STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF ADMINISTRATIVELY CORRECTED AIR CONSTRUCTION PERMIT

In the Matter of a Request for Administrative Correction:

Mr. Robert K. Alff
Senior Vice President
Calpine Eastern Corporation
Boston, MA 02110

FINAL Permit No.: 1050221-004-AC
Auburndale Cogeneration Facility

Enclosed is an ADMINISTRATIVELY CORRECTED page to the final Air Construction permit, 1050221-004-AC for the construction of a simple cycle combustion turbine located at 1501 West Derby Avenue, Auburndale, Polk County. This correction is issued pursuant to Rule 62-210.360, Florida Administrative Code and Chapter 403, Florida Statutes (F.S.). The corrective action is consistent with the Department's original intent and does not alter the planned emissions.

Any party to this order (permit) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by the filing of 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, 3900 Commonwealth Boulevard, Mail Station #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 thirty days from the date this notice is filed with the clerk of the permitting authority.

Michael P. Halpin, P.E.
New Source Review

6/28/01
(Date)

Robert K. Alff, Senior VP, Calpine Eastern Corporation
Mr. Benjamin Borsch, Environmental Manager, Calpine
Mr. Kennard F. Kosky, P.E. Golder
Mr. Bill Thomas, SWD-DEP
Mr. Gregg Worley, EPA
Mr. John Bunyak, NPS

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. Alternately, the permittee shall submit a determination of PSD applicability for proposed permit changes, which the Department shall consider in making its determination. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]

5. Allowable Fuels: The combustion turbine shall be fired with pipeline-quality natural gas containing no more than 2 grains of sulfur per 100 dry standard cubic feet of gas, monthly average. It is noted that this limitation is much more stringent than the sulfur dioxide limitation in 40 CFR 60, NSPS Subpart GG and assures compliance with regulations 40 CFR 60.333 and 60.334 of this Subpart. The permittee shall demonstrate compliance with the fuel sulfur limits by keeping the records specified in this permit. The use of fuel oil containing no more than 0.05% sulfur by weight shall not exceed 400 hours during any consecutive 12-month period. [Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]

6. Allowable Operation: The combustion turbine shall utilize no more than 2,227,400 MMBtu of natural gas during any consecutive 12-month period. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount and heat inputs 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]

7. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

EMISSIONS CONTROLS

8. Unconfined Emissions of Particulate Matter: [Rule 62-296.320(4)(c), F.A.C.]

   (a) No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

   (b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

   (c) Reasonable precautions include the following:

   - Paving and maintenance of roads, parking areas and yards.
   - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
   - Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
   - Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
   - Landscaping or planting of vegetation.

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:

Mr. Robert K. Alff
Senior Vice President
Calpine Eastern Corp.
The Pilot House, 2nd Floor
Lewis Wharf
Boston, MA 02110

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* JMayer

B. Date of Delivery 7/2/01

C. Signature

X JMayer

☐ 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

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

Article Sent To:
Mr. Robert K. Alff

Postage	$
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Return Receipt Fee (Endorsement Required)	
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Total Postage & Fees	$

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Calpine Eastern Corp.
Street, Apt. No.; or PO Box No.
The Pilot House, 2nd Floor
City, State, ZIP+4
Boston, MA 02110

PS Form 3800, July 1999 See Reverse for Instructions

7099 3400 0000 1453 1811

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Robert K. Alff
Senior Vice President, Calpine Eastern Corporation
The Pilot House, 2nd Floor, Lewis Wharf
Boston, MA 02110

DEP File No. 1050221-004-AC
Auburndale Cogeneration Facility
Polk County

Enclosed is Final Permit Number 1050221-004-AC. This permit authorizes Calpine Eastern Corporation to install a simple cycle combustion turbine at the existing Auburndale Cogeneration Facility. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this 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.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 6/26/01 to the person(s) listed:

Robert K. Alff, Senior VP, Calpine Eastern Corporation *
Mr. Benjamin Borsch, Environmental Manager, Calpine *
Mr. Kennard F. Kosky, P.E. Golder
Mr. Bill Thomas, SWD-DEP
Mr. Gregg Worley, EPA
Mr. John Bunyak, NPS

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.

Charlotte J. Hayes 6/26/01
(Clerk) (Date)

FINAL DETERMINATION

Calpine Eastern Corporation
Auburndale Cogeneration
DEP File No.1050221-004-AC

The Department distributed a public notice package on May 29, 2001 to allow the applicant to construct a new emission unit at the Auburndale Cogeneration Facility located in Auburndale, Polk County. The Public Notice of Intent to Issue was published in The Lakeland Ledger on June 7, 2001.

