

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40CFR75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the Department's Southwest District Office (DEPSWD) for review at least 90 days prior to installation.

44. Fuel Oil Monitoring Schedule: The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the C.D. McIntosh, Jr. Power Plant, an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
45. Natural Gas Monitoring Schedule: The following custom monitoring schedule for natural gas is approved (pending EPA concurrence) in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2):
- Monitoring of natural gas nitrogen content shall not be required.
 - Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods in Specific Condition No. 32 for the measurement of sulfur in gaseous fuels, or an approved alternative method. Once Unit 5 becomes operational, monitoring of the sulfur content of the natural gas shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then fuel sulfur monitoring shall be conducted once per quarter for six quarters and after that, semiannually.
 - Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the City shall notify DEP of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is reexamined.
 - The City shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.
 - Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the City for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel.
 - The City may obtain the sulfur content of the natural gas from the fuel supplier (Florida Gas Transmission) provided the test methods listed in Specific Condition E.4 are used.

AIR CONSTRUCTION PERMIT PSD-FL-245 (1050004-004-AC)

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

46. Determination of Process Variables:

- The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh 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), F.A.C]

APPENDIX GC
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.

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

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 (X)
 - b) Determination of Prevention of Significant Deterioration (X); and
 - c) Compliance with New Source Performance Standards (X).
- 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.

--- end PSD permit ---

B. Additional Specific Conditions

1. If selective catalytic reduction (SCR) technology is installed, the SCR system shall be designed with a concentration of ammonia in the exhaust gas no greater than that evaluated in the Air Construction permit and PSD approval.

2. During combined cycle operation, steam injection for power augmentation shall not exceed 3000 hours during any consecutive 12-month period. The permittee shall keep records of operation sufficient to demonstrate compliance with this limit. The permittee shall demonstrate compliance with the CO emissions standard by conducting EPA Method 10 in accordance with the following schedule:

a. Within 60 days of implementing power augmentation, the permittee shall conduct an initial CO emissions performance test during the maximum amount of power augmentation to demonstrate compliance with the CO emissions standard.

b. Within 45 days after utilizing power augmentation in a federal fiscal year, the permittee shall schedule and conduct a CO emissions performance test during power augmentation.

c. Within 45 days after operating 1000 hours with power augmentation in a federal fiscal year, the permittee shall schedule and conduct a second CO emissions performance test during power augmentation.

d. Within 45 days after operating 2000 hours with power augmentation in a federal fiscal year, the permittee shall schedule and conduct a third CO emissions performance test during power augmentation.

e. The permittee shall comply with all notification, testing, and reporting requirements required by PSD Permit No. PSD-FL-245. NOx data compiled by the continuous monitor during each CO performance test shall be reported and summarized with each CO test report. Steam injection shall be limited to the rate during the most recent emissions performance test that demonstrated compliance with the CO standards.

XIV. WATER RESOURCES MANAGEMENT

A. General Conditions (Chapters 40C-2 and 40C-3, F.A.C.)

1. SWFWMD and Department authorized staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications and conditions of this certification.

2. Nothing in this certification should be construed to limit the authority of the SWFWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246,

Florida Statutes. In the event of a water shortage, as declared by the SWFWMD Governing Board, the Permittee must adhere to reductions in water withdrawals as specified by the SWFWMD.

3. Prior to the construction, modification, or abandonment of an on-site well, the Permittee must submit a completed application form for a Water Well Construction Permit to the Department and SWFWMD. All construction, modification, or abandonment of water wells must be conducted under the supervision of a licensed water well contractor and must be performed in accordance with Chapter 40D-3, Florida Administrative Code. Construction of a well will require modification of the certification when such construction is other than that specified and described in the Site Certification Application. Prior to modification or abandonment of a well, the Permittee must file an amendment to the site certification application with the Department and the SWFWMD. Upon completion of the construction, modification or abandonment of each well, the Permittee must submit to SJRWMD and the Department a completion report for the well.

4. Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to put the system back in an operative condition acceptable to the SWFWMD. Failure to make such repairs will be cause for deeming the well abandoned in accordance with chapters 403 and 373, Florida Statutes, and the rules promulgated thereunder.

5. The Permittee must mitigate any adverse impact caused by withdrawals permitted herein on legal uses of water existing at the time of application. The Department has the right to curtail permitted withdrawal rate or water allocations if the withdrawals of water cause an adverse impact on legal uses of water which existed at the time of certification. Adverse impacts are exemplified by but not limited to:

a. Reduction of water levels in an adjacent surface water body resulting in a significant impairment of the use of water in that water body.

b. Saline water intrusion or introduction of pollutants into the water supply of an adjacent water use resulting in a significant reduction of water quality; and

c. Change in water quality resulting in either impairment or loss of use of a well or water body.

6. Permittee must mitigate any adverse impact caused by withdrawals permitted herein on adjacent land uses that existed at the time of permit application. The Department has the right to curtail permitted withdrawal rates of water allocations if withdrawals of water cause an adverse impact on adjacent land uses that existed at the time of certification. Adverse impacts are exemplified by but not limited to:

a. Significant reduction in water levels in an adjacent surface water body;

b. Land collapse or subsidence caused by a reduction in water levels; and

c. Damage to crops and other types of vegetation.

B. Specific Conditions

1. Reclaimed water.

a. Reclaimed water is to be used in place of ground water from the on-site wellfield and public supply wells to meet the water needs of the power facility, except for steam cycle needs and potable uses.

b. The Permittee is not required to accept reclaimed water in amounts which exceed the power plant's demand and storage capacity.

1. **Groundwater.**

a. In the event reuse water is not available, SWFWMD Identification (DID) numbers 31,32, and 33 will be used as a stand-by supply for the cooling tower makeup water associated with McIntosh Unit No. 5.

(1) The stand-by quantities will be:

DID No.	Annual Average Daily (gpd)	Peak Month Daily (gpd)
31	798,900	3,240,000
32	798,900	3,240,000
33	798,900	3,240,000

(2) The combined total stand-by quantities from DID Nos. 31, 32, and 33 for cooling tower makeup water will be limited to 798,900 gpd Annual Average Daily and 3,240,000 gpd Peak Month Daily.

b. Groundwater regulatory aspects under SWFWMD's jurisdiction, except those associated with DID 31, 32, and 33 that pertain to McIntosh Unit No. 5, will be addressed under Water Use Permit (WUP) No. 200047.04 and any subsequent revisions to the WUP.

c. DID numbers 5 and 8 may be used for raw water makeup for McIntosh Unit No. 5.

3. **Surface Water**

There will be no intake from or discharge to surface Waters of the State associated with the construction or operation of McIntosh Unit No. 5.

XV. **SOLID AND HAZARDOUS WASTE MANAGEMENT**

A. No solid or hazardous waste is to be permanently stored onsite.

B. Salt cake from the industrial wastewater treatment and cooling water systems is to be sent off-site for disposal.

XVI. INDUSTRIAL WASTEWATER

All industrial wastewater is to be discharged into the existing McIntosh Power Plant Facility wastewater treatment units. Should there be any change in these treatment units that adversely affect the treatment of wastewater from the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XVII. DOMESTIC WASTEWATER

All sanitary wastewater is to be discharged into the existing McIntosh Power Plant Facility wastewater treatment units. Should there be any change in these treatment units that adversely affect the treatment of wastewater from the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XVIII. POTABLE WATER

All potable water is to be received from the existing McIntosh Power Plant Facility potable water supply. Should there be any change in these supply units that adversely affect the delivery of potable water to the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XIX. STORMWATER MANAGEMENT

All stormwater is to be discharged into the existing McIntosh Power Plant Facility stormwater treatment units. Should there be any change in these treatment units that adversely affect the treatment of wastewater from the McIntosh Unit No. 5 these Conditions of Certification must be modified in accordance with Condition XI.

XX. TRANSPORTATION

A. Traffic control will be maintained during plant construction and maintenance in compliance with the applicable standards contained in the Manual on Uniform Traffic Control Devices; Statewide Minimum Level of Service Standards, Rule Chapter 14-94, Florida Administrative Code; Florida Department of Transportation's Roadway and Traffic Design Standards; and Florida Department of Transportation Standard Specifications for Road and Bridge Construction, whichever is more stringent.

B. For the delivery of any overweight or overdimensional loads to the site during the construction of the Facility, the Permittee or its contractors shall adhere to the necessary standards and receive the necessary permits required under Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

C. Access Management to the State Highway System: No new access to the State Highway System is proposed in the site certification application. If new access is later proposed, access permitting as defined in Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

D. Use of State of Florida Right of Way or Transportation Facilities: If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the applicable requirements of the Department of Transportation's Utility Accommodation Manual and Rule 14-46.001, Railroads/Utilities Installation or Adjustment, Florida Administrative Code.

E. Heavy construction vehicles are to remain on site during the construction phase.

F. A bulletin board shall be located such that employees have easy access to it and on which car pooling advertisements can be placed.



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

June 22, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gregg Worley, Section Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
US EPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Lakeland McIntosh Unit 5 Site Certification Application (SCA) & Unit 3 SCA Amendment

Dear Mr. Worley:

Enclosed is a copy of the site certification application for the steam cycle for the City of Lakeland's McIntosh Unit 5 in Polk County. This is a proposed conversion of an existing simple cycle combustion turbine to a combined cycle unit through the addition of one heat recovery steam generator, a stack, one 120 MW (nominal) steam turbine, and cooling towers. Our Siting Coordination Office has indicated that an application is included for modification of the allowable fuel for Unit 3 to include biomass as a fuel supplement. There appears to be no emissions increase associated with the Unit 5 HRSG except for drift from the cooling tower. The proposed conversion to combined cycle and possible installation of a conventional SCR unit was anticipated during the initial permitting so limits were included for the conversion. Therefore the application is not for a PSD permit.

Please provide your comments as soon as possible as we need to comment to our Siting Coordination Office by August 13, 1999. This project is subject to the Florida Power Plant Siting Act and review by the Governor and Cabinet. If you have any questions regarding this matter, please call me, at 850/921-9523.

Sincerely,

A. A. Linero, P.E., Administrator
New Source Review Section

AAL/jk

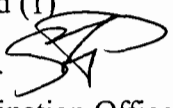
Enclosure

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Memorandum

Florida Department of
Environmental Protection

TO: Clair Fancy (4) ✓
Mike Hickey (4)
Geoffrey Mansfield (3)
David Bickner (1)
Scott Gorland (1)

FROM: Steve Palmer 
Siting Coordination Office

RECEIVED
JUN 15 1999
BUREAU OF
AIR REGULATION

DATE: June 14, 1999

SUBJECT: Lakeland McIntosh Unit 5 Site Certification Application (SCA) and Unit 3 SCA Amendment; PA 74-06SA (Module 8016).

Attached is a copy of the City of Lakeland Electric Utilities site certification application (SCA) for the Unit 5 steam cycle. This is a proposed conversion of an existing simple cycle combustion turbine to a combined cycle unit through the addition of one heat recovery steam generator (HRSG), a HRSG stack, heat recovery steam generators, and one one 120 MW (nominal) steam turbine, and cooling towers. An application is also included for modification of the allowable fuel for Unit 3 to include biomass as a fuel supplement.

