

File

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: CITY OF LAKELAND;)
C.D. MCINTOSH POWER PLANT)
UNIT NO. 3; MODIFICATION OF)
CONDITIONS OF CERTIFICATION)
PA-74-06SR-E)
_____)

OGC NO. 93-3123

FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION

On December 7, 1978, the Governor and Cabinet, acting as the Siting Board, issued a final order, pursuant to Chapter 403, Part II, Florida Statutes (F.S.), approving Certification of the City of Lakeland McIntosh Power Plant Unit Number 3 ("McIntosh Unit No. 3"). The Site Certification authorized construction and operation of a coal-refuse, and oil-fired steam electric generating unit, along with various associated facilities. That Site Certification was subsequently modified in 1980, 1988, and 1993.

On December 7, 1994, the City of Lakeland filed a request to modify the conditions of certification for McIntosh Unit No. 3 pursuant to Section 403.516(1)(b), F.S., and Rule 62-17.211, Florida Administrative Code (F.A.C.). On October 26, 1995, the City of Lakeland supplemented the request for modification. The City of Lakeland requested that the conditions be modified to approve use of an alternative fuel, petroleum coke. In addition, the City of Lakeland's requests included minor revisions to:

1) update regulatory references; 2) clarify that the Certification regulates only McIntosh Unit No. 3; 3) reflect the elimination of use of the artificial marsh, and 4) adjust submittal requirements for fuel usage and analysis data.

Copies of the City of Lakeland's modification request were distributed to all parties to the certification proceeding and made available for public review. On January 27, 1995, a Notice of Receipt of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. The notice specified the Department of Environmental Protection's (Department) intent to modify the conditions of certification. On March 9, 1995, the City of Lakeland responded to the Department's requests for additional information. On December 22, 1995, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. The notice specified that a hearing would be held if requested by the parties on or before 45 days from receipt of the notice of proposed modification or if requested within 30 days of publication of the notice by persons whose substantial interests are affected by the proposed modification. No written objection to the proposed modification was received by the Department.

Accordingly, in the absence of any timely objection, IT IS ORDERED:

The proposed changes to the Conditions of Certification for McIntosh Unit No. 3 as described in the December 7, 1994, request for modification and October 26, 1995 supplemental request, as clarified by the City of Lakeland's March 9, 1995 responses to DEP's requests for additional information are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the Department hereby MODIFIES the conditions of certification for the City of Lakeland McIntosh Unit No. 3 as follows:

GENERAL

1. 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 any discharge more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any proposed ~~anticipated~~ facility expansions, production increases, or process modifications which will result in new, different or increased discharges or expansion in steam generating capacity of Unit No. 3 will require a submission of a new or supplemental application pursuant to Chapter 403, Florida Statutes.

2. Noncompliance 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 Southwest District Manager of the Department by telephone during the working day during which said noncompliance occurs and shall confirm this situation in writing within seventy-two (72) working-day hours of first becoming aware of such conditions, supplying the following information:

- a. A description and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

3. Unit No. 3 Operation Facilities

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior department approval.

4. Adverse Impact - no change

5. Right of Entry

The permittee shall allow the Secretary of the Florida Department of Environmental Protection Regulation and/or authorized representatives, upon the presentation of credentials: ---- no change

6. - 10. - no change

11. Review of Site Certification

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination System Permit issued pursuant to the Federal Water Pollution Control

Act Amendments of 1972, for the plant units, the Department shall review all monitoring data that has been submitted to it during the preceding five-year period, for the purposes of determining the extent of the permittee's compliance with the conditions of this certification and the environmental impact of this facility unit. The Department shall submit the results of its review and recommendations to the permittee. Such review will be repeated at least every five years thereafter.

12. Modification of Conditions

The conditions of this certification may be modified in the following manner:

- a. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to monitoring or sampling.
- b. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Discharge Elimination System (NPDES) permit for the certified facility. Lakeland or Orlando Utilities Commission (OUC), as appropriate, shall send each party to the certification proceeding (at the party's last known address as shown on the record of such proceeding) copies of notice of requests submitted by Lakeland or OUC for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) From state

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.

