

Golder Associates Inc.

5100 West Lemon Street, Suite 114
Tampa, FL USA 33609
Telephone (813) 287-1717
Fax (813) 287-1716

RECEIVED

JUN 21 2001



BUREAU OF AIR REGULATION

TRANSMITTAL LETTER

To: Mike Halpin
Dept. of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road, MS - 5505
Tallahassee, FL 32399-2400

Date: 06/19/01

From: Betty Robinson, Golder Associates, Inc.

Project No. 003-9515-0100

Sent by:

☒ US Mail
☐ Air Freight
☐ Hand Carried

☐ UPS
☐ Federal Express

Quantity	Item	Description
01	Photocopy of Affidavit (previously faxed to your office)	Copy of affidavit and legal ad that was published on Thursday, June 7, 2001 in the Lakeland Ledger for the Auburndale Peaker project air permit.

Remarks:

If you have any questions please call me at (813) 287-1717.

Thanks,

Betty

AFFIDAVIT OF PUBLICATION

THE LEDGER

Lakeland, Polk County, Florida

Case No

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Ken Holtzinger, who on oath says that he is the Classified Manager of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

Notice of Intent

in the matter of Dep File No. 1050221-004-AC

in the

Court, was published in said newspaper in the issues of

6-7; 2001

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed: 

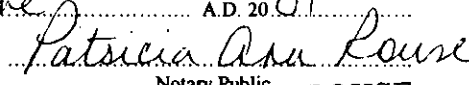
Ken Holtzinger
Classified Manager
Who is personally known to me.

Sworn to and subscribed before me this

day of

June

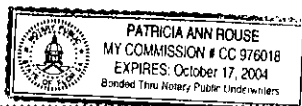
A.D. 2001



PATRICIA ANN ROUSE
Notary Public

(Seal)

My Commission Expires



Attach Notice Here

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 1050221-004-AC

Auburndale Cogeneration Facility
Auburndale, Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Calpine Eastern Corporation, for the Auburndale Cogeneration Facility, located at 1501 West Dixie Avenue, Auburndale, Polk County. The permit is to install one Series Cyclone Gas Turbine rated at 104 MW nominal (135 MW maximum) for peaking purposes at the existing facility. A Bag Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 C.F.R. 52.21. Prevention of Significant Deterioration (PSD) The applicant's mailing address is Calpine Eastern Corporation, The Big House, 2nd Floor, 100 West Street, Boston, MA 02110.

In order to ensure that a BACT review does not delay, the Department will require the use of Continuous Emission Monitoring Systems (CEMS) for the measurement of both nitrogen oxides (NO_x) and carbon monoxide (CO). Additionally, NO_x limitations will be placed upon the existing unit, which are more stringent than the current limits, offsetting proposed new emissions. Emissions of sulfur dioxide (SO₂), sulfate acid mist (SAM), and particulate matter (PM₁₀/PM_{2.5}) will be very low because of the use of inherently clean burning peaking quality natural gas and the low allowance (400 lbs per year) for the combustion of 0.05% sulfur oil.

Total emissions of pollutants shall not exceed the following emission rates:

Pollutant	Proposed Gas Emission Limit	Proposed Oil Emission Limit	TPY ¹	PSD Significant Emission Rates (TPY)
NO _x	25 ppmvd @ 15% O ₂	42 ppmvd @ 15% O ₂	372	40
CO	10 ppmvd @ 15% O ₂	10 ppmvd @ 15% O ₂	99	100
VOC	4 ppmvd @ 15% O ₂	5 ppmvd @ 15% O ₂	57	40
SO ₂	2 grains/100 SCF	74.9 lb/hr (0.05% S)	16.2	40
PM ₁₀	2.9 lb/hr	58.5 lb/hr	31	15

¹ Based on worst case permit conditions.

² The tons per year limit for NO_x is 30 TPA, over past six months of the facility.

An air quality impact analysis was conducted, although it was not required. Emissions from this facility will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the final permit with the attached conditions 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 14 (fourteen) days from the date of publication of the Public Notice of Intent to Issue Air Construction Permit in the Department's Bureau of Air Regulation at 2600 Bow Stone Road, Mail Station #505, 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 the proposed regulatory action, the Department will revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit 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. Mediation is not available in this proceeding.

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 3000 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 120.569(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under section 120.569(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 petitioner 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 section 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, who 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 facts of material fact; if there are none, the petitioner must so indicate; (e) A concise statement of the specific 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 28-106.30.

Because this 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 this proceeding in accordance with the requirements set forth above.

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:

Dept. of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-0979

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, technical evaluations, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under section 403.111, F.S. Interested persons may, contact the Administrator, New Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information. The Technical Evaluation and Permitting information as well as the Draft Permit are available at http://www11.floridadep.com/dep/permits/technical/technical_evaluation/technical_evaluation.html by clicking on Utilities and Other Facilities Permits issued.

5462 - 6-7-2001

Golder Associates Inc.

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



June 11, 2001

RECEIVED 0039515

JUN 12 2001

BUREAU OF AIR REGULATION

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

Attention: Mr. M. P. Halpin, P.E., New Source Review Section

RE: AUBURNDALE COGENERATION FACILITY - NEW SIMPLE CYCLE
COMBUSTION TURBINE
FDEP FILE NO. 1050221-004-AC (PSD-FL-311)

Dear Mike:

This correspondence provides comments to the draft permit. There are only two areas where changes to the Conditions are requested. These requested changes would not affect the total emissions or the emission rates proposed for the project.