Please review this SCA for sufficiency and return your comments to me by August 13, 1999. If your office is required to submit a preliminary statement of issues, it is due to the Siting Office no later than August 10, 1999.

If you have any questions, please call me at 850/487-0472.

Attachment --

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

- 1. Al Limer
- 2. MS 5500

- 3. Patton - Lakeland McIntosh
- 4. Unit # 5. we issued
- 5. PSD permit 2 years ago, but they
- 6. only now went through

PLEASE PREPARE REPLY FOR:

- SECRETARY'S SIGNATURE
- DIV/DIST DIR SIGNATURE
- MY SIGNATURE
- YOUR SIGNATURE
- DUE DATE _____

ACTION/DISPOSITION

- DISCUSS WITH ME
- COMMENTS/ADVISE
- REVIEW AND RETURN
- SET UP MEETING
- FOR YOUR INFORMATION
- HANDLE APPROPRIATELY
- INITIAL AND FORWARD
- SHARE WITH STAFF
- FOR YOUR FILES

COMMENTS:

PPS Act. So this goes in original PSD 245 file with anything else related to subsequent PPS action.

~~Joe - FYI Al~~

~~let me know how to handle.~~

~~KF~~

~~TH - FYI. ^{FILE} ~~PLEASE~~ CALLED SCOTT & ADVISED THAT BACT DETERMINATION IS MISSING.~~

~~THEN ROUTE TO AAL, FYI.~~

~~→ FILE IN PSD-FC-245.~~

FROM: Jamara Jones DATE: 6/14/00 PHONE: 1-91682



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 23, 2000

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION
FEB 28 2000
RECEIVED

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 -A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit (Section III. Emission Unit Specific Condition 29) and 40CFR 60.7 and 60.8, we are writing to notify the Department of our intention to perform the initial stack testing commencing on March 2, 2000. Accordingly, we intend to demonstrate compliance with the NSPS and BACT Standards while burning Natural Gas. However, at this time we do not intend to demonstrate compliance while burning low sulfur fuel oil as, to date, we have not used any fuel oil during start up of this unit. We have informed DEP Southwest District by telephone of this event, however, we will provide a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa FL 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

City of Lakeland ● Department of Electric



Farzie Shelton, chE; REM

AL

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

January 14, 2000

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

RECEIVED

JAN 21 2000

BUREAU OF AIR REGULATION

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 -A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit (Section III. Emission Unit Specific Condition 29) and 40CFR 60.7 and 60.8, we are writing to notify the Department of our intention to perform the initial stack testing commencing on January 14, 2000. Accordingly, we intend to demonstrate compliance with the NSPS and BACT Standards while burning Natural Gas. However, at this time we do not intend to demonstrate compliance while burning low sulfur fuel oil as, to date, we have not used any fuel oil during start up of this unit. Please note that we restarted this unit on January 7, 2000 following redesign and reassemble of some combustion components. We have informed DEP Southwest District by telephone of this event, however, we will provide a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa Fl 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

City of Lakeland ● Department of Electric

Permit #:1050004-006-AC PATS:

Issue:29-JAN-1999 Expire:29-JAN-2004

Project #/Name	Owner/Company	Type/Sub	Receive
001/AMENDMENTS TO PERMIT PSD-	LAKELAND ELECTRIC	AC /M1	08-DEC-1994
002/PETROLEUM COKE AS FUEL RE	LAKELAND ELECTRIC	AC /M1	19-OCT-1995
003/MCINTOSH POWER PLANT	LAKELAND ELECTRIC	AV /00	14-JUN-1996
004/MCINTOSH POWER PLANT FACI	LAKELAND ELECTRIC	AC /1A	08-DEC-1997
005/MCINTOSH POWER PLANT EARL	LAKELAND ELECTRIC	AV /02	31-AUG-1998
006/CITY OF LAKELAND-MCINTOSH	LAKELAND ELECTRIC	AC /M2	27-JAN-1999
007/CITY OF LAKELAND - UNIT #	LAKELAND ELECTRIC	AC /M1	09-JUL-1999
008/CITY OF LAKELAND - UNIT 5	LAKELAND ELECTRIC	AC /M1	21-SEP-1999
009/C.D. MCINTOSH POWER PLANT	LAKELAND ELECTRIC	AV /02	24-APR-2000
010/C.D. MCINTOSH, JR.,UNIT N	LAKELAND ELECTRIC	AC /M1	29-JUL-2000
/STEAM GENERATOR	LAKELAND ELECTRIC	A0 /2A	23-NOV-1988
/PEAKING UNIT #3, FUEL OIL	LAKELAND ELECTRIC	A0 /2B	15-DEC-1988
/PEAKING UNIT #1, FUEL OIL	LAKELAND ELECTRIC	A0 /2B	15-DEC-1988
/STEAM GENERATOR	LAKELAND ELECTRIC	A0 /2A	20-DEC-1989

Press [NXTBLK] for summary information.

Count: 14

v

<Replace>

Permit #:1050003-007-AC PATS: Issue:30-MAY-2000 Expire:30-MAY-2005

Project #/Name	Owner/Company	Type/Sub	Receive
001/CUSTOM FUEL MONITOR/ISO/L	LAKELAND ELECTRIC	AC /M1	27-JUN-1995
002/LARSEN 8 REV'S	LAKELAND ELECTRIC	A0 /MM	23-OCT-1995
003/REVISE TEST DATES - UNITS	LAKELAND ELECTRIC	A0 /MM	18-MAR-1996
004/LARSEN POWER STATION	LAKELAND ELECTRIC	AV /00	14-JUN-1996
005/LAKELAND ELECTRIC/WATER U	LAKELAND ELECTRIC	AC /M1	20-MAR-1997
006/LAKELAND/LARSEN ADMIN COR	LAKELAND ELECTRIC	AV /03	26-OCT-1999
007/LAKELAND-LARSEN MEMORIAL	LAKELAND ELECTRIC	AC /M1	25-FEB-2000
008/LAKELAND/LARSEN ADMIN COR	LAKELAND ELECTRIC	AV /03	16-MAR-2000
/LARSEN MEMORIAL UNIT 5	LAKELAND ELECTRIC	A0 /99	01-FEB-1985
/STEAM GENERATOR NO. 7	LAKELAND ELECTRIC	A0 /99	04-APR-1985
/LARSON MEMORIAL POWER PLA	LAKELAND ELECTRIC	A0 /99	04-APR-1985
/LARSEN PLANT--GAS TURBINE	LAKELAND ELECTRIC	A0 /00	07-JUN-1988
/LARSON MEMORIAL POWER PLA	LAKELAND ELECTRIC	A0 /2A	05-FEB-1990
/LARSON MEMORIAL POWER PLA	LAKELAND ELECTRIC	A0 /2A	05-FEB-1990

Press [NXTBLK] for summary information.

Count: 14

v

<Replac>

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

<p>3. Article Addressed to:</p> <p><i>Mr. Ronald W. Jorden</i> <i>Assistant Managing Director</i> <i>Lakeland Electric Water Utilities</i> <i>501 East Lemon St.</i> <i>Lakeland, FL 33801-5079</i></p>	<p>4a. Article Number</p> <p><i>Z 031 391 898</i></p> <p>4. Service Type</p> <p><input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified</p> <p><input type="checkbox"/> Express Mail <input type="checkbox"/> Insured</p> <p><input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD</p> <p>7. Date of Delivery</p> <p><i>12-15-99</i></p>
<p>5. Received By: (Print Name)</p>	<p>8. Addressee's Address (Only if requested and fee is paid)</p>
<p>6. Signature: (Addressee or Agent)</p> <p><i>X Bonnie Brennan</i></p>	

Thank you for using Return Receipt Service.

Z 031 391 898

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to	
<i>Ronald Jorden</i>	
Street & Number	
<i>501 E. Lemon St.</i>	
Post Office, State, & ZIP Code	
<i>Lakeland, FL 33801-5079</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
<i>12/13/99</i>	

PS Form 3800, April 1995



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

OCT 18 1999

RECEIVED

OCT 22 1999
DIVISION OF AIR
RESOURCES MANAGEMENT

4APT-ARB

Mr. Howard L. Rhodes, Director
Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Initial Performance Test Extension Request for Unit No. 5 at the Lakeland Electric
McIntosh Power Plant, Lakeland, Florida

Dear Mr. Rhodes:

The purpose of this letter is to provide you with comments regarding an initial performance test extension that Lakeland Electric requested for the referenced combustion turbine (CT) which is subject to 40 C.F.R. Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). According to a September 16, 1999, letter that Lakeland Electric sent to the Environmental Protection Agency (EPA), Region 4 and to the Florida Department of Environmental Protection, Unit No. 5 started up on April 14, 1999. Based upon this startup date, the deadline for conducting an initial performance test on this CT would be October 11, 1999 (i.e., no later than 180 days after startup). As a result of serious damage that occurred to the unit during operational testing that was conducted following its startup, Unit No. 5 has been shutdown for repairs since July 30, 1999, and Lakeland Electric does not anticipate restarting the unit before mid-November. Therefore, it will be impossible to conduct the initial performance test by the applicable deadline, and Lakeland Utilities has requested an extension of the deadline for conducting its initial test. Specifically, the company has requested that the deadline for testing be extended until 60 days following the restart of the unit, and based upon our review of the relevant facts, we have concluded that the proposed testing extension is reasonable.

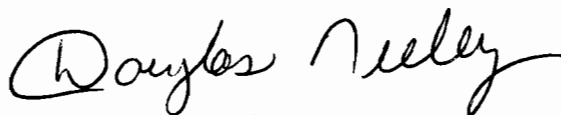
The EPA has previously granted initial testing extensions to owners and operators of facilities that could not be tested by the deadlines in 40 C.F.R. §60.8(a) due to mechanical breakdowns that prevented them from operating. In all of the previous determinations that we are aware of, companies were allowed to delay their initial performance test until 30 days after the facility resumed operation following the completion of repairs made to correct the mechanical breakdown(s) that prevented the company from completing the test by the applicable deadline. Although Lakeland Electric has requested a longer initial testing extension than EPA has granted in the past, we have concluded that allowing this additional time to complete the testing at Lakeland Electric is justified due to the nature of the repairs and modifications the company will have to make to Unit No. 5 before it can be restarted.

According to the September 16, 1999, letter from Lakeland Electric, Unit No. 5 is the first Westinghouse 501G turbine to be built. Due to its large size (250 Megawatts) it had to be assembled onsite, and this prevented it from being factory tested prior to its installation at Plant McIntosh. During the operational testing period earlier this year, vibration problems damaged turbine equipment on two occasions, and on the second occasion, multiple components were affected when part of a broken compressor diaphragm passed through the unit and damaged other downstream equipment. In addition to redesigning and testing new equipment to correct the vibration problems that caused this damage, Lakeland Electric is also in the process of replacing fuel gas control valves that did not work properly during the previous startup testing.