- c. All other modifications shall be made in accordance with Section 403.516, F.S.

CONDITIONS OF CERTIFICATION - SPECIAL

I. Air

The construction and operation of the Unit No. 3 at the McIntosh Plant shall be in accordance with all applicable provisions of the Chapters 62-210 - 62-297 ~~17-2, 17-5, and 17-7,~~ Florida Administrative Code. The permittee shall comply with the following conditions of certification:

A. Emission Limitations

1. Stack emissions shall not exceed those specified in Chapter ~~17-2.04(6)(e) 1-~~ 62-296.405, and 62.296.800(2)(a)1., FAC.
2. ~~The permittee shall not burn a fuel oil containing more than an average of 0.7% sulfur unless it can be demonstrated that either, a) heat efficiency is such as to insure compliance with all applicable emission limitations, or b) that a flue gas desulfurization unit is installed that will insure compliance with applicable emission limitations.~~
 - a. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 1.2 pounds per million BTU heat input in accordance with 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction Started After August 17, 1971.
 - b. A flue gas desulfurization system will be

installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide in gases discharged to the atmosphere from the boiler shall not exceed 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pounds per million BTU heat input. Compliance with the percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of three years and made available by the City upon request by the Department. Whenever blends of petroleum coke are co-fired with other fuels, sulfur dioxide emissions shall not exceed 0.718 pounds per million BTU heat input based on a 30-day rolling average and shall comply with the reduction requirements given above.

c. Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of the SO₂ scrubber will be allowed.

d. The burning of high sulfur oil (greater than 0.5 percent by weight) or a combination of high sulfur oil and municipal refuse as an emergency fuel without the use of the SO₂ scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the

atmosphere from the boiler shall not exceed 0.8 pounds per million BTU under this condition.

e. During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil (greater than 0.5 percent by weight) or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO₂ scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu under this condition.

3. - no change

4. Particulate emissions from the coal handling facilities:

a. The applicant shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system, or coal transfer and loading system ~~processing coal~~, visible emissions which exceed 20 percent opacity.

b. - no change

5. Particulate matter emitted into the atmosphere from the boiler shall not exceed:

<u>Mode of Firing</u>	<u>lb/10⁶ BTU Heat Input</u>
<u>Coal</u>	<u>0.044</u>
<u>Coal/Petcoke</u>	<u>0.044</u>
<u>Coal/Refuse</u>	<u>0.050</u>
<u>Coal/Petcoke/Refuse</u>	<u>0.050</u>
<u>Oil</u>	<u>0.070</u>
<u>Oil/Refuse</u>	<u>0.075</u>

B. Air Monitoring Program

~~1. The permittee shall install and operate continuously monitoring devices for the Unit No. 3 boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity. The~~

~~monitoring devices shall meet the applicable requirements of 17-2.08, FAC~~ Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, the ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel analysis data shall be used in conjunction with emission factors and the continuous monitoring data to calculate SO₂ reduction.

2. - 3. - no change

4. The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports, in accordance with ~~Standard Sampling Techniques and Methods of Analysis for The Determination of Air Pollutants from Point Sources, July 1975 Rule 62-297, F.A.C.~~

5. - no change

6. Emission Control Systems:

Prior to operation of the source, the owner or operator shall submit to the Department a standardized plan or procedure that will allow the company to monitor emission control equipment efficiency and enable the company to return malfunctioning equipment to proper operation as expeditiously as possible.

C. Stack Testing:

1. - no change

2. Performance tests shall be conducted and data reduced in accordance with methods and procedures in accordance with EPA or DEP-approved test methods. Standard Sampling Techniques and Methods of the Determination on Air Pollutants from Point Sources, July 1975.

3. - 4. - no change

5. Stack tests for particulates, NO_x and SO₂ shall be performed annually in accordance with conditions 2, 3 and 4 above. CEMS and CEM's relative accuracy tests may be used to determine compliance as long as the source and test conditions are consistent with the applicable requirements.

