

Department of Environmental Protection

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

Virginia B. Wetherell Secretary

September 21, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Farzie Shelton
Environmental Coordinator
Department of Electric and Water Utilities
501 East Lemon Street
Lakeland, Florida 33801-5050

Dear Ms. Shelton:

Re: Amendment of PSD-FL-166/AC53-190437, Specific Conditions City of Lakeland, Larson Power Plant Unit 8

Attached is one copy of the proposed permit amendment, Intent to Issue, Public Notice of Intent to Issue Permit Amendment (for publication by the City), and Preliminary Determination changing the Specific Conditions applicable to the Charles Larson Power Plant Unit No. 8.

Please submit any comments you may have concerning the Department's proposed action to Mr. A. A. Linero, P.E., Administrator, New Source Review Section, at the above address. If you have any questions, please call Mr. Martin Costello, P.E. or Mr. Linero at (904) 488-1344.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/mc/t

cc: Jerry Kissel, SWD Jewell Harper, EPA Roy Harwood, Polk Co.

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Technical Evaluation and Preliminary Determination

City of Lakeland
Department of Electric and Water Utilities
Polk County, Florida

Charles Larson Power Plant Unit 8--Combustion Turbine

Department File No. PSD-FL-166/AC53-190437 Request to Amend Permit

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

September 21, 1995

On June 27, 1995 the Department received a request to amend construction permit No. AC53-190437 / PSD-FL-166. The request included the incorporation of a customized fuel monitoring schedule for the sulfur and nitrogen content of the natural gas fired in the turbine, corrections to the sulfur dioxide and sulfuric acid mist permit limits, and clarification of the nitrogen oxides compliance testing requirements (when the ISO correction should be applied).

Custom Fuel Monitoring Schedule

The proposed custom fuel monitoring schedule, as corrected by the applicant's letter dated August 10, 1995 (attached), will be included as an attachment to the construction permit. EPA has approved this fuel monitoring schedule. This fuel monitoring schedule supersedes AC53-190437 / PSD-FL-166 condition 17, which specifies records of daily sulfur and nitrogen content of the fuel and condition 23, which requires annual reports for nitrogen content of the fuel being fired, as these conditions apply to the firing of natural gas.

Increased Emission Limits for SO2 and H2SO4

The Department acknowledges the applicant's oversight in neglecting the sulfur from mercaptans (which are added to the natural gas for safety reasons) in the estimate of annual SO₂ emissions. The Department also agrees that a typographical error was apparently made in the annual emission limits for sulfuric acid mist, both for natural gas and oil. The sulfur dioxide and sulfuric acid mist limits will be adjusted as requested.

Correction of NO_X Emissions to ISO Conditions

The Bureau of Air Regulation has evaluated the request to remove the requirement to correct the compliance test data to ISO conditions for comparison with the NO_X emission limit of 25 ppm @ 15 percent oxygen. The Department will grant this request provided there will not be an increase in either lb/hr or tons/yr of NO_X emission rates. If there is a NO_X emissions increase due to less water injection for NO_X control, then pursuant to Rule 62-212.400(2)(g) F.A.C.:

(g) Relaxations of Restrictions on Pollutant Emitting Capacity. If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this section if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this section shall apply to the facility or modification as though

construction had not yet commenced on it.

For verification of emissions changes associated with removing the ISO correction from the permit, the City of Lakeland shall submit an analysis of emissions changes (lbs/hr and tpy), including continuous NO_X monitoring data and associated water injection rates for at least one month prior to and after the change, to the Bureau of Air Regulation. This report shall be submitted to the Bureau of Air Regulation within 13 months from issuance of this amendment.

It is the Department's determination that the proposed changes will not cause or contribute to violations of any ambient air quality standard or allowable increment. The Department intends to issue the permit amendment pending publication by the City of Lakeland of the Notice of Intent to Issue Permit Amendment and consideration of comments.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an Application for Permit Amendment DEP File No. PSD-FL-166

DEP File No. PSD-FL-166 AC53-190437 Polk County

Ms. Farzie Shelton Environmental Coordinator Department of Electric and Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5050

INTENT TO ISSUE

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment for the proposed changes as detailed in the application/request specified, above and the Department's Preliminary Determination (copy attached), for the reasons stated in the application/request.

The applicant, City of Lakeland Department of Electric and Water Utilities, applied on June 27, 1995, to the Department to amend of their PSD/air construction permit applicable to the Charles Larson Power Plant, Unit No. 8. The request is to remove the ISO correction which is applied to measured NO_X emissions for comparison with the nitrogen oxides (NOx) limit established in the PSD permit (25 ppm); implement a customized fuel monitoring schedule; and correct the permit limits for sulfur dioxide (SO₂) and sulfuric acid mist (H_2SO_4). The combustion turbine is Unit 8 and is located at the Charles Larson Power Plant. The facility is located in Polk County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a permit amendment is required for the proposed work.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit Amendment. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "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. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 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 amendment.