When equipment failures prevent the owner or operator of an affected facility from completing an initial performance test by the deadline established in 40 C.F.R. §60.8(a) extending the deadline for initial testing until 30 days following the restart of the facility provides sufficient time to complete the testing if the repairs made prior to restarting the unit do not affect its operating characteristics significantly. In the case of Unit No. 5 at Plant McIntosh, however, a substantial number of equipment changes are being made, and much of the operational testing conducted by Lakeland Electric prior to the shutdown of the unit will probably have to be repeated before the unit can be safely run across its entire range of operation. Since the amount of operational testing that will have to be conducted when the unit restarts may be comparable to that which would have to be conducted on an entirely new unit, we have concluded that Lakeland Electric's request that the deadline for conducting an initial performance test on Unit No. 5 be extended until 60 days following the restart of the unit is reasonable.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of the Region 4 staff at (404) 562-9102.

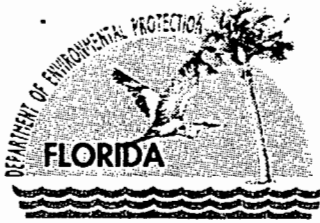
Sincerely,



R. Douglas Neeley
Chief

Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: Mr. Clair Fancy, FL DEP
Mr. Hamilton Oven, FL DEP
Mr. Al Linero, FL DEP
Mr. Michael Harley, FL DEP



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

October 14, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Ronald W. Tomlin
Assistant Managing Director
Lakeland Electric & Water Utilities
501 East Lemon Street
Lakeland, Florida 33801-5079

Re: DEP File No. 1050004-006-AC (PSD-FL-245B)
McIntosh Unit No. 5 Combustion Turbine

Dear Mr. Tomlin:

The Department reviewed your letter to EPA dated September 16 requesting extension of the deadline to demonstrate compliance with 40CFR60 Subpart GG, "Standards of Performance for New Stationary Gas Turbines." It is our understanding that the unit has not operated since July and is under inspection, modification and re-assembly. We cannot defer the compliance date for the NSPS standard until EPA acts on your request. However, we are deferring the compliance schedule for the other emissions limits (such as BACT on NO_x) to accommodate the work described in your letter. Deferral of the NSPS testing requirement will occur automatically upon approval by EPA. The Department hereby modifies the referenced permit as follows:

SPECIFIC CONDITION 29

Compliance with the allowable emission limiting standards shall be determined for applicable New Source Performance Standards in accordance with as amended by the most recent approved EPA schedule (not later than 30 days after reassembling and restarting the unit). Compliance shall be determined by February 15, 2000 and 120 days for all other emissions limits after achieving the maximum production rate, for gas-firing and not later than 90 days after the first oil firing that occurs after October 14, 1999 for oil firing each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel. Initial and subsequent annual compliance shall be demonstrated and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C. Emission limits compliance dates shall conform to the timetable specified on Specific Condition No. 20. [EPA Region IV. Initial Performance Test Schedule – Unit 5. March 22, 1999 or as subsequently amended by EPA]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. 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) of the Florida Statutes 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), however, any person who asked the Department 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 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 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department'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 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, 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; 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 Department'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.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department 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 in this proceeding.

In addition to the above, a person subject to regulation has a right to apply 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, 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.

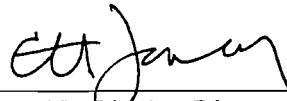
The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will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

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (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 thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

for 
Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10/15/99 to the person(s) listed:

Ronald W. Tomlin, City of Lakeland*
Farzie Shelton, City of Lakeland
Gregg Worley, EPA

John Bunyak, NPS
Bill Thomas, DEP SWD
Hamilton Oven DEP PPSO

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


(Clerk)

10/15/99
(Date)

Z 031 391 962

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to <i>Mr. Richard W. Tomlin</i>	
Street & Number <i>501 Lemon St.</i>	
Post Office, State, & ZIP Code <i>Lakeland FL 33801-5079</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date <i>Lakeland 10/15/99</i>	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

MR RONALD W TOMLIN
 ASSISTANT MANAGING DIRECTOR
 LAKELAND ELECTRIC & WATER UTILITIES
 501 EAST LEMON ST
 LAKELAND, FL 33801-5079

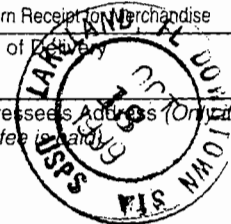
4a. Article Number

Z 031 391-962

4b. Service Type

- Registered Certified
- Express Mail Insured
- Return Receipt for Merchandise COD

7. Date of Delivery



5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

X Umrey Joseph

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994

10C595-98-B-0229

Domestic Return Receipt

Thank you for using Return Receipt Service.



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

September 16, 1999

BUREAU OF AIR REGULATION

SEP 21 1999

RECEIVED

Greg Worley, Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

**Re: Air Construction Permit, DEP File No. 1050004-00-AC (PSD-FL-245-A)
250 Megawatt Combustion Turbine - McIntosh Power Plant Unit No. 5**

Dear Mr. Worley:

As you are aware, Unit No. 5 is the first generation of Westinghouse 501G series Combustion Turbine that commenced initial operation on April 14, 1999. In accordance with the 40 CFR 60.8(a) as referenced in Specific Condition 29 of our permit, demonstration of compliance with the New Source Performance Standards (NSPS) and emission limits must be performed no later than 180 days of initial operation of the unit (on or before October 14, 1999). Therefore, anticipating a smooth startup period and shakedown of equipment, on June 24, 1999 we tendered notice of our intention to perform the emission testing beginning July 24, 1999.

However, this unit due to its large size had not been factory tested prior to its installation on site of McIntosh Power Plant and special test program had been developed to validate the unit's design in the field. Unfortunately during initial testing program numerous mechanical problems and malfunctions were encountered leading to extensive laboratory testing and redesign of some components. Since some of the malfunction incapacitated the operation of the unit, on July 19, 1999 we informed the Agency and the Florida Department of Environmental Protection (DEP) of the cancellation of performance tests. Unit No. 5 has been in an outage since July 30th 1999 and we do not anticipate restart of this machine until approximately November 11, 1999. It will be worthwhile to note that the unit has been put through startup at a low load for only 171 hours since April 14, 1999. Therefore, the testing program was in its infancy when it had to be discontinued.

To facilitate your appreciation of the problems and malfunctions encountered by this unit, the following are some of the malfunctions:

1. The unit experienced a phenomenon known as High Frequency Dynamics (HFD) in late April at loads up to 195 MW. HFD is a condition where pressure pulsations occur in the combustion system at very high frequencies. These pulsations caused vibrations in the combustion components that led to equipment damage. Solution to this problem has required extensive ongoing laboratory testing and redesign of various components, including the combustion baskets and possibly the transition stage.
2. One compressor diaphragm incurred damage as a result of an inner shroud vibration. This occurred in late July when the unit was running at 155 MW. To make matters worse, part of the damaged component went downstream in the machine and caused further damage. Therefore, some of the diaphragms are currently being redesigned and remanufactured.
3. The valves used for controlling fuel gas to the engine did not perform as per design expectation. This problem was noticed in the first two weeks of July during the initial light off. These valves are being replaced with a different type of valve.

City of Lakeland ● Department of Electric

Greg Worley, Chief
Pre-Construction/HAP Section
September 16, 1999
Page 2

To redesign and replace the damaged parts, restart the unit, tune the machine for safe optimum performance and prepare it for the performance emission testing, a number of tasks must be successfully completed. Assuming the replacement parts are made available following redesign and manufacturing, they must be installed at the site. Upon receipt and installation of damaged parts, a full offline inspection and test must be completed prior to restart of the unit. Providing the result of offline inspection and tests are satisfactory, the unit will be restarted and will be put through tuning sequences to ensure the engine will run safely and reliably while demonstrating the guaranteed and permitted emission levels. Finally, once the engine is tuned satisfactorily, the unit will be ready for emission compliance testing.

The EPA has recognized that 180 days are required for initial operation and shakedown of a newly constructed unit as reflected in the requirements of 40 CFR Part 60.8. As you will appreciate, unit's initial operation had to be stopped during its infancy of the testing procedure. Replacement parts will need to go through extensive testing and tuning prior to normal operation of the machine. Therefore, we are writing to request that the Agency allow a 60-day window from the date of restart of the unit to perform the compliance testing. We have discussed this matter in a telephone discussion with Mr. David McNeal. Mr. McNeal was sympathetic about our predicament and indicated that EPA has had a policy since September 1977 to allow a 30-day window to perform the initial testing. Additionally, in a letter addressed to Mr. Clair Fancy dated October 19, 1994, Ms. Jewell Harper confirmed this policy and delegated the decision to the State providing the extension of time was consistent with the 30-day window (please see attached). As mentioned before, Lakeland is requesting a 60-day window from restart of the unit for initial testing and would appreciate your consideration in this matter.

As always, we look forward to working with you and your staff in finding a suitable solution to our request. If you should have questions, please do not hesitate to contact me.

Sincerely,



Farzie Shelton

Cc: Mr. C.H. Fancy, P.E. - DEP
Mr. Hamilton Owen P.E. - DEP
Mr. Al Linero P.E. - DEP
Mr. David McNeal - EPA

SWD
Attachment T. Heron, BAR

City of Lakeland ● Department of Electric

Control Number: 9700055

•

- Category: NSPS
- Region: Region 4
- Date: 10/19/1994
- Title: Initial Testing Deadline Extension
- Recipient: Fancy, Clair
- Author: Harper, Jewell
- Comments:

•

•

• Abstract:

•

- Q. Will EPA extend the deadline for initial testing at a cogeneration facility?

•

- A. Yes. If a facility is shut down due to equipment malfunction and cannot conduct an initial test within 180 days of startup, testing should be conducted as soon as practicable, but not more than 30 days after restarting. If the facility cannot be operated at its maximum production rate during the initial test, a subsequent test must be conducted when the maximum production rate can be achieved.

•

• Letter:

•

- Mr. Clair Fancy
- Chief
- Bureau of Air Regulation

- Air Resources Management Division
- Florida Department of Environmental Protection
- 2600 Blair Stone Road
- Tallahassee, Florida 32399-2400

- SUBJ: Extension of the New Source Performance
- Standard-(NSPS) Initial Testing Deadline Requested for the
- Polk Power Partners Mulberry Cogeneration Project

- Dear Mr. Fancy:

- The purpose of this letter is to provide you with comments
- on the referenced test extension request that Polk Power
- Partners submitted jointly to the U.S. Environmental
- Protection Agency (EPA) Region IV and the Florida
- Department of Environmental Protection on September 22,
- 1994. The company is requesting an extension of the
- deadline to conduct an initial test on a cogeneration
- facility that is subject to NSPS. In accordance with 40
- C.F.R. 60.8(a), initial testing must be conducted within
- 60 days after reaching maximum production, but not later
- than 180 days after initial startup. Because of mechanical
- problems, Polk Power Partners will not be able to conduct
- an initial test within 180 days after startup.