D. Reporting

1. ~~Stack monitoring, fuel usage and fuel analysis~~ data shall be reported to the Department on a quarterly basis in accordance with 40 CFR, Part 60, Section 60.7(c), (d) and in accordance with 62-297.405(1)(g) 17-2-00, FAC. Fuel usage and fuel analysis data shall be reported to the Department on an annual basis.

2. - no change

E. - F. - no change

G. Reporting:

1. Beginning one month after certification the applicant shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of equipment (including control equipment). All reports and information required to be submitted under this condition shall be submitted to ~~Mr. Hamilton S. Owen, Jr., the Administrator, of Power Plant Siting~~ Coordination Office, Department of Environmental Protection Regulation, 2600 Blair Stone Road, MS 48, Tallahassee, Florida 32399-2400.

2. Lakeland shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially in commercial operation, co-fired with petroleum coke, information demonstrating in accordance with 40 CFR 52.21 (b) (33) and 40 CFR 52.21

(b) (21) (v) that the operational changes did not result in emission increases of carbon monoxide, nitrogen oxides, or sulfuric acid mist.

H. Fuels:

The following fuels may be burned:

Coal only;

Low sulfur fuel oil only (≤ 0.5 percent sulfur by weight);

Coal and up to 10 percent refuse (based on heat input)

Low sulfur fuel oil and up to 10 percent refuse (based on heat input);

Coal and up to 20 percent petroleum coke (based on weight);

Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input);

High sulfur oil (> 0.5 percent sulfur by weight) consistent with Conditions I.A.2.b. or I.A.2.c.;

Natural gas only or in combination with any of the other fuels or fuel combinations listed above;

II. Water Discharges

Discharges during construction and operation of the Unit No. 3 shall be in accordance with all applicable provisions of Chapter 62-302 17-3, Florida Administrative Code and 40 CFR 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category. In addition, the permittee shall comply with the following conditions of certification:

A. Pretreatment Standards

Wastewater discharges from Unit No. 3 to the Lakeland wetlands treatment system shall comply with the effluent limitation guidelines contained in 40 CFR § 423.16 ~~Part 423.12~~ and amendments. The specific standards applicable to the

facilities as planned are:

1. Cooling Tower Blowdown

There shall be no detectable amounts of materials added for corrosion inhibition containing zinc and chromium in cooling tower blowdown discharged to the City of Lakeland wetland treatment system. ~~On an emergency basis the on site Marsh Treatment System may be used to treat cooling tower blowdown.~~

2. - 3. - no change

4. Chemical Wastes and Boiler Blowdown

All low volume wastes (demineralizer regeneration, cooling tower basin cleaning wastes, floor drainage, sample drains and similar wastes), metal cleaning wastes (including preheater and fireside wash) and boiler blowdown shall be treated as required for pH adjustment and removal of chemical constituents. These wastewaters will be treated in a process wastewater treatment system capable of complying with 40 CFR, § 423.16 ~~Part 423.12~~ and discharged with the cooling tower blowdown via a return pipeline to the Lakeland wetlands treatment system. The remaining sludge shall be disposed of in the on site FGD stabilized sludge landfill.

5. Sluice Pond Overflow

Sluice pond overflow (coal pile runoff from less than 10-year, 24-hour rainfall and bottom and fly ash transport water) shall be treated if necessary required to meet the requirements of 40 CFR, § 423.16 ~~Part 423.12~~ and discharged with the cooling tower blowdown to the Lakeland wetlands treatment system.

6. Flue Gas Desulfurization Sludge Pond Overflow

The flue gas desulfurization sludge pond overflow shall be treated if required to meet the requirements

of 40 CFR, § 423.16 ~~Part 423.12~~ in a process waste system and discharged with the cooling tower blowdown to the Lakeland wetlands treatment system.

B. In-Plant Water Monitoring Program

A monitoring program shall be undertaken by the City of Lakeland on each effluent stream within the facility to determine compliance by Unit 3 with the applicable effluent guidelines of 40 CFR, § 423.16 ~~Part 423.12~~ for those wastewaters discharged to the Lakeland wetlands treatment system. This monitoring program may be reviewed annually to determine the necessity for its continuance.

III. Groundwater

A. General

The use of groundwater shall be minimized to the greatest extent practicable.