The Department will issue the permit amendment with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section The petition must contain the information set forth 120.57, F.S. below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399 904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE PERMIT AMENDMENT all copies were mailed by certified mail before the close of business on 9-21-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to \$120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date

Copies furnished to:

Jerry Kissel, SWD Jewell Harper, EPA Roy Harwood, Polk Co.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT PSD-FL-166/AC53-190437

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to the City of Lakeland, Department of Electric and Water Utilities, 501 East Lemon Street, Lakeland, Florida 33801-5050. The amendment is of certain specific conditions related to fuel monitoring, sulfur dioxide (SO₂) and sulfuric acid mist ($\rm H_2SO_4$) emissions, and nitrogen oxides ($\rm NO_X$) reporting applicable to the Charles Larson Power Plant Unit No. 8.

The U. S. Environmental Protection Agency reviewed and concurred with the customized fuel monitoring schedule. The changes in SO₂ and H_2 SO₄ limits are actually corrections and are not significant. The Department will remove the requirement in the PSD/air construction permit to correct compliance test data to ISO conditions for comparison with the NO_X emission limit of 25 ppm (firing natural gas) provided there will not be an increase in either lb/hr or tons/yr of NO_X emission rates. The applicant is required to submit an analysis of continuous emission monitoring data which shows that this action will not cause reductions in the water injection with corresponding increases in NO_X emissions. Therefore, this change will not cause or contribute to a violation of any air pollution ambient air standard or adversely affect the environment.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action

or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request 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

Department of Environmental Protection Southwest District 8407 Laurel Fair Circle Tampa, Florida 33619

Polk County Natural Resources Division 4189 Ben Durrance Road Bartow, Florida 33830

Any person may send written comments on the proposed action to Administrator, New Source Review at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person(s). Such requests must be submitted within 30 days of this notice.



Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee. Florida 32399-2400

Virginia B. Wetherell Secretary

October XX, 1995

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Ms. Farzie Shelton Environmental Coordinator Department of Electric and Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5050

Dear Ms. Shelton:

Re: Amendment of PSD-FL-166/AC53-190437 City of Lakeland, Larson Power Plant Unit 8

The Department has evaluated your request and hereby incorporate each of the following amendments to the above referenced permit.

Custom Fuel Monitoring Schedule

The proposed custom fuel monitoring schedule, as corrected by your letter dated August 10, 1995 (attached), is included as an attachment to the above referenced permit. This fuel monitoring schedule supersedes AC53-190437/PSD-FL-166 condition 17, which specifies daily sulfur and nitrogen records and condition 23, which requires annual reports for nitrogen content of the fuel being fired, as these conditions apply to the firing of natural gas.

Annual Sulfur Dioxide And Sulfuric Acid Mist Limits

The annual sulfur dioxide and sulfuric acid mist limits is changed as follows:

<u>TABLE 1</u> (attached)

FROM:

SO₂..... 2.6 (tpy on gas)

Sulfuric Acid Mist..... - (tpy on gas)... 3.3 X 10 -3 (tpy on oil)

Ms. Farzie Shelton October XX, 1995 Page Two



TO:

SO₂..... 8.6 (tpy on gas)

Sulfuric Acid Mist..... 0.8 (tpy on gas)... 9.13 (tpy on oil)

Correction of NO_X Emissions to ISO Conditions

The Department hereby removes the requirement to correct the test data to ISO conditions for comparison with the NO_X emission limit of 25 ppm provided there will not be an increase in either lb/hr or tons/yr of NO_X emission rates.

For verification of emissions changes associated with removing the ISO correction from the permit, the City of Lakeland shall submit an analysis of emissions changes (lbs/hr and tpy), including continuous NO_{X} monitoring data and associated water injection rates for at least one month prior to and after the change, to the Bureau of Air Regulation. This report shall be submitted to the Bureau of Air Regulation within 13 months from issuance of this amendment.

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit AC53-190437/PSD-FL-166.

Sincerely,

Howard L. Rhodes, Director Division of Air Resources Management Ms. Farzie Shelton October XX, 1995 Page Three



CERTIFICATE OF SERVICE

The undersigned duly designated deputy cler this PERMIT AMENDMENT and all copies were method the close of business on	mailed by	mail
Clerk Sta	amp	

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk	Date

Copies to be furnished to:

Jerry Kissel, SWD Jewell Harper, EPA Roy Harwood, Polk Co.

Memorandum

Environmental Protection

TO:

THRU:

FROM:

A. A. Linero Ola Line 4/20/95

Martin Costello 4/20/95

DATE:

September 20, 1995

SUBJ:

City of Lakeland, Larson Power Plant Unit 8

Amendment of PSD-FL-166/AC53-190437, Specific Conditions

Attached for your review and approval is an amendment to the existing City of Lakeland, Larson Power Plant Unit No. 8 (CT) which adds a customized fuel monitoring schedule; changes the permit limits for SO2 and H2SO4 and removes the ISO correction from the NO_Y standard.

The City is required to submit an analysis confirming that NOx emissions increases associated with removing the ISO correction are below significant levels with respect to PSD and major source permitting. EPA has approved the customized fuel monitoring schedule. The corrections in SO2/H2SO4 emissions are not significant. The ISO requirement is consistent with our present draft Guidance Memo.

If you have any questions, Martin Costello and/or I will be glad to discuss the details.

AAL/mc/t