- Based upon the review of the request from Polk Power
- Partners, an extension of the initial testing deadline
- would be appropriate if the extension is consistent with

- previous EPA policies regarding testing deadlines for
- facilities that cannot operate due to equipment
- malfunctions. The basic EPA policy on such extensions was
- established in a memo issued by EPA Headquarters in 1977,
- and a copy of this memo which was downloaded from the EPA
- Applicability Determination Index is enclosed. According to
- this memo, testing should be conducted as soon as
- practicable, but not more than 30 days after restarting, if
- a facility is shutdown due to equipment malfunctions and
- cannot conduct an initial test within 180 days after
- startup.

- In addition to requiring that testing be conducted as soon
- as practicable after restarting the facility, the 1977
- guidance also requires that a subsequent test be conducted
- after the facility reaches its maximum production rate if
- the facility cannot be operated at its maximum production
- rate during the initial test. The purpose for this
- requirement is to ensure that the affected facility is able
- to comply with the applicable standard(s) under "worst
- case" operating conditions.

- If initial testing extension requests are submitted to your
- agency in the future, it will not be necessary to submit
- them to Region IV for approval if extensions granted are
- consistent with the guidance issued in 1977 (i.e., testing
- is completed within 30 days after the facility restarts,
- and if necessary, two tests are conducted when a facility
- cannot be operated at its maximum production rate during

• the initial test). Any extension requests that deviate from
• this policy should be submitted to Region IV for review.

•
• If you have any questions about the issues addressed
• in this letter, please contact Mr. David McNeal of my staff
• at 404/3473555, voice mailbox 4158.

•
• Sincerely yours,

•
• Jewell A. Harper

• Chief

• Air Enforcement Branch

• Air, Pesticides and Toxics Management Division

• cc: State and Local Air Directors Enclosure

• DATE: 10/07/94

• APPLICABILITY DETERMINATION

• INDEX PAGE 1 DOWNLOAD REPORT

• Selection Criteria:

• REFERENCE = 113(a)

• Control Number: A042

• Title: NSPS PERFORMANCE TEST VIOLATION

• Recipient: WU, JAMES, REGION IV



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 25, 1999

RECEIVED

JUN 28 1999

BUREAU OF
AIR REGULATION

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 -A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit and 40CFR 60.7(a)(5) and 60.13, we are writing to notify the Department of our intention to perform the necessary certification test commencing July 14, 1999 when we also certify these equipment per 40 CFR 75.

We are providing a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa FL 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

City of Lakeland ● Department of Electric



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 24, 1999

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

RECEIVED

JUN 28 1999

BUREAU OF
AIR REGULATION

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 -A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit (Section III. Emission Unit Specific Condition 29) and 40CFR 60.7 and 60.8, we are writing to notify the Department of our intention to perform the initial stack testing commencing on July 24, 1999. Accordingly, we intend to demonstrate compliance with the NSPS and BACT Standards while burning Natural Gas. However, at this time we do not intend to demonstrate compliance while burning low sulfur fuel oil as, to date, we have not used any fuel oil during start up of this unit. Therefore, we will endeavor to notify you of initial stack testing event while burning fuel oil when the unit has gone through startup period utilizing this fuel.

We are providing a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa Fl 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

City of Lakeland ● Department of Electric



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

File

RECEIVED

APR 20 1999

BUREAU OF
AIR REGULATION

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 15, 1999

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Re: Air Construction Permit No. 1050004-006-AC (PSD-FL-245 -A) Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit and 40CFR60.7(3), we are writing to notify the Department of the actual date of startup of this unit, which was on April 14, 1999. Accordingly, we would endeavor to inform the Department of all required notifications.

We are providing a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

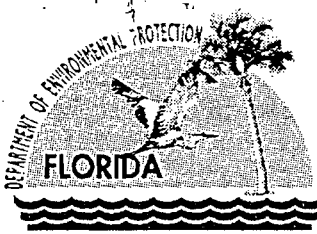
Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa FL 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

City of Lakeland ● Department of Electric



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

April 6, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Ronald W. Tomlin
Assistant Managing Director
Lakeland Electric & Water Utilities
501 East Lemon Street
Lakeland, Florida 33801-5079

Re: DEP File No. 1050004-006-AC (PSD-FL-245B)
McIntosh Unit No. 5 Combustion Turbine

Dear Mr. Tomlin:

The Department reviewed EPA's letter dated March 22, 1999 approving extension of the initial deadline to demonstrate compliance with 40CFR60 Subpart GG, "Standards of Performance for New Stationary Gas Turbines." As the delegated agency with the authority to implement Subpart GG in Florida, the Department hereby modifies the referenced permit as follows:

SPECIFIC CONDITION 29

Compliance with the allowable emission limiting standards shall be determined ~~within 60 days~~ for applicable New Source Performance Standards as amended by the approved EPA schedule (**not later than 30 days after reassembling and restarting the unit**) and 120 days for all other emissions limits after achieving the maximum production rate, for each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C. Emission limits compliance dates shall conform to the timetable specified on Specific Condition No. 20. [EPA Region IV. Initial Performance Test Schedule - Unit 5. March 22, 1999]

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. 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) of the Florida Statutes 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), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Best Available Copy

Mr. Ron W. Tomlin

Page 2

April 6, 1999

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 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department'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 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; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department'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

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department 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 in this proceeding.

In addition to the above, a person subject to regulation has a right to apply 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.

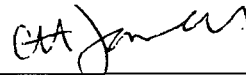
The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number 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 EPA 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.

A copy of this letter shall be filed with the referenced permit and certification and shall become part of the permit.

Sincerely,

to v


Howard L. Rhodes, Director
Division of Air Resources
Management

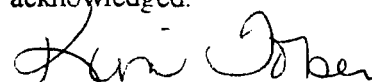
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4-12-99 to the person(s) listed:

- Mr. Ronald W. Tomlin, City of Lakeland*
- Ms. Farzie Shelton, City of Lakeland
- Mr. Gregg Worley, EPA
- Mr. John Bunyak, NPS
- Mr. Bill Thomas, DEP SWD
- Mr. Hamilton Oven DEP PFSO

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



(Clerk)

4-12-99
(Date)

Is your RETURN ADDRESS completed on the reverse side?

SENDER

- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

Fold at line over top of envelope to the right of the return address.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

<p>3. Article Addressed to: Ronald W. Jonlin, AMD Lakeland Electric & Water 501 E. Lemon St. Lakeland, FL 33801-5079</p>	<p>4a. Article Number Z 333 618 095</p>
<p>5. Received By: (Print Name)</p>	<p>4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD</p> <p>7. Date of Delivery 4-14-99</p>
<p>6. Signature: (Addressee or Agent) X Bonnie Peltz</p>	<p>8. Addressee's Address (Only if requested and fee is paid)</p>

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 333 618 095

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Country		Ronald Jonlin	
Street & Number		Lakeland Electric	
Post Office, State, & ZIP Code		Lakeland, FL	
Postage			
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date	1050004-006-AE 4-12-99		
	PSO-FL-245B		

PS Form 3800, April 1995

Florida Department of
Environmental Protection

Memorandum

TO: Howard Rhodes
THRU: A. A. Linero
FROM: Teresa Heron *A.H.*
DATE: April 6, 1999
SUBJECT: City of Lakeland McIntosh Unit No. 5
250 MW Gas Turbine (PSD-FL-245B)

Attached is a permit amendment for the City of Lakeland's McIntosh Power Plant Unit 5 approving extension of the initial performance tests to demonstrate compliance with 40CFRSubpart GG, Standards of Performance for New Stationary Gas Turbines.

We recommend your approval and signature.

AAL/th

Attachments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAR 22 1999

4APT-ARB

RECEIVED

Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

MAR 29 1999

BUREAU OF
AIR REGULATION

SUBJ: Initial Performance Test Extension Requested for Unit No. 5 at the Lakeland Electric
McIntosh Power Plant, Lakeland, Florida

(P50-F1-245B)
1050004-006-AC

Dear Mr. Fancy:

The purpose of this letter is to provide you with written comments regarding a Lakeland Electric request for an extension of the deadline for conducting the initial performance test on the referenced combustion turbine, which will be subject to 40 C.F.R. Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). In a letter dated February 22, 1999 addressed to the U.S. Environmental Protection Agency (EPA), Region 4 and that was also sent to the Florida Department of Environmental Protection, Lakeland Electric asked for an extension of the deadline for conducting an initial performance test on Unit No. 5 under New Source Performance Standards. Based upon our review of the company's letter, we have determined that its request for an extension of the initial testing deadline is reasonable, and we are providing this determination to you since your agency has been delegated the authority to implement Subpart GG in Florida.

According to the February 22, 1999 letter from Lakeland Electric, Unit No. 5 will be the first of a new series of turbines built by Westinghouse, and due to the large size of the unit, it will not be factory tested before it is installed at Plant McIntosh. Because this unit will be the first of its kind and due to the lack of factory testing, an extensive series of tests to evaluate the integrity and long-term operability of the turbine will be conducted over a period of approximately 13 weeks following the initial startup of the unit. After the completion of the this initial evaluation test period, the turbine will be disassembled to remove test equipment and to inspect hardware components. Once these inspections of the hardware components are completed, the unit will be reassembled and put into commercial service.

Unit No. 5 will be subject to a nitrogen oxides (NO_x) concentration limit in Subpart GG, and under the provisions of 40 C.F.R. §60.8(a), the company would have to conduct an initial performance test within 60 days after firing the turbine at it's maximum operating rate or within

180 days after startup, whichever comes first. As an alternative to conducting the initial performance test within 60 days after reaching maximum production, Lakeland Electric has requested approval to delay the initial NO_x test until 30 days after the unit is reassembled and restarted following completion of the initial 13-week evaluation period. Depending upon when the turbine is first fired at its peak capacity, the deadline for testing the unit (i.e., 60 days after reaching maximum capacity) could fall within the 13-week period during which Lakeland Electric plans to conduct its initial evaluation of the turbine, or it could fall on a day on which the unit cannot operate because it has not yet been reassembled after the inspection of turbine hardware components.

Regardless of exactly when the deadline for testing falls, we believe that the Lakeland Electric proposal to conduct its initial performance test no later than 30 days after reassembling and restarting the turbine is acceptable. On September 29, 1977, the EPA issued a determination that allowed a company to delay its initial performance test until 30 days after restarting a facility that could not be tested by the deadline in 40 C.F.R. §60.8(a) due to equipment malfunctions that prevented the unit from operating. Based upon the precedent set by this previous determination, approval of the Lakeland Electric request for an extension of the deadline to conduct the initial performance test on Unit No. 5 would clearly be reasonable if the turbine has not been reassembled and is unable to run 60 days after it is first fired at its maximum operating rate.

Based upon the fact that the initial evaluation of the turbine will be conducted over a period of 13 weeks (81 days), the deadline for testing it could pass before the unit is disassembled if the unit is fired at its maximum operating rate early in the evaluation test period. If this were the case, Lakeland Electric could theoretically conduct a performance test on Unit No. 5 within 60 days after the turbine is fired at its maximum operating rate. Due to the fact that the turbine will be disassembled at the end of the 13-week evaluation test period, the results of a performance test conducted after the unit is reassembled are likely to be more representative of ongoing operation than a test conducted prior to the end of the evaluation period. Therefore, approving the Lakeland Electric request that it be allowed to delay its initial performance test until 30 days after the turbine is restarted following its reassembly is acceptable to EPA even if the 60th day after the unit is fired at its maximum operating rate is reached before the unit is disassembled.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of my staff at 404/562-9102.