B. Well Criteria

The well locations shall be approved by the Southwest Florida Water Management District. Design and construction of new wells shall be in accordance with the applicable rules of the Department of Environmental Protection Regulation and Southwest Florida Water Management District.

C. Groundwater Use Limitations - No change

IV. Leachate

A. Compliance

Leachate from coal storage piles, settling and treatment ponds, ~~artificial marsh, rapid infiltration beds,~~ secure land fills and flue gas desulfurization sludge ponds (FGD) shall not contaminate waters of the State (including both surface and groundwaters) in excess of the limitations of Chapters 62-302 and 62-520 ~~17-3~~, F.A.C.

B. Monitoring

A monitoring well system shall be used to determine

whether or not leachate from the treatment ponds, ~~artificial marsh~~, secure landfill, ash sluice ponds, and the flue gas desulfurization sludge ponds is reaching the groundwater.

1.-4. - no change

5. A quarterly summary of the results of the monitoring shall be provided by the permittee to the Southwest District of the Department of Environmental Protection Regulation and to the Southwest Florida Water Management District.

6. The permittee shall keep a monthly record of the monitoring results and shall notify the Department's Southwest District Manager and the Southwest Florida Water Management District when said measurements reach 90% of the levels permitted in the water quality standards of Rule 62-520.420 ~~17-3-101~~, F.A.C.

V. Control Measures During Construction

A. Stormwater Runoff

During construction and plant operation, necessary measures shall be used to settle, filter, treat or absorb silt containing or pollutant laden stormwater runoff to limit the suspended solids to 50 mg/l or less during rainfall periods not exceeding the 10-year, 24-hour rainfall, and to prevent an increase in turbidity to 29 NTU's ~~50 Jackson Turbidity Units~~ above background in waters of the State.

Control measures shall consist at the minimum, of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt and sediment laden runoff. The pH shall be kept within the range of 6.0 to 8.5.

VI. Solid Wastes

Solid Wastes resulting from construction or operation shall be disposed of in accordance with the applicable regulations of Chapter 62-701 ~~17-7~~, FAC.

Open burning in connection with land clearing shall be in accordance with Chapter 62-256 ~~71-5~~, FAC, no additional permits shall be required, but the Division of Forestry shall be notified. Open burning shall not occur if the Division of forestry has issued a ban on burning due to fire hazard conditions.

VIII. Solid Waste Utilization System - no change

The solid waste utilization facility shall be designed and operated in compliance with all applicable regulations of the Department, including but not limited to Chapter 62-701 ~~71-7~~, FAC.

XIII. Transmission Lines

Directly associated transmission lines shall be constructed and maintained in a manner to minimize environmental impacts in accordance with Chapter 403, F.S., and Chapters 27F-6, 27F-7, and 62-312, ~~22~~ FAC.

A. Construction

1. Filling and construction in waters of the State shall be minimized to the extent practicable. No such activities shall take place without obtaining lease or title from the Board of Trustees of the Internal Improvement Trust Fund ~~Department of Natural Resources~~.
- 2.-9. - no change
10. Any archaeological sites discovered during construction of the transmission line shall be disturbed as little as possible and such discovery shall be communicated to the Department of State, Division of ~~Archive History and Records Management~~ Historical Resources.

XIV. Construction in Waters of the State

No construction in waters of the State shall commence without obtaining lease or title from the ~~Department of Natural~~

Resources Board of Trustees of the Internal Improvement Trust Fund.

XVI. Sanitary Waste Disposal

Sanitary waste from operating plant facilities shall be disposed of in a septic tank system, as approved by the Health Department of Health & Rehabilitative Services, as long as the average daily flow does not exceed 2,000 gallons per day. If the sanitary waste exceeds 2000 gpd, a properly designed treatment system shall be constructed upon receipt of approval by the Department.

NOTICE OF RIGHTS

Any party to this Order has the right to seek judicial review of this Order pursuant to Section 120.68, Florida Statutes, by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of the General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the appropriate filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department of Environmental Protection.