Section III. Performance Restrictions, Condition 4. A change in this condition is requested that will eliminate any ambiguity in the conditions and the Department's PSD Rules. The suggested wording follows (changes underlined):

4. Simple Cycle, Intermittent Operation Only: The combustion turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation, nor the permitted short and long-term emission limits allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD non-applicability determination and resulted in the emission standards specified in this permit. Specifically, these restrictions eliminated several control alternatives based on technical as well as regulatory considerations. For any request to modify this emission unit in any way that has a significant net emissions increase (whether a physical or operational modification, including a change in the allowable hours of operation or heat input, or to alter any short or long-term emission) the permittee shall submit a full PSD permit application complete with a new proposal of the best available control technology as if the unit had never been built. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]

The suggested change would clarify that those changes having a significant emission increase would require a PSD permit including a BACT evaluation. The condition as currently written would suggest that even emission decreases would require BACT review, which is contrary to the Department's Rules.

Section III. Performance Restrictions, Condition 6. A change in this condition from an hour's limitation to a heat input limitation is requested. As previously discussed, the Department could conceptually accept this alternative depending upon supporting calculations and basis. Indeed, many of the Department's permits issued for previous power projects have included heat input as production limits rather than and hours limitation. It is requested that the heat-input limit be based on the primary fuel of natural gas, with a penalty if distillate oil is burned. The amount of oil is limited by Condition 5 and the limitation of 400 hours during a consecutive 12-month period, regardless of heat input, is acceptable to the applicant. This hour limitation for oil firing is also similar to the oil firing limitation for the cogeneration unit. The requested alternative condition is as follows (strikeouts shown and additions underlined):

6. ~~Hours of Operation~~ Heat Input Limitation: The combustion turbine shall utilize ~~operate~~ no more than 2,597,300 MMBtu ~~1400 hours~~ during any consecutive 12-month period. If oil is utilized in any 12-month period, the heat input limitation is reduced by 1.8 MMBTU for every 1.0 MMBTU where distillate oil is used. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the heat input amount of natural gas as well as fuel oil fired and the hours of operation. [Rule 62-210.200, F.A.C. (Definitions - PTE), PSD Avoidance]

The calculations to support the requested production limit are based on the information in Tables 2-1 and 2-2 of the PSD application, and are as follows:

Gas Firing: $115 \text{ tons NO}_x/\text{year} \times 2,000 \text{ lb/ton} \times 1,520 \text{ MMBtu/hr} \times \text{hr}/134.6 \text{ lb NO}_x$
 $= 2,597,325.4 \text{ MMBtu/year}$

Oil Penalty: $232.6 \text{ lb NO}_x/1,467 \text{ MMBtu} \times 1,520 \text{ MMBtu}/134.6 \text{ lb NO}_x$
 $= 0.1586 \text{ lb NO}_x/\text{MMBtu (oil)}/0.0886 \text{ lb NO}_x/\text{MMBtu (gas)}$
 $= 1.8 \text{ MMBtu (gas) equivalent emissions of 1 MMBtu (oil)}$

Please note that emission rates relative to heat input are relatively constant for the range of turbine inlet temperatures. This production limit, combined with the emission limits and the tons/year limits in Conditions 14 and 15, provide significant restrictions on the new peaking that restrict net emissions to less than PSD thresholds.

Section III. Emissions Standard, Condition 14: It is requested that the phrase "when firing natural gas" be included in the conditions related to the existing cogeneration unit (EU-001). It is clear that the compliance method for this emission limit as contained in Condition 31 is specific to natural gas. The added phase would insure no ambiguity occurs in interpretations of the permit. The phase is added below in **bold** type.

14. Nitrogen Oxides (NO_x):

NO_x emissions from the combustion turbine shall not exceed 25.0 ppmvd nor 42.0 ppmvd (gas and oil respectively) corrected to 15% oxygen. Additionally, annual

emissions of NO_x from this emission unit shall not exceed 115 TPY, based upon a 12-month rolling total. In this regard, existing EU-001 shall be required to comply with an annual NO_x emission limit of 177 TPY, as well as an equivalent annual NO_x limit of 9 ppmvd corrected to 15% oxygen when firing natural gas, based upon a 12-month rolling total. These emission limits are *in addition to* all existing limits on EU-001, and are unit specific limits imposed as a result of the applicant's desire to net out of a PSD review for NO_x for EU-006.

Your efforts to expedite the issuance of the permit are greatly appreciated. Please call if there are any questions.

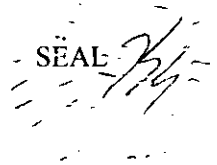
Sincerely,

GOLDER ASSOCIATES INC.



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

KFK/nav



cc: Bruce Franco, Calpine Eastern Corporation
Benjamin Borsch, Calpine Eastern Corporation
Ted Baldwin, Calpine Eastern Corporation
A. A. Linero, FDEP, Bureau of Air Regulation

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C. Holladay
B. Thomas, SWD
H. Harley, EPA
G. Bumpak, NPS