Sincerely,



R. Douglas Neeley
Chief

Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

RECEIVED
MAR 01 1999
BUREAU OF
AIR REGULATION

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 24, 1999

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Re: Air Construction Permit No. PSD-FL-245 - Lakeland Electric Unit No. 5

Dear Mr. Fancy:

In compliance with the above referenced permit and 40CFR60.7(2), we are writing to notify the Department of our intention to perform initial startup on this unit on April 9, 1999. However, we would endeavor to inform the Department of any changes in our plan and actual startup of the unit accordingly.

We are providing a copy of this letter to Mr. Bill Thomas of DEP's Southwest District and Mr. Greg Worley of the Environmental Protection Agency.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Cc: Mr. William C. Thomas P.E.
Administrator
Department of Environmental Protection
3804 Coconut Palm Drive
Tampa FL 33619

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

City of Lakeland ● Department of Electric



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

January 28, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Ronald W. Tomlin
Assistant Managing Director
Lakeland Electric & Water Utilities
501 East Lemon Street
Lakeland, Florida 33801-5079

Re: DEP File No. 1050004-006-AC (PSD-FL-245A)
McIntosh Unit No. 5 Combustion Turbine

Dear Mr. Tomlin:

The Department reviewed your request dated January 26, 1999 to provide additional time to demonstrate compliance with the Best Available Control Technology emission limits established in the reference permit. It is our understanding that the unit will start up in May or June of this year and that the initial tests will at least demonstrate compliance with the applicable New Source Performance Standard, 40CFR60, Subpart GG, "Standards of Performance for New Stationary Gas Turbines." Subsequent tuning of the Dry Low NO_x combustors will be conducted followed by additional testing to demonstrate compliance with the BACT-based emission limits. The request is acceptable and the referenced permit is hereby modified as follows:

SPECIFIC CONDITION 29

Compliance with the allowable emission limiting standards shall be determined within 60 days for applicable New Source Performance Standards and 120 days for all other emissions limits after achieving the maximum production rate, for each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-204.800, F.A.C. Emission limits compliance dates shall conform to the timetable specified on Specific Condition No. 20.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. 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) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

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 EPA 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.

A copy of this letter shall be filed with the referenced permit and certification and shall become part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

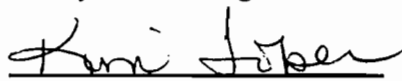
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1-29-99 to the person(s) listed:

Ms. Farzie Shelton, City of Lakeland*
Mr. Gregg Worley, EPA
Mr. John Bunyak, NPS
Mr. Bill Thomas, DEP SWD
Mr. Hamilton Oven DEP PPSO

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


(Clerk)

1-29-99
(Date)



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

HAND DELIVERED

January 26, 1999

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

1050004-006-AC

**Re: Air Construction Permit, DEP File No. 1050004-004-AC (PSD-FL-245)
250 Megawatt Combustion Turbine - McIntosh Power Plant Unit No. 5**

As you are aware, Unit No. 5 is the first generation of Westinghouse 501G series Combustion Turbine and due to its large size has not been factory tested prior to its installation on site of McIntosh Power Plant. Hence, more time is needed to tune the unit and in particular the combustors for compliance demonstration with the Best Available Control Technology Standard (BACT). Therefore, we are writing to request a minor modification to the Section III. Emission Unit Specific Condition - Compliance Determination, condition No. 29 of the above referenced permit. We are requesting the Department to consider an additional time (60 more days) for demonstration and compliance with the BACT Standard beyond the 60 days allowed by the permit when the maximum production rate has been achieved, but no later than 180 days of initial operation of the unit.

However, please be advised that we intend and endeavor to demonstrate compliance with the New Source Performance Standard (NSPS) in accordance with the 40CFR60.8 and 40CFR60, Subpart GG (Standards of Performance for Stationary Gas Turbines) as per condition No. 29 of this permit.

We appreciate the Department's consideration to our request and accordingly we are enclosing a check for the sum of \$50.00 to cover the fees associated with this minor modification. If you should have any questions, please do not hesitate to contact me.

Sincerely,

Farzie Shelton

Enclosure

Cc: Mr. Hamilton Owen P.E.
Mr. Al Linero P.E.

City of Lakeland • Department of Electric

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Ronald W. Tomlin
Lakeland Electric
& Water Utilities
501 E. Lemon St.
Lakeland, FL 33801

4a. Article Number

Z 333 612 506

4b. Service Type

- Registered
- Express Mail
- Return Receipt for Merchandise
- Certified
- Insured
- COD

7. Date of Delivery

2-4-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

X Ronald W. Tomlin

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Z 333 612 506

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	
Ronald Tomlin	
Street & Number	
Lakeland E & W	
Post Office, State, & ZIP Code	
Lakeland FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
1-29-99	
1050004-006-AC	
050-FL-245A	

PS Form 3800, April 1995

Florida Department of Environmental Protection

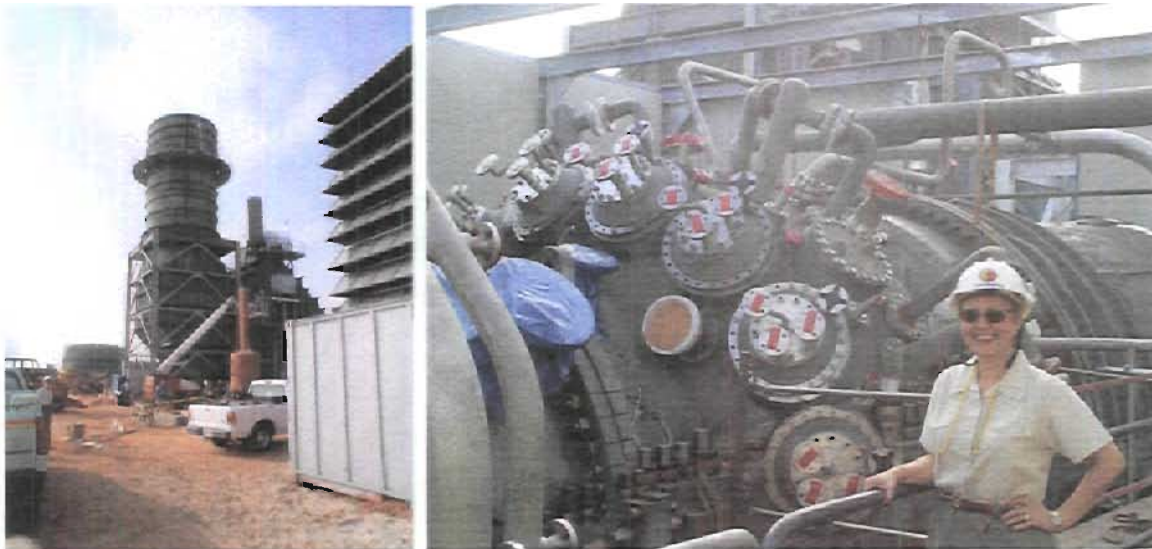
Memorandum

Kim

TO: Howard Rhodes
THRU: Clair Fancy *aaf for CHF*
FROM: A. A. Linero *AAL*
DATE: January 22, 1999
SUBJECT: City of Lakeland McIntosh Unit No. 5
250 MW Gas Turbine (PSD-FL-245)

Attached is a modification to the City of Lakeland's permit for their new combustion turbine. They are asking for 60 days of additional time following start-up to conduct the BACT tests. Apparently Westinghouse plans only to demonstrate compliance with the NSPS within the first 60 days. The present permit requires demonstration of compliance with both sets of standards within 60 days.

I am convinced that granting some additional time is prudent based on my trip to Lakeland and my knowledge of the status of Westinghouse projects throughout the country. It will improve the probability that the unit will actually comply with the limits at an early date while allowing the City to generate electricity from the unit. I informed the City's representative that there will be no other future extensions of the time limit to demonstrate compliance with the BACT limits. My understanding is that Westinghouse must cover any damages and penalties if they are not able to comply with the permit requirements.



I recommend your approval and signature.

AAL/aal

Attachments



Farzie Shelton, chE; REM

Environmental Affairs Manager of Licensing & Permitting

HAND DELIVERED

January 26, 1999

RECEIVED

JAN 27 1999

BUREAU OF
AIR REGULATION

Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

1050004-006-AC_{AC} M2

Dear Mr. Fancy:

**Re: Air Construction Permit, DEP File No. 1050004-004-AC (PSD-FL-245)
250 Megawatt Combustion Turbine - McIntosh Power Plant Unit No. 5**

As you are aware, Unit No. 5 is the first generation of Westinghouse 501G series Combustion Turbine and due to its large size has not been factory tested prior to its installation on site of McIntosh Power Plant. Hence, more time is needed to tune the unit and in particular the combustors for compliance demonstration with the Best Available Control Technology Standard (BACT). Therefore, we are writing to request a minor modification to the Section III. Emission Unit Specific Condition - Compliance Determination, condition No. 29 of the above referenced permit. We are requesting the Department to consider an additional time (60 more days) for demonstration and compliance with the BACT Standard beyond the 60 days allowed by the permit when the maximum production rate has been achieved, but no later than 180 days of initial operation of the unit.

However, please be advised that we intend and endeavor to demonstrate compliance with the New Source Performance Standard (NSPS) in accordance with the 40CFR60.8 and 40CFR60, Subpart GG (Standards of Performance for Stationary Gas Turbines) as per condition No. 29 of this permit.

We appreciate the Department's consideration to our request and accordingly we are enclosing a check for the sum of \$50.00 to cover the fees associated with this minor modification. If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Enclosure

Cc: Mr. Hamilton Owen P.E.
Mr. Al Linero P.E.

City of Lakeland ● Department of Electric

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW - MICRO PRINTING IN BORDER



City of Lakeland

SunTrust/Mid-Florida, N.A.

83-115
631

NUMBER 360749

DATE

CHECK AMOUNT

26-JAN-99 *****50.00

Fifty Dollars And 00 Cents *****

FLORIDA DEP OF ENVIRONMENTAL REGULATION

PAY TO
THE
ORDER
OF

E. Strickland
City Manager

Ray D. ...
Assistant City Manager

Gregory ...
AUTHORIZED SIGNATURE





Farzie Shelton, chE; REM

al's

Environmental Affairs Manager of Licensing & Permitting

File

February 22, 1999

RECEIVED

FEB 23 1999

BUREAU OF
AIR REGULATION

Mr. Greg Worley
Chief
Pre-Construction/HAP Section
United States Environmental Protection Agency
Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303-8909

Re: **Air Construction Permit, DEP File No. 1050004-004-AC (PSD-FL-245)
250 Megawatt Combustion Turbine - McIntosh Power Plant Unit No. 5**

Dear Mr. Worley:

As you are aware, Unit No. 5 is the first generation of Westinghouse 501G series Combustion Turbine and due to its large size has not been factory tested prior to its installation on site of McIntosh Power Plant. Hence, special test program has been developed to validate the unit's design in the field. The overall test program includes mapping and tuning of fuel combustors design, followed by the disassembly of the engine to remove the test instruments and inspection of the engine hardware. Finally the engine is reassembled in preparation of compliance testing and commercial operation.