COMMENTS/CHANGES

No comments were received from EPA or from the Fish and Wildlife Service.

Comments were received from the applicant's consultant (Golder Associates) on June 12, 2001. These are addressed individually below.

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.]

RESPONSE: The Department will revise the condition as follows:

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 (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. Alternately, the permittee shall submit a determination of PSD applicability for proposed permit changes, which the Department shall consider in making its determination. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]

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 and consecutive 12-month period, regardless of heat input, is acceptable to the applicant. This hour's limitation for oil firing is also similar to the oil firing limitation

for the cogeneration unit. The requested alternative conditions 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]

RESPONSE: The Department will revise the condition (throughout) as follows:

6. Allowable Operation: The combustion turbine shall utilize no more than 2,227,400 MMBtu of natural gas during any consecutive 12-month period. In the event that fuel oil is combusted during any consecutive 12-month period, the heat input limitation shall be reduced by 1.8 MMBtu for every 1.0 MMBtu of fuel oil combusted. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount and heat inputs 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]

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.

RESPONSE: The Department will revise the condition as follows:

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, based upon a 12-month rolling total and natural gas firing. 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.

CONCLUSION

The final action of the Department is to issue the permit with the changes described above.

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE:

Calpine Eastern Corporation
Boston, MA 02110

Authorized Representative:
Mr. Robert K. Alff
Senior Vice President

ARMS Permit No.	1050221-004-AC
Facility ID No.	1050221
SIC No.	4911
Expires:	April 1, 2003

PROJECT AND LOCATION

The proposed project authorizes the installation of one simple cycle, combustion turbine with an electrical generator set. The gas turbine is capable of producing a nominal 104 MW of electricity.

The project will be located in Polk County at 1501 West Derby Avenue, Auburndale. The UTM coordinates are Zone 17, 420.8 km E, 3103.2 km N and map coordinates are Latitude 28° 03' 06", Longitude 81° 48' 21".

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

APPENDICES

The following Appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources Management

Date:

FACILITY DESCRIPTION

The existing facility is a cogeneration plant consisting of a combined cycle combustion turbine cogeneration system rated at 156 total megawatts (MW) output. The combined cycle system consists of one combustion turbine (CT), one unfired heat recovery steam generator (HRSG), and one steam turbine-generator. The facility utilizes pipeline natural gas as its primary fuel source and low sulfur (0.05 % by weight) distillate fuel oil as a backup fuel source. Also located at this facility are two distillate fuel oil storage tanks, and miscellaneous unregulated/insignificant emissions units and/or activities. Completion of this project will result in the installation of a new electric power generator capable of providing a nominal 104 MW of electrical power.

NEW EMISSIONS UNIT

The proposed project will result in the following new emissions unit, as well as additional limitations being placed upon existing Emission Unit 001.

ARMS ID No.	EMISSION UNIT DESCRIPTION
006	Westinghouse 501D5A combustion turbine (CT) configured for simple cycle operation, 1369 MMBtu/hr for natural gas and 1412 MMBtu/hr for number 2 fuel oil (0.05% S) at ISO conditions. Evaporative cooling is authorized.

REGULATORY CLASSIFICATION

HAPs: This facility will not be a major source of hazardous air pollutants (Title III).

Acid Rain: This facility is subject to the acid rain provisions of the Clean Air Act (Title IV).

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

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

NSPS Sources: The combustion turbines specified in this permit are subject to regulation under the New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60, Subpart GG.

RELEVANT DOCUMENTS

- Permit application received on 12/12/00
- Department's Request For Additional Information (RFI) distributed on 1/10/01
- Applicant's response to RFI received 1/19/01
- Department's 2nd RFI distributed on 2/6/01
- Application complete on 5/18/01
- Intent to Issue Permit package (including Technical Evaluation and Preliminary Determination) issued on 5/24/01

GENERAL AND ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114.

2. Compliance Authority: All documents related compliance activities such as reports, tests, and notifications should be submitted to the Air Resources Section of the Southwest District Office, Florida Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 3619-8218. The phone number is 813/744-6100 and the fax number is 813/744-6084.