DONE AND ORDERED this 15th day of February, 1996, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52
Florida Statutes, with the designated
Department Clerk, receipt of which
is hereby acknowledged.

Robert C. B.
Clerk

2/14/96
Date

for Anneth V. Plante
VIRGINIA B. WETHERELL
SECRETARY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the foregoing has been furnished by regular U. S. Mail to the following this 14th day of February, 1996:

James S. Alves, Esquire
Hopping Green Sams & Smith
P.O. Box 6526
Tallahassee, FL 32314-6526

City of Lakeland
2379 Broad Street
Lakeland, FL 33802

Mark Carpanini, Esquire
Office of County Attorney
P.O. Box 60
Bartow, FL 33830-0060

Richard Tschantz, Esquire
Southwest Fla. Water Mgmt. Dist.
2379 Broad Street
Brooksville, FL 34609-6899

Robert V. Elias, Esquire
Division of Legal Services
Florida Public Service Comm.
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Andrew R. Reilly
East Lake Parker Residents
P.O. Box 2039
Haines City, FL 33844

Tom Tart
Greg DeMuth
Orlando Utilities Commission
500 South Orange Street
Orlando, FL 32801

Farzie Shelton
Dept of Water and Electric
Utilities
501 East Lemon Street
Lakeland, FL 33801-5050

Karen Brodeen, Esquire
Dept. of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100



CHARLES T. "CHIP" COLLETTE,
Assistant General Counsel
Florida Department of
Environmental Protection
2600 Blair Stone Road
MS 35
Tallahassee, FL 32399-2400

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STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: CITY OF LAKELAND;)
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On December 7, 1994, the City of Lakeland filed a request to modify the conditions of certification for McIntosh Unit No. 3 pursuant to Section 403.516(1)(b), Fla. Stat., and Rule 62-17.211, F.A.C. On October 26, 1995, the City of Lakeland supplemented the request for modification. The City of Lakeland requested that the conditions be modified to approve use of an alternative fuel, petroleum coke. In addition, the City of Lakeland's requests included minor revisions to: 1) update regulatory references;

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2) clarify that the Certification regulates only McIntosh Unit No. 3; 3) reflect the elimination of use of the artificial marsh, and 4) adjust submittal requirements for fuel usage and analysis data.

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Accordingly, in the absence of any written objection, **IT IS ORDERED:**

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1. Change in Discharge

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2. Noncompliance 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 Southwest District Manager of the Department

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by telephone during the working day during which said noncompliance occurs and shall confirm this situation in writing within seventy-two (72) working-day hours of first becoming aware of such conditions, supplying the following information:

- a. A description and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

3. Facilities Unit No. 3 Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior department approval.

4. Adverse Impact - no change

5. Right of Entry

The permittee shall allow the Secretary of the Florida Department of Environmental ~~Regulation~~ Protection and/or authorized representatives, upon the presentation of credentials: ---- no change

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Act Amendments of 1972, for the plant units, the Department shall review all monitoring data that has been submitted to it during the preceding five-year period, for the purposes of determining the extent of the permittee's compliance with the conditions of this certification and the environmental impact of this facility unit. The Department shall submit the results of its review and recommendations to the permittee. Such review will be repeated at least every five years thereafter.

8. Modification of Conditions

The conditions of this certification may be modified in the following manner:

- a. The Board hereby delegates to the Secretary the authority to modify, after notice and opportunity for hearing, any conditions pertaining to monitoring or sampling.
- b. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Discharge Elimination System (NPDES) permit for the certified facility. Lakeland or Orlando Utilities Commission (OUC), as appropriate, shall send each party to the certification proceeding (at the party's last known address as shown on the record of such proceeding) copies of notice of requests submitted by Lakeland or OUC for modifications or renewals of the above listed

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permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) From state 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.

- c. All other modifications shall be made in accordance with Section 403.516, F.S.