The test period is planned to cover a period of approximately thirteen weeks from an expected first fire date. The test program planned for this unit is critical for the evaluation of the integrity and long-term operability of the unit. The test program includes various phases beginning with the loading of the combustion turbine to full operating conditions in programmed steps with as few operating hours and starts as possible. Operating the combustion turbine at maximum load and temperatures early in the program is critical due to the limited life of the instrumentation that is used to collect the data. For the proper evaluation of the integrity of the unit, the data must be based on operation of the engine under the most extreme conditions. The primary focus of this testing period is the critical temperature data. However, vibration frequencies, blade clearances, stress and strain, thermal and aerodynamic data are also recorded. The combustion system will be tuned for maximum stability for this testing period. The 501G engine will be instrumented with over 2000 data points for the validation testing effort. This testing program is governed by a strategy to obtain the highest priority or most critical data early in the test plan when the highest percentage of the test instrumentation is full functional. The test period will include extensive validation testing on the engine, its auxiliaries, single and dual fuel combustors, a combustor changeout, an engine outage to disassemble and reassemble the engine, as well as the normal production unit commissioning activities.

City of Lakeland • Department of Electric

February 22, 1999

Mr. Greg Worley
Chief
Per. Construction/HAP Section
United States Environmental Protection Agency
Region 4

We are cognizant of the 40 CFR 60.8(a) requirements, demonstration of compliance with the New Source Performance Standards (NSPS) as referenced in specific condition 29 of our permit. However, based on the above test program and due to an extenuating circumstances beyond our control, we are writing to request an extension of time beyond the 60 days allowed after achieving the maximum production rate to demonstrate compliance. In a telephone discussion with Mr. David McNeal he stated that the Agency will consider an extension of time, a 30 day time window from the last reassembly of the unit but no later than 180 days of initial operation of the unit, to perform the NSPS compliance test. Therefore, we are writing to request this extension.

We appreciate the Agency's consideration to our request and wait to hear from you soon. However, if you should have any questions, please do not hesitate to contact me.

Sincerely



Farzie Shelton

Cc: Mr. C.H. Fancy, P.E.
Chief Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400

Mr. Hamilton Owen P.E.
Administrator
Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Rd
MS-48
Tallahassee, FL 32399-2400

cc: J. Heron, BARR

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Final Order Approving Land Use and Certification has been sent by United States Postal Service to:

Ann Cole, Clerk and
J. Lawrence Johnston, Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, FL 32399-1550

Mark Carpanini, Esquire
Office of County Attorney
Post Office Box 9005
Bartow, Florida 33831-9005

Frank K. Anderson
Senior Attorney
Southwest Florida Water
Management District
2379 Broad Street
Brooksville, Florida 34609-6899

Andrew S. Grayson, Esquire
Assistant General Counsel
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

James V. Antista, General Counsel
Fish and Wildlife Conservation
Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

Douglas Roberts, Esquire
Angela Morrison, Esquire
Hopping Green Sams & Smith
Post Office Box 6526
Tallahassee, Florida 32314

Thomas B. Tart, Esquire
Orlando Utilities Commission
500 South Orange Street
Orlando, Florida 32801

Sheauching Yu, Esquire
Assistant General Counsel
Department of Transportation
Haydon Burns Building
605 Suwannee Street, M.S. 58
Tallahassee, Florida 32399-0450

Robert V. Elias, Esquire
Florida Public Service Commission
Gerald Gunter Building
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Andrew R. Reilly, Esquire
East Lake Parker Residents
95 South 10th Street
Post Office Box 2039
Haines City, Florida 33845-2039

Norman White, Esquire
Central Florida Regional Planning Council
555 East Church Street
Bartow, Florida 33830

and by hand delivery to:

Scott A. Goorland, Esquire
Department of Environmental Protection
3900 Commonwealth Blvd., M.S. 35
Tallahassee, FL 32399-3000

this 1st day of June, 2000.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

for 
J. TERRELL WILLIAMS
Assistant General Counsel

3900 Commonwealth Blvd., M.S. 35
Tallahassee, FL 32399-3000
Telephone (850) 488-9314

RECEIVED

JUN 02 2000

BUREAU OF AIR REGULATION

STATE OF FLORIDA
SITING BOARD

IN RE: CITY OF LAKE LAND)
C.D. McINTOSH, JR. POWER PLANT)
UNIT NO. 5)
APPLICATION PA74-06SR2)

OGC CASE NO. 99-0993
DOAH CASE NO. 99-2739EPP

FINAL ORDER APPROVING LAND USE AND CERTIFICATION

On March 2, 2000, an Administrative Law Judge with the Division of Administrative Hearings (hereafter "DOAH") submitted his Recommended Order to the Department of Environmental Protection (hereafter "DEP") in this consolidated land use and certification proceeding. The Recommended Order indicates that copies were served upon the attorneys for the East Lake Parker Residents, City of Lakeland, Department of Electric Utilities (hereafter "Lakeland" or "Lakeland Utilities"), and various other governmental entities.¹ On March 8, 2000, DOAH submitted a "corrected copy of page 11" of the Recommended Order rectifying a "scrivener's error" in Finding of Fact No. 25. A copy of the Recommended Order, containing the "corrected" page 11, is attached as Exhibit A. The matter is now before the Governor and Cabinet, sitting as the Siting Board, for final agency action under the Florida Electrical Power Plant Siting Act (hereafter "PPSA") embodied in Sections 403.501-403.518, Florida Statutes.

BACKGROUND

Lakeland Utilities is a municipal utility supplying electric service to over 100,000 customers in its service area within Polk County. Lakeland Utilities currently operates power plants at two locations in the City of Lakeland. The McIntosh Power Plant site is the larger power plant site and contains six electrical generating units. McIntosh Unit 3 is a 365-megawatt, coal-fired electrical generating unit originally certified under the PPSA in 1978.

In 1998, Lakeland obtained approvals to construct McIntosh Unit 5, a new 250-megawatt, simple-cycle combustion turbine ("CT") at the McIntosh site. These approvals consisted of a modification of the site certification for McIntosh Unit 3 and a separate Prevention of Significant Deterioration Permit, both issued by DEP. The modification of the

¹ The Recommended Order reflects that copies thereof were furnished to counsels for Polk County, Florida Dept. of Transportation, Florida Fish and Wildlife Conservation Commission, Florida Dept. of Community Affairs, Florida Public Service Commission, Southwest Florida Water Management District, Orlando Utilities Commission, and the Central Florida Regional Planning Council.

site certification for McIntosh Unit 5 was required because the new CT was to be located within the site certified for McIntosh Unit 3. Approvals for modification of the site certification for the new McIntosh Unit 5 CT were required under the modification provisions of the PPSA. The McIntosh Unit 5 CT is completing construction and will be placed into service in the near future. The original permits for the new McIntosh Unit 5 CT anticipated that the simple-cycle CT would later be converted to a combined cycle configuration.

Under the proposed McIntosh Unit 5 Steam Cycle Project (the "Project"), the combined cycle configuration involves the construction of a heat recovery steam generator ("HRSG").² The HRSG captures the exhaust gas from the CT and produces steam by extracting the heat from the flue gases. In the HRSG, the hot gases are used to convert water into steam in a closed system of piping. The steam is then used to turn a new steam turbine, which provides the power for an electrical generator. The proposed combined cycle Project will be fired primarily with natural gas, with fuel oil as a backup fuel. Natural gas will be supplied by an existing 10-mile long pipeline owned by the City of Lakeland, which connects to the Florida Gas Transmission gas pipeline system. No alterations to those pipelines are required for the project. Fuel oil for the unit will be delivered by truck and stored in an existing on-site fuel storage tank.

The Project site is a three-acre tract of land within the larger 530-acre McIntosh Power Plant site located in the eastern portion of the City of Lakeland, along the northern shore of Lake Parker. The Project site is generally surrounded by undeveloped lands, including reclaimed and vacant phosphate lands. There are no residential or commercial properties adjacent to the Project site, and the nearest residence is over one mile away.

DOAH PROCEEDINGS

A DOAH formal hearing was held in this PPSA proceeding before Administrative Law Judge J. Lawrence Johnston (hereafter "ALJ") in Lakeland, Florida, on January 11, 2000. Pursuant to the consent of the parties, this DOAH hearing served as a consolidated land use and certification hearing under § 403.508, Florida Statutes. Evidence was presented at the hearing by Lakeland Utilities and by DEP. The record indicates that no additional

² The Project's proposed addition of the new HRSG steam turbine and electrical generator to McIntosh Unit 5 will produce an incremental 100 megawatts of electricity produced through the use of steam. Thus, Lakeland Utilities was required to submit a new PPSA application for site certification of the Project.

governmental agencies or other parties appeared or presented evidence at the DOAH hearing. At the time set aside for receiving public comment, the Mayor of Lakeland commented in support of the Project, but no other members of the general public appeared.

RECOMMENDED ORDER

Included in the Recommended Order are the following findings of fact of the ALJ:

1. The Project site contains no significant environmental features, and no archaeological or historical resources were found. No sensitive local, regional federal parks, wilderness areas, forests, or areas of critical concern are located within five miles of the Project site. No threatened, endangered, or protected plant or animal species are known to be present at or near the Project site.
2. There is no direct discharge of wastewater from McIntosh Unit 5 to adjacent surface waters, and the Project will not have any effect on area surface waters.
3. Air emissions from the Project will not have a significant impact on air quality and will comply with all applicable federal and state air quality standards, including the conditions contained in the PSD Permit for McIntosh Unit 5 and DEP's proposed Conditions of Certification in this PPSA proceeding.

The ALJ concluded in the Recommended Order that, when converted to combined cycle operation, the Project will be consistent and in compliance with the land use plans and zoning ordinances of the City of Lakeland. The ALJ further concluded that Lakeland Utilities has established that the Project will produce minimal adverse affects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. The ALJ ultimately recommended that a final order be entered by the Siting Board finding that the Project site is consistent with the existing land use plans and zoning ordinances of the City of Lakeland and granting certification of the location and operation of the Project under the PPSA, subject to the Conditions of Certification proposed by DEP.

CONCLUSION

Pursuant to subsection 120.57(1)(i), Florida Statutes, the parties to this proceeding were provided fifteen days in which to file Exceptions to the Recommended Order. Nevertheless, no Exceptions to the Recommended Order have been filed by any governmental agencies or private citizens challenging any of the ALJ's factual findings, legal conclusions, or recommendations. The record also reflects that written reports on the Project were prepared by DEP, Dept. of Community Affairs, Southwest Florida Water Management District, Florida Dept. of Transportation, and the Florida Fish and Wildlife Conservation Commission, and that all of these agencies recommended certification of the Project. The record further indicates

that the Central Florida Regional Planning Council entered into a prehearing stipulation submitted to the ALJ asserting that the Project would be consistent with the Council's Strategic Regional Policy Plan. There is no evidence of record in this PPSA proceeding that any state, regional, or local agency has recommended denial of certification of the Project. Based on a review of the record in these consolidated proceedings, the Siting Board concludes that the Project site is consistent and in compliance with the existing land use plans and zoning ordinances of the City of Lakeland, and that certification of the Project under the PPSA serves and protects the broad interests of the public and should be approved.