3. Terminology: The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code.

4. General Conditions: The owner and operator are subject to, and shall operate under the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

7. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

8. Expiration: This air construction permit shall expire on April 1, 2003. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4) 62-4.080, and 62-4.210, F.A.C]

9. Title V Permit: This permit authorizes construction and/or installation of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The owner or operator shall apply for a Title V operation permit at least ninety days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and a copy sent to the Department's Southwest District office. [Rules 62-4.030, 62-4.050, 62-4.220, and 62-213.420, F.A.C.]

This section of the permit addresses the following new emissions unit *and existing Emission Unit 001*.

EU ID No.	EMISSION UNIT DESCRIPTION
006	Siemens/Westinghouse Model W501D5A combustion turbine with electrical generator set: Westinghouse 501D5A combustion turbine (CT) Unit 2 configured for simple cycle operation. Water injection technology shall be utilized for NO_X control. Heat inputs are 1369 MMBtu/hr for natural gas and 1412 MMBtu/hr for number 2 fuel oil (0.05% S), both during ISO conditions. Exhaust gases exit a 50 feet tall stack that is 22 feet in diameter at approximately 1000°F with a volumetric flow rate of 1,887,143 acfm.

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS Requirements: The combustion turbine shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.

   (a) **Subpart A, General Provisions**, incuding:

   - 40 CFR 60.7, Notification and Record Keeping
   - 40 CFR 60.8, Performance Tests
   - 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
   - 40 CFR 60.12, Circumvention
   - 40 CFR 60.13, Monitoring Requirements
   - 40 CFR 60.19, General Notification and Reporting Requirements

   (b) **Subpart GG, Standards of Performance for Stationary Gas Turbines** These provisions include a requirement to correct test data to ISO conditions; however, such correction is not used for compliance determinations with the BACT standards.

PERFORMANCE RESTRICTIONS

2. Combustion Turbines: The permittee is authorized to install, tune, operate and maintain one new combustion turbine with electrical generator set (Siemens/Westinghouse Model 501D5A). The unit is designed to produce a maximum 135 MW of electrical power. [Applicant Request]

3. Permitted Capacity: The heat input to the combustion turbine from firing natural gas shall not exceed 1591 MMBtu per hour based on the following: 100% base load, a higher heating value (HHV) for natural gas and a compressor inlet air temperature of 32° F. The heat input to the combustion turbine from firing No. 2 fuel oil shall not exceed 1546 MMBtu per hour based on the following: 100% base load and a compressor inlet air temperature of 32° F. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing subsequent to both Phases. Heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. [Design, Rule 62-210.200, F.A.C. (Definition - PTE)]

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 (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. Alternately, the permittee shall submit a determination of PSD applicability for proposed permit changes, which the Department shall consider in making its determination. [Rules 62-212.400(2)(g) and 62-212.400(6)(b), F.A.C.]

5. Allowable Fuels: The combustion turbine shall be fired with pipeline-quality natural gas containing no more than 2 grains of sulfur per 100 dry standard cubic feet of gas, monthly average. It is noted that this limitation is much more stringent than the sulfur dioxide limitation in 40 CFR 60, NSPS Subpart GG and assures compliance with regulations 40 CFR 60.333 and 60.334 of this Subpart. The permittee shall demonstrate compliance with the fuel sulfur limits by keeping the records specified in this permit. The use of fuel oil containing no more than 0.05% sulfur by weight shall not exceed 400 hours during any consecutive 12-month period. [Applicant Request, Rule 62-210.200, F.A.C. (Definition - PTE)]

6. Allowable Operation: The combustion turbine shall utilize no more than 2,227,400 MMBtu of natural gas during any consecutive 12-month period. In the event that fuel oil is combusted during any consecutive 12-month period, the heat input limitation shall be reduced by 1.8 MMBtu for every 1.0 MMBtu of fuel oil combusted. The permittee shall install, calibrate, operate and maintain a monitoring system to measure and accumulate the amount and heat inputs 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]

7. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

EMISSIONS CONTROLS

8. Unconfined Emissions of Particulate Matter: [Rule 62-296.320(4)(c), F.A.C.]

   (a) No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.

   (b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

   (c) Reasonable precautions include the following:

   - Paving and maintenance of roads, parking areas and yards.
   - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
   - Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
   - Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
   - Landscaping or planting of vegetation.

- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

(d) In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

9. Water Injection Technology: The permittee shall install, calibrate, tune, operate, and maintain a water injection system for the unit. The system shall be designed and operated so as to ensure that NO_X emissions do not exceed 25 ppmvd @15% O_2. [Applicant request; PSD avoidance]

10. Tuning: Prior to the initial emissions performance tests for the gas turbine, the water injection system shall be tuned to optimize the reduction of NO_X emissions (within the other limitations of this permit). Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations to minimize permitted pollutant emissions. [Design, PSD avoidance]

11. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

EMISSIONS STANDARDS

12. Summary: The following table summarizes the emissions standards specified in this permit. Although these limits were not determined by BACT, they (along with other limitations described herein) form the basis for the Department's determination that PSD does not apply.

Pollutant	Gas Emission limit	Oil Emission limit
NO_X	25 ppmvd @ 15% O_2	42 ppmvd @ 15% O_2
CO	10 ppmvd @ 15% O_2	10 ppmvd @ 15% O_2
VOC	4 ppmvd @ 15% O_2	5 ppmvd @ 15% O_2
SO_2	2 grains / 100 SCF	74.9 lb/hr (0.05% S)
PM_{10}	2.9 lb/hr	58.5 lb/hr

13. Carbon Monoxide (CO):

CO emissions from the combustion turbine shall not exceed 10.0 ppmvd (at full output of the emissions unit) corrected to 15% oxygen. Additionally, annual emissions of CO from this emission unit shall not exceed 99 TPY, based upon a 12-month rolling total.

The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the CEMS requirement of this permit. [Rule 62-212.400, F.A.C. (PSD avoidance)]

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, based upon a 12-month rolling total and natural gas firing.* 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.

The permittee shall demonstrate compliance with this standard as described in Specific Condition 31 and by conducting performance tests and emissions monitoring in accordance with EPA Method 20 and the CEMS requirement of this permit. Short-term (ppmvd) NO_X emissions from the new emissions unit shall not exceed the specified limitations based on a 24-hour block average for data collected from the continuous emissions monitor. [Rule 62-212.400, F.A.C. (PSD avoidance)]

15. Particulate Matter (PM/PM_{10}), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO_2)

    (a) Fuel Specifications. Emissions of PM, PM_{10}, SAM, and SO_2 shall be limited by the use of pipeline-quality natural gas containing no more than 2 grain per standard cubic feet, the use of 0.05% sulfur oil and good combustion techniques as specified in this permit. The permittee shall demonstrate compliance with the oil and gas fuel sulfur limits by maintaining the records specified by this permit as well as fulfilling the requirements specified in PSD-FL-185. The fuel specification is a work practice standard established as a means of determining the applicability of PSD [Rule 62-212.400, F.A.C. (PSD Applicability)] and as a synthetic minor limit for SAM/SO_2 emissions [Rule 62-4.070(3), F.A.C.].

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

16. Volatile Organic Compounds (VOC):

    VOC emissions from the combustion turbine shall exceed neither 4.0 ppmvd nor 5.0 ppmvd (gas and oil respectively) corrected to 15% oxygen. The permittee shall demonstrate compliance with these standards by conducting tests in accordance with EPA Method 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions, if specifically requested. [Application, Design, Rule 62-4.070(3), F.A.C.]

EXCESS EMISSIONS

17. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. These emissions shall be included in the calculation of the 12-month rolling and 24-hour averages to demonstrate compliance with the continuous emissions standards. [Rule 62-210.700(4), F.A.C.]

18. Excess Emissions Allowed: Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:

    (a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for up to 2 hours in any 24-hour period. [Design; Rule 62-210.700(1) and (5), F.A.C.]

    (b) During all startups, shutdowns, and malfunctions, the continuous emissions monitor (CEM) shall monitor and record emissions. However, up to 2 hours of monitoring data during any 24-hour period may be excluded from continuous compliance demonstrations as a result of startups, shutdowns, and documented malfunctions. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report. [Design; Rules 62-210.700(1), (5), and 62-4.130, F.A.C.]

(c) CEMS data exclusion and replacement methods shall be in accordance with EPA's Acid Rain requirements. Additionally, the permittee's record-keeping for the EU-001 and EU-006 NO_X emissions caps (TPY) shall be in full agreement with publicly available data on EPA's Acid Rain website.

EMISSIONS PERFORMANCE TESTING

19. Sampling Facilities: The permittee shall design the combustion turbine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. Permanent stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rules 62-4.070 and 62-204.800, F.A.C., and 40 CFR 60.40a(b)]

20. Performance Test Methods: Initial (I) and Annual (A) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Chapter 62-204.800, F.A.C.