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2. ~~The permittee shall not burn a fuel oil containing more than an average of 0.7% sulfur unless it can be demonstrated that either, a) heat efficiency is such as to insure compliance with all applicable emission limitations, or b) that a flue gas desulfurization unit is installed that will insure compliance with applicable emission limitations.~~
 - a. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 1.2 pounds per million Btu heat input in accordance with 40 CFR 60 Subpart D, Standards of Performance for Fossil-

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Fuel-Fired Steam Generators for which Construction Started After August 17, 1971.

b. A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide in gases discharged to the atmosphere from the boiler shall not exceed 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pounds per million Btu heat input. Compliance with the percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of three years and made available by the City upon request by the Department. Whenever blends of petroleum coke and with other fuels are co-fired, sulfur dioxide emissions shall not exceed 0.718 pound per million Btu heat input based on a 30-day rolling average and shall comply with the reduction requirements given above.

c. Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of SO₂ scrubber will be allowed.

d. The burning of high sulfur oil (greater than 0.5percent by weight) or a combination of high sulfur oil and municipal refuse as an emergency

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fuel without the use of the SO₂ scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu under this condition.

e. During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil (greater than 0.5 percent by weight) or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO₂ scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu under this condition.

3. - no change

4. Particulate emissions from the coal handling facilities:

a. The applicant shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system, or coal transfer and loading system ~~processing coal~~, visible emissions which exceed 20 percent opacity.

b. - no change

5. Particulate matter emitted into the atmosphere from the boiler shall not exceed:

<u>Mode of Firing</u>	<u>lb/10⁶ Btu Heat Input</u>
<u>Coal</u>	<u>0.044</u>
<u>Coal/Petcoke</u>	<u>0.044</u>
<u>Coal/Refuse</u>	<u>0.050</u>

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<u>Coal/Petcoke/Refuse</u>	<u>0.050</u>
<u>Oil</u>	<u>0.070</u>
<u>Oil/Refuse</u>	<u>0.075</u>

B. Air Monitoring Program

~~1. The permittee shall install and operate continuously monitoring devices for the Unit No. 3 boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity. The monitoring devices shall meet the applicable requirements of 17-2.08, FAC Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, the ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel analysis data shall be used in conjunction with emission factors and the continuous monitoring data to calculate SO₂ reduction.~~

2. - 3. - no change

4. The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports, in accordance with Standard Sampling Techniques and Methods of Analysis for The Determination of Air Pollutants from Point Sources, July 1975 Rule 62-297, F.A.C.

5. - no change

6. Emission Control Systems:

Prior to operation of the source, the owner or operator shall submit to the Department a standardized plan or procedure that will allow the company to monitor emission control equipment efficiency and enable the company to return malfunctioning equipment to proper

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operation as expeditiously as possible.

C. Stack Testing:

1. - no change
2. Performance tests shall be conducted and data reduced in accordance with methods and procedures in accordance with EPA or DEP-approved test methods. Standard Sampling Techniques and Methods of the Determination on Air Pollutants from Point Sources, July 1975.
3. - 4. - no change
5. Stack tests for particulates and NO_x and SO₂ shall be performed annually in accordance with conditions 2, 3 and 4 above.

D. Reporting

1. Stack monitoring, ~~fuel usage and fuel analysis~~ data shall be reported to the Department on a quarterly basis in accordance with 40 CFR, Part 60, Section 60.7(c), (d) and in accordance with ~~17-2.08~~ 62-297.405(1)(g), FAC. Fuel usage and fuel analysis data shall be reported to the Department on an annual basis.
2. - no change

E. - F. - no change

G. Reporting:

1. Beginning one month after certification the applicant shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of equipment (including control equipment). All reports and information required to be submitted under this condition shall be submitted to ~~Mr. Hamilton S. Owen, Jr.,~~ the Administrator, of Power Plant Siting

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Coordination Office, Department of Environmental Regulation Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

2. Lakeland shall maintain and submit to the Department on an annual basis for a period of five years from the date the unit is initially, in commercial operation, co-fired with petroleum coke, information demonstrating in accordance with 40 CFR 52.21 (b) (33) and 40 CFR 52.21 (b) (21) (v) that the operational changes did not result in emission increases of carbon monoxide, nitrogen oxides, or sulfuric acid mist.