Having reviewed the Recommended Order and other matters of record and being otherwise duly advised, it is ORDERED that:

A. The ALJ's Recommended Order, as corrected, is adopted in its entirety and incorporated herein by reference.

B. Pursuant to § 403.508(2), Florida Statutes, the site of the Project as described in the Site Certification Application and the evidence presented at the DOAH hearing is determined to be consistent and in compliance with applicable existing land use plans and zoning ordinances of the City of Lakeland.

C. Certification under the PPSA of the location and operation of the Project as proposed in the Site Certification Application and the evidence presented at the DOAH hearing is APPROVED, subject to the Conditions of Certification attached hereto as Exhibit B.

D. Authority to assure and enforce compliance by the City of Lakeland or Lakeland Utilities and their agents with all of the Conditions of Certification imposed by this Final Order is hereby DELEGATED to DEP, except that any proposed Project modification to burn a fuel other than natural gas or fuel oil shall be reviewed by the Siting Board.

Any party to this certification proceeding has the right to seek judicial review of this Final Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, 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 of Appeal must be filed within 30 days from the date this Final Order is filed with the Clerk of the Department.

DONE AND ORDERED this 1ST day of June 2000, in Tallahassee, Florida, pursuant to a vote of the Governor and Cabinet, sitting as the Siting Board, at a duly noticed and constituted Cabinet meeting held on April 25, 2000.

THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD

BY: Jeb Bush
THE HONORABLE JEB BUSH
GOVERNOR

Katherine Harris
KATHERINE HARRIS
SECRETARY OF STATE

Bob Butterworth
BOB BUTTERWORTH
ATTORNEY GENERAL

Robert F. Milligan
ROBERT F. MILLIGAN
COMPTROLLER

Bill Nelson
BILL NELSON
TREASURER

Bob Crawford
BOB CRAWFORD
COMMISSIONER OF AGRICULTURE

Tom Gallagher
TOM GALLAGHER
COMMISSIONER OF EDUCATION

FILING AND ACKNOWLEDGMENT: FILED, ON THIS DATE, PURSUANT TO §120.52 FLORIDA STATUTES, WITH THE DESIGNATED DEPARTMENT CLERK, RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED.

Randy Carter
CLERK
6/1/00
DATE

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

*Mr. Ronald W. Jomley
Assistant Managing Director
Lakeland Electric & Water Utilities
501 East Lemon St.
Lakeland, FL 33801-5079*

4a. Article Number
2 031 391 898

4b. Service Type

<input type="checkbox"/> Registered	<input checked="" type="checkbox"/> Certified
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Insured
<input type="checkbox"/> Return Receipt for Merchandise	<input type="checkbox"/> COD

7. Date of Delivery
12-15-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)

Bonnie Brenner

Thank you for using Return Receipt Service.

2 031 391 898

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	
<i>Ronald Jomley</i>	
Street & Number	
<i>501 E Lemon St</i>	
Post Office, State, & ZIP Code	
<i>Lakeland, FL 33801-5079</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
<i>12/13/99</i>	

PS Form 3800, April 1995

Z 031 391 962

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to <i>Mr. Richard W. Tomlin</i>	
Street & Number <i>501 Lemon St.</i>	
Post Office, State, & ZIP Code <i>Lakeland FL 33801-5079</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date <i>Lakeland 10/15/99</i>	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 MR RONALD W TOMLIN
 ASSISTANT MANAGING DIRECTOR
 LAKELAND ELECTRIC & WATER UTILITIES
 501 EAST LEMON ST
 LAKELAND, FL 33801-5079

5. Received By: (Print Name)

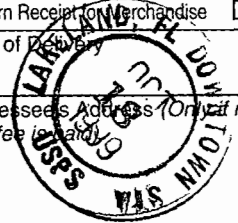
6. Signature: (Addressee or Agent)
X Mary Joseph

4a. Article Number
Z 031 391-962

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)



Thank you for using Return Receipt Service.

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Al Jimeno
 2. MS 5500

3. Patty - Lakeland McIntosh
Unit # 5. We issued
 4. PSD permit 2 years ago, but they
 5. only now went through

PLEASE PREPARE REPLY FOR:

- SECRETARY'S SIGNATURE
- DIV/DIST DIR SIGNATURE
- MY SIGNATURE
- YOUR SIGNATURE
- DUE DATE _____

ACTION/DISPOSITION

- DISCUSS WITH ME
- COMMENTS/ADVISE
- REVIEW AND RETURN
- SET UP MEETING
- FOR YOUR INFORMATION
- HANDLE APPROPRIATELY
- INITIAL AND FORWARD
- SHARE WITH STAFF
- FOR YOUR FILES

COMMENTS:

PPS Act. So this goes in original PSD245 file with anything else related to subsequent PPS action.

~~Joe - FYI Al~~

~~let me know how to handle.~~

~~KA~~

~~TH - FYI. ^{LIVE} ~~PLEASE~~ CALLED SCOTT & ADVISED THAT BACT DETERMINATION IS MISSING.~~

~~THEN ROUTE TO AAL, FYI.~~

~~→ FILE IN PSD-FC-245.~~

FROM: Jamara Jones DATE: 6/14/00 PHONE: 1-9682

Is your RETURN ADDRESS completed on the reverse side?

SENDER

- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

Fold at line over top of envelope to the right of the return address

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Ronald W. Jomlin, AMO
 Lakeland Electric & Water
 501 E. Lemon St.
 Lakeland, FL
 33801-5079

4a. Article Number
 2333 618 095

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
 4-14-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
 X Bonnie Pultz

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Thank you for using Return Receipt Service.

Z 333 618 095

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

PS Form 3800, April 1995

Service	Ronald Jomlin
Street & Number	Lakeland Electric
Post Office, State, & ZIP Code	W. Water Lakeland, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1050004 006 Ac 4-12-99 PSO-FL-245B

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Ronald W. Tomlin
 Lakeland Electric
 + Water Utilities
 501 E. Lemon St.
 Lakeland, FL 33801

4a. Article Number
 Z 333 612 506

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
 2-4-99

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
 X Ronald W. Tomlin

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

102595-97-B-0179

Domestic Return Receipt

Z 333 612 506

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Ronald Tomlin	
Street & Number Lakeland E + W	
Post Office, State, & ZIP Code Lakeland FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	1-29-99
1050004-006-AC 000-FL-245A	

PS Form 3800 April 1995



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

June 22, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Branch
NPS - Air Quality Division
Post Office Box 25287
Denver, Colorado 80225

Re: Lakeland McIntosh Unit 5 Site Certification Application (SCA) & Unit 3 SCA Amendment

Dear Mr. Bunyak:

Enclosed is a copy of the site certification application for the steam cycle for the City of Lakeland's McIntosh Unit 5 in Polk County. This is a proposed conversion of an existing simple cycle combustion turbine to a combined cycle unit through the addition of one heat recovery steam generator, a stack, one 120 MW (nominal) steam turbine, and cooling towers. Our Siting Coordination Office has indicated that an application is included for modification of the allowable fuel for Unit 3 to include biomass as a fuel supplement. There appears to be no emissions increase associated with the Unit 5 HRSG except for drift from the cooling tower. The proposed conversion to combined cycle and possible installation of a conventional SCR unit was anticipated during the initial permitting so limits were included for the conversion. Therefore the application is not for a PSD permit.

Please provide your comments as soon as possible as we need to comment to our Siting Coordination Office by August 13, 1999. This project is subject to the Florida Power Plant Siting Act and review by the Governor and Cabinet. If you have any questions regarding this matter, please call me, at 850/921-9523.

Sincerely,

A. A. Linero, P.E., Administrator
New Source Review Section

AAL/jk

Enclosure

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

November 1, 2001

Ms. Farzie Shelton
City of Lakeland, Department of Electric Utilities
501 East Lemon Street
Lakeland, FL 33801-5050

Re: Lakeland Electric
McIntosh Power Plant Unit Nos. 1, 2, 3, and 5
Construction of Additional Natural Gas Lateral

Dear Ms. Shelton:

The Department acknowledges receipt of your letter dated October 15, 2001 regarding the construction of an additional natural gas lateral at the McIntosh Power Plant. The Department agrees that construction of the additional gas lateral at the existing plant, considered alone, does not require an air construction permit. In addition, such activity would not be considered a "modification" for any of the existing units that are currently equipped and authorized to fire natural gas.

This determination is based on the information provided in your letter. It is not applicable to seemingly similar circumstances at other facilities. The Department reserves the authority to make such determinations on a case-by-case basis. If you have any questions, please contact me at 850/921-9523.

Sincerely,

A. A. Linero, Administrator
New Source Review Section

cc: Mr. Ken Kosky, Golder Associates
Mr. Hamilton S. Oven, DEP Office of Siting Coordination
Mr. Gerald Kissel, SWD

Enclosures: 10/15/01 Letter

AAL/jfk

"More Protection, Less Process"

Printed on recycled paper.



Farzie Shelton, chE; REM

Manager of Environmental Affairs

October 15, 2001

Mr. Clair Fancy P.E.
Chief of the Bureau of Air Management
Division of Air Resources Management
Florida Department of Environmental Protection
111 S. Magnolia
Suite 4
Tallahassee, Fl 32301

RECEIVED

OCT 16 2001

BUREAU OF AIR REGULATION

Re: **Lakeland Electric; McIntosh Power Plant Units No.1, 2, 3, and 5**
Addition of Natural Gas Pipeline

Dear Mr. Fancy:

Lakeland Electric (Lakeland) is proposing to provide the Gulfstream an easement for installation of a 16" natural gas supply pipeline at the McIntosh Power Plant. This gas supply is a lateral pipeline in addition to existing Natural Gas System at this facility. Currently, McIntosh Power Plant is served by the Florida Gas Transmission (FGT), however, addition of the Gulfstream pipeline to the Lakeland's system will provide Lakeland with more reliable fuel delivery and opportunity for more competitive fuel purchase.

Accordingly, Lakeland has requested Mr. Ken Kosky of Golder Associates to evaluate the applicability of Rule 62-210 F.A.C. to all its units at McIntosh Power Plant in regards to this gas pipeline. Therefore, enclosed you will find Mr. Kosky's determination stating the construction of this pipeline will not cause modification under the definitions in Rule 62-210.200.

If you should have any questions, please do not hesitate to contact me.

Sincerely

Farzie Shelton

Enc.