    (a) EPA Method 9 - Visual Determination of the Opacity of Emissions from Stationary Sources (I, A);

    (b) EPA Method 10 - Determination of Carbon Monoxide Emissions from Stationary Sources (I, A);

    (d) EPA Method 20 - Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines (I, A); and

    (e) EPA Method 25A - Determination of Volatile Organic Concentrations (I). (EPA Method 18 may be conducted to account for the non-regulated methane portion of the VOC emissions.)

    Annual RATA testing at 100% output may be utilized to satisfy the above annual requirements for CO and NO_X tests. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the DEP Emissions Monitoring Section Administrator in accordance with an alternate sampling procedure specified in Rule 62-297.620, F.A.C.

21. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to initial NSPS performance tests and at least 15 days prior to any other required tests. [40 CFR 60.7, 40 CFR 60.8 and Rule 62-297.310(7)(a)9., F.A.C.]

22. Initial Tests Required: Initial performance tests to demonstrate compliance with the emission standards specified in this permit shall be conducted within 60 days after achieving at least 90% of permitted capacity, but not later than 180 days after initial operation of the emissions unit. Initial performance tests shall be conducted for CO, NO_X, VOC, and visible emissions from the combustion turbine. Initial NO_X performance tests shall be conducted in accordance with the requirements of NSPS Subpart GG including testing at four separate load conditions. NO_X emissions data shall also be converted into units of the NSPS emissions standard. CO performance tests shall be conducted concurrently with all NO_X performance tests required at the four load conditions. [Rule 62-297.310(7)(a)1., F.A.C.]

23. Annual Performance Tests: To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for CO, NO_X and visible emissions from the combustion turbine. If conducted at permitted capacity, CO and NO_X emissions data collected during the annual CO and NO_X continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). [Rule 62-297.310(7)(a)4., F.A.C.]

24. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for CO, NO_X, VOC, and visible emissions from the combustion turbine. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants that are required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3., F.A.C.]

25. Tests After Substantial Modifications: All performance tests required for initial startup shall also be conducted after any substantial modification and appropriate shakedown period of air pollution control equipment. Shakedown periods shall not exceed 100 days after re-starting the combustion turbine. [Rule 62-297.310(7)(a)4., F.A.C.]

26. Combustion Turbine Testing Capacity: Initial performance tests shall be conducted in accordance with 40 CFR 60.8 and 40 CFR 60.335 for pollutants subject to a New Source Performance Standard (NSPS) in Subpart GG for stationary gas turbines. Other required performance tests for compliance with standards specified in this permit shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 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. However, 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 inlet temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Emissions performance tests shall meet all applicable requirements of Chapters 62-204 and 62-297, F.A.C. [Rule 62-297.310(2), F.A.C.]

27. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

28. Applicable Test Procedures

    (a) Required Sampling Time.

        1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. [Rule 62-297.310(4)(a)1., F.A.C.]

        2. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2., F.A.C.]

    (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]

    (c) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]

29. Determination of Process Variables

    (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]

    (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient

accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]

30. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

31. Continuous Emission Monitoring System: The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the exhaust stack of this emissions unit to measure and record the emissions of NO_X and CO from the emissions units, and the oxygen (O_2) content of the flue gas at the location where NO_X and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEM system shall be used to demonstrate compliance with the emission limits for NO_X and CO within this permit.

    Compliance with the emission limits for NO_X shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 valid hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.

    For the EU-001 and EU-006 annual (TPY) emissions limits of NO_X, measurements shall be in pounds (converted to tons) and be based on a 12-month rolling total starting at the first day of each calendar month. Each monthly total shall be calculated by adding each valid 24-hour block average (as determined above) from valid operating days (all fuels) within the calendar month. This monthly total shall be combined with the emissions from the previous valid 11 calendar months and shall comprise a 12-month rolling total.

    For the 9-ppmvd annual equivalent emissions limit, which is being placed upon EU-001, measurements shall be in ppmvd and be based on a 12-month rolling total starting at the first day of each calendar month. Each monthly total shall be calculated by adding each valid (daily) 24-hour gas firing block averages (as determined above) from valid operating days within the calendar month. This monthly total shall be combined with the previous valid 11 calendar months and shall comprise a 12-month rolling total. In order to convert each 12-month rolling total to an annual equivalent limit, the following formula shall be utilized:

    $ppmvd_e = ppmvd_a * [hours_g/8760]$ where:
    $ppmvd_e$ = the equivalent annual short-term emissions for nitrogen oxides (