H. Fuels:

The following fuels may be burned:

Coal only

Low sulfur fuel oil only (<0.5 percent sulfur by weight)

Coal and up to 10 percent refuse (based on heat input)

Low sulfur fuel oil and up to 10 percent refuse (based on heat input)

Coal and up to 20 percent petroleum coke (based on weight)

Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input)

High sulfur oil (> 0.5 percent sulfur by weight) consistent with Conditions I.A.2.b. or I.A.2.c.

Natural gas only or in combination with any of the other fuels or fuel combinations listed above

II. Water Discharges

Discharges during construction and operation of the Unit No. 3 shall be in accordance with all applicable

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provisions of Chapter 62-302 17-3, Florida Administrative Code and 40 CFR 423, Effluent Guidelines and Standards for Steam Electric Power Generating Point Source Category. In addition, the permittee shall comply with the following conditions of certification:

A. Pretreatment Standards

Wastewater discharges from Unit No. 3 to the Lakeland wetlands treatment system shall comply with the effluent limitation guidelines contained in 40 CFR, ~~Part~~ § 423.16 ~~423.12~~ and amendments. The specific standards applicable to the facilities as planned are:

1. Cooling Tower Blowdown

There shall be no detectable amounts of materials added for corrosion inhibition containing zinc and chromium in cooling tower blowdown discharged to the City of Lakeland wetland treatment system. ~~On an emergency basis the on-site Marsh Treatment System may be used to treat cooling tower blowdown.~~

2. - 3. - no change

4. Chemical Wastes and Boiler Blowdown

All low volume wastes (demineralizer regeneration, cooling tower basin cleaning wastes, floor drainage, sample drains and similar wastes), metal cleaning wastes (including preheater and fireside wash) and boiler blowdown shall be treated as required for pH adjustment and removal of chemical constituents. These wastewaters will be treated in an process wastewater treatment system capable of complying with 40 CFR, ~~Part~~ 423.12 § 423.16 and discharged with the cooling tower blowdown via a return pipeline to the Lakeland wetlands treatment system. The remaining sludge shall be

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disposed of in the on site FGD stabilized sludge landfill.

5. Sluice Pond Overflow

Sluice pond overflow (coal pile runoff from less than 10-year, 24-hour rainfall and bottom and fly ash transport water) shall be treated if necessary ~~required~~ to meet the requirements of 40 CFR ~~Part 423.12~~ § 423.16 and discharged with the cooling tower blowdown to the Lakeland wetlands treatment system.

6. Flue Gas Desulfurization Sludge Pond Overflow

The flue gas desulfurization sludge pond overflow shall be treated if required to meet the requirements of 40 CFR ~~Part 423.12~~ § 423.16 in a process waste system and discharged with the cooling tower blowdown to the Lakeland wetlands treatment system.

B. In-Plant Water Monitoring Program

A monitoring program shall be undertaken by the City of Lakeland on each effluent stream within the facility to determine compliance by Unit 3 with the applicable effluent guidelines of 40 CFR, ~~Part 423.12~~ § 423.16 for those wastewaters discharged to the Lakeland wetlands treatment system. This monitoring program may be reviewed annually to determine the necessity for its continuance.

III. Groundwater

A. General

The use of groundwater shall be minimized to the greatest extent practicable.

B. Well Criteria

The well locations shall be approved by the Southwest Florida Water Management District. Design and construction of

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new wells shall be in accordance with the applicable rules of the Department of Environmental ~~Regulation~~ Protection and Southwest Florida Water Management District.

C. Groundwater Use Limitations - No change

IV. Leachate

A. Compliance

Leachate from coal storage piles, settling and treatment ponds, ~~artificial marsh, rapid infiltration beds,~~ secure land fills and flue gas desulfurization sludge ponds (FGD) shall not contaminate waters of the State (including both surface and groundwaters) in excess of the limitations of Chapters ~~17-3,~~ 62-302 and 62-520, F.A.C.

B. Monitoring

A monitoring well system shall be used to determine whether or not leachate from the treatment ponds, ~~artificial marsh,~~ secure landfill, ash sluice ponds, and the flue gas desulfurization sludge ponds is reaching the groundwater.

1.-4. - no change

5. A quarterly summary of the results of the monitoring shall be provided by the permittee to the Southwest District of the Department of Environmental ~~Regulation~~ Protection and to the Southwest Florida Water Management District.

6. The permittee shall keep a monthly record of the monitoring results and shall notify the Department's Southwest District Manager and the Southwest Florida Water Management District when said measurements reach 90% of the levels permitted in the water quality standards of ~~17-3.101~~ Rule 62-520.420, F.A.C.

V. Control Measures During Construction

A. Stormwater Runoff

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During construction and plant operation, necessary measures shall be used to settle, filter, treat or absorb silt containing or pollutant laden stormwater runoff to limit the suspended solids to 50 mg/1 or less during rainfall periods not exceeding the 10-year, 24-hour rainfall, and to prevent an increase in turbidity to ~~50 Jackson Turbidity Units~~ 29 NTU's above background in waters of the State.

Control measures shall consist at the minimum, of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt and sediment laden runoff. The pH shall be kept within the range of 6.0 to 8.5.

VI. Solid Wastes

Solid Wastes resulting from construction or operation shall be disposed of in accordance with the applicable regulations of Chapter ~~17-7~~ 62-701, FAC.

Open burning in connection with land clearing shall be in accordance with Chapter ~~71-5~~ 62-256, FAC, no additional permits shall be required, but the Division of Forestry shall be notified. Open burning shall not occur if the Division of forestry has issued a ban on burning due to fire hazard conditions.

VIII. Solid Waste Utilization System - no change

The solid waste utilization facility shall be designed and operated in compliance with all applicable regulations of the Department, including but not limited to Chapter ~~71-7~~ 62-701, FAC.

XIII. Transmission Lines

Directly associated transmission lines shall be constructed and maintained in a manner to minimize environmental impacts in accordance with Chapter 403, F.S.,

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and Chapters 2227F-6, 27F-7, and 62-312, F.A.C.

A. Construction

1. Filling and construction in waters of the State shall be minimized to the extend practicable. No such activities shall take place without obtaining lease or title from the ~~Department of Natural Resources~~ Board of Trustees of the Internal Improvement Trust Fund.

2.-9. - no change

10. Any archaeological sites discovered during construction of the transmission line shall be disturbed as little as possible and such discovery shall be communicated to the Department of State, ~~Division of Archive History and Records Management~~ Historical Resources.

XIV. Construction in Waters of the State

No construction in waters of the State shall commence without obtaining lease or title from the ~~Department of Natural Resources~~ Board of Trustees of the Internal Improvement Trust Fund.

XVI. Sanitary Waste Disposal

Sanitary waste from operating plant facilities shall be disposed of in a septic tank system, as approved by the ~~Health Department~~ of Health & Rehabilitative Services, as long as the average daily flow does not exceed 2,000 gallons per day. If the sanitary waste exceeds 2000 gpd, a properly designed treatment system shall be constructed upon receipt of approval by the Department.

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NOTICE OF RIGHTS

Any party to this Order has the right to seek judicial review of this Order pursuant to Section 120.68, Florida Statutes, by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of the General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the appropriate filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date of the Final Order is filed with the Clerk of the Department of Environmental Protection.

DONE AND ORDERED this _____ day of _____, 199_,
in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

VIRGINIA B. WETHERELL
SECRETARY

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the foregoing has been
furnished by regular U. S. Mail to the following this ____ day
of _____, 199__:

James S. Alves, Esquire
Hopping Green Sams & Smith
P.O. Box 6526
Tallahassee, FL 32314-6526

City of Lakeland
2379 Broad Street
Lakeland, FL 33802

Mark Carpanini, Esquire
Office of County Attorney
P.O. Box 60
Bartow, FL 33830-0060

Richard Tschantz, Esquire
Southwest Fla. Water Mgmt. Dist.
2379 Broad Street
Brooksville, FL 34609-6899

Karen Brodeen, Esquire
Dept. of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

Hamilton S. Oven, Jr., P.E.
Department of Environmental
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Division of Legal Services
Florida Public Service Comm.
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East Lake Parker Residents
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Orlando Utilities Commission
500 South Orange Street
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