Cc: Mr. Hamilton S. Oven
Administrator
Office of Siting Coordination

City of Lakeland • Department of Electric Utilities

501 East Lemon Street • Lakeland, Fl 33801-5050 • (863) 834-6603 • Fax (863) 834-8187 • Message System 834-6592

farzie.shelton@lakelandgov.net

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Farzie Shelton
 City of Lakeland, Dept. of Electric Utilities
 501 East Lemon Street
 Lakeland, FL 33801-5050

2. Article Number (Copy from service label)

7000 2870 0000 7028 2799

PS Form 3811, July 1999

Domestic Return Receipt

102595-99-M-1789

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

Bonnie Brenneke 11/5/01

C. Signature Agent Addressee
 X Bonnie Brenneke

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Ms. Farzie Shelton, Manager
 Environmental Affairs
 City of Lakeland
 Department of Electric Utilities
 501 East Lemon St.
 Lakeland, FL 33801-5050

2.

P:

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

Bonnie Brenneke 11/5/01

C. Signature Agent Addressee
 X Bonnie Brenneke

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

102595-99-M-1789

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)

7000 2870 0000 7028 2799

OFFICIAL USE

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To
 Farzie Shelton
 Street, Apt. No., or PO Box No.
 501 E. Lemon St.
 City, State, ZIP+4
 Lakeland, FL 33801-5050

PS Form 3800, May 2000 See Reverse for Instructions

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



October 11, 2001

Ms. Farzie Shelton
Manager of Environmental Affairs
Lakeland Electric, City of Lakeland
501 East Lemon Street
Lakeland, Florida 33801-5079

0137624
RECEIVED
OCT 12 2001

Environmental Affairs

RE: C.D. McIntosh, Jr. Power Plant, Units No. 3 and No. 5
Addition of Natural Gas Pipeline Lateral

Dear Ms. Shelton:

This correspondence is being submitted to provide an evaluation of the addition of a natural gas pipeline lateral that will connect the C.D. McIntosh, Jr. Power Plant Site to the new Gulfstream Natural Gas System. Currently, the McIntosh Plant is connected to the Florida Gas Transmission (FGT) natural gas system with a pipeline lateral owned by the City of Lakeland. The current City-owned pipeline lateral is approximately 10 miles long. The evaluation is based on a review of the permitting documents for the Gulfstream Natural Gas System and discussion with the City of Lakeland staff regarding the interconnection to the Gulfstream system.

The new natural gas pipeline lateral connected to the McIntosh Plant will be owned and controlled by Gulfstream Natural Gas System. Appropriate environmental permits and authorizations have already been obtained for the onshore Florida portion of the pipeline system. A consolidated environmental resource permit (ERP) has been obtained for the complete pipeline system, which includes a small wetland area on the McIntosh Plant Site. The ERP was issued by the Department's Southwest District Office on March 6, 2001 (Permit No. 41-01666973-001).

The natural gas pipeline lateral connecting the McIntosh Plant will come from the Auburndale area east of the McIntosh Plant Site and connect to the existing natural gas metering station located to the east of Unit 3 and across East Lake Parker Road. The natural gas pipeline lateral connection to the McIntosh Plant will be about 6 miles long. The pipeline lateral will enter the eastern boundary of the McIntosh Plant Site and pass through the site to the existing natural gas metering station. Enclosed are figures and drawings showing the pipeline lateral route in the vicinity of the McIntosh Plant Site and connection to the existing natural gas metering station.

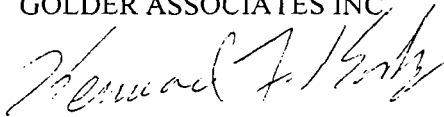
The size of the natural gas pipeline lateral will be 16 inches in diameter, which is identical in size to the existing natural gas pipeline lateral owned by the City of Lakeland and connected to the FGT natural gas system. There will be no physical changes in the natural gas facilities from the metering station to each of the emission units where natural gas is currently authorized. Natural gas is authorized for McIntosh Unit 1 (Emission Unit 001), McIntosh Unit 2 (Emission Unit 005), McIntosh Unit 3 (Emission Unit 006), McIntosh Unit 5 (Emission Unit 028), and Gas Turbine Peaking Unit 1 (Emission Unit 004). The connection with the Gulfstream Natural Gas System will allow the City of Lakeland to have two alternative sources of natural gas.

The Gulfstream pipeline lateral will be the same size as the City-owned connection to FGT and that there will no change in the connections downstream of the natural gas metering station. Moreover, the emissions with the use of natural gas will be lower than other fuels authorized for the emission units (i.e., distillate oil, residual oil, RDF, coal, and petroleum coke, as applicable). Therefore, the additional pipeline connection would not be a modification under the definitions in 62-210.200 Florida Administrative Code (F.A.C.) and the Prevention of Significant Deterioration Rules in 62-212.400 F.A.C.

Please contact me at (352) 336-5600 if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.



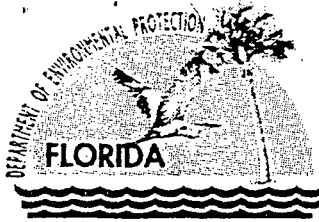
Kennard F. Kosky, P.E.
Principal
Professional Engineer No. 14996



KFK/nav

Enclosures

P:\Projects\2001\0137624 City of Lakeland\4.1\101101.doc



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
May 16, 2001

David B. Struhs
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Roger D. Harr, City Manager
Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801-5079

Re: DEP File No. 1050004-010-AC (PSD-FL-245C)
Title V DRAFT Operation Permit Revision 1050004-011-AV
C. D. McIntosh, Jr. Power Plant

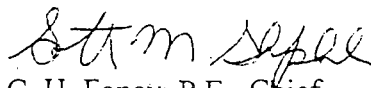
Dear Mr. Harr:

Enclosed is one copy of the Technical Evaluation and Preliminary Determination and associated combined Air Construction Permit/Title V DRAFT Operation Permit Revision, for the C. D. McIntosh, Jr. Power Plant in Polk County. The Department's "INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT REVISION" and the "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT REVISION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT REVISION" must be published one time only, as soon as possible, the legal advertising section of a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Scott Sheplak, P.E., Administrator, Title V Section at the above letterhead address. If you have any questions, please call Mr. Edward J. Svec at 850/921-8985.

Sincerely,


C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/es

Enclosures

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

"More Protection. Less Process"

Printed on recycled paper.

In the Matter of an
Application for Permit by:

Mr. Roger D. Harr
City Manager
Lakeland Electric
501 East Lemon Street
Lakeland, Florida 33801-5079

Air Construction Permit No. 1050004-010-AC (PSD-FL-245C)
Title V Operation Permit Revision 1050004-011-AV
Increase to the Maximum Heat Input to Unit # 5
C. D. McIntosh, Jr. Power Plant
Polk County

INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT REVISION

The Department of Environmental Protection (Department) gives notice of its intent to issue a combined Air Construction Permit/ Title V Operation Permit Revision (copy of the combined Draft Air Construction Permit/ Title V DRAFT Operation Permit Revision is attached) for the proposed project, detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Lakeland Electric, applied on July 29, 2000, to the Department to increase the maximum heat input to Unit # 5 (E.U. ID No. -028) at the C. D. McIntosh, Jr. Power Plant in Polk County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212, 62-213, and 62-214. The Department has determined that a combined Air Construction Permit/ Title V Operation Permit Revision is required in order to: increase the maximum heat input to Unit # 5 when operating on natural gas, which was established by permit PSD-FL-245 and incorporated in the current Title V operating permit.

The Department intends to issue this combined Air Construction Permit/ Title V Operation Permit Revision based on the belief that reasonable assurances have been provided to indicate that operation of the Title V source will not adversely impact air quality, and the Title V source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT REVISION." The notice shall be published one time only 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). The Department suggests that you publish the notice within thirty days of receipt of this letter. You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit or other authorization. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

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

The Department will accept written comments concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT REVISION." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change to this combine Draft Air Construction Permit/ Title V DRAFT Operation

Permit Revision, the Department shall issue a combined Revised Draft Air Construction Permit/ Title V DRAFT Operation Permit Revision and require, if applicable, another Public Notice.

The Department will issue the PSD Permit Modification with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station # 35, Tallahassee, Florida, 32399-3000. 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) of the Florida Statutes 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), however, any person who asked the Department 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 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 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department'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 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; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department'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

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department 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 in this proceeding.

In addition to the above, a person subject to regulation has a right to apply 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.

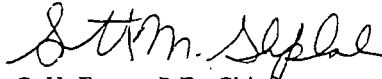
The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number 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 EPA 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.

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.


C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE A COMBINED AIR CONSTRUCTION/TITLE V OPERATION PERMIT REVISION (including the combined Draft Air Construction Permit/Title V DRAFT Operation Permit Revision) and all copies were sent by certified mail before the close of business on 5/17/01 to the person(s) listed:

Roger D. Harr, City Manager, Lakeland Electric

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE A COMBINED AIR CONSTRUCTION/TITLE V OPERATION PERMIT REVISION (including the combined Draft Air Construction Permit/Title V DRAFT Operation Permit Revision) were sent by U.S. mail on the same date to the person(s) listed:

Farzie Shelton, Lakeland Electric
Bill Thomas, P.E., SWD

5/17/01 cc: *of Invo Reading File*

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Barbara J. Sunday 5/17/01
(Clerk) (Date)

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

Article Sent To:
Mr. Roger D. Harr

Postage	\$	Postmark Here
Certified Fee		
Return Receipt Fee (Endorsement Required)		
Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Name (Please Print Clearly) (to be completed by mailer)
Mr. Roger D. Harr
Street, Apt. No., or PO Box No.
501 East Lemon Street
City, State, ZIP+4
Lakeland, Florida 33801-5079

**PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE
V OPERATION PERMIT REVISION**

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Air Construction Permit No. 1050004-010-AC (PSD-FL-245C)
Title V Operation Permit Revision No.: 1050004-011-AV

Lakeland Electric
C. D. McIntosh, Jr. Power Plant
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue a combined Air Construction Permit/Title V Operation Permit Revision to the Lakeland Electric for the C. D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk County. The applicant's name and address are Lakeland Electric, 501 East Lemon Street, Lakeland, Florida 33801-5079.

The Department will issue the combined Draft Air Construction Permit/Title V PROPOSED Operation Permit Revision, and subsequent combined Final Air Construction Permit/ Title V FINAL Operation Permit Revision, in accordance with the conditions of the attached Draft Air Construction Permit/ Title V DRAFT Operation Permit Revision unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department has determined that a combined Air Construction Permit/ Title V Operation Permit Revision is required in order to: increase the maximum heat input to Unit # 5 when operating on natural gas, which was established by permit PSD-FL-245 and incorporated in the current Title V operating permit.

The Department will accept written comments concerning the proposed combined Draft Air Construction Permit/Title V DRAFT Operation Permit Revision for a period of thirty (30) days from the date of publication of this notice. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this combined Draft Air Construction Permit/Title V DRAFT Operation Permit Revision, the Department shall issue a combined Revised Draft Air Construction Permit/Title V DRAFT Operation Permit Revision and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station # 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) 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) of the Florida Statutes 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), however, any person who asked the Department for notice of agency action may file a petition within fourteen (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 will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department'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 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; and (f) A demand for relief.

A petition that does not dispute the material facts upon which the Department'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 Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department 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:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 850/488-1344
Fax: 850/922-6979

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 application, the Technical Evaluation and Preliminary Determination, combined Draft Air Construction Permit/Title V DRAFT Operation Permit Revision, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, Title V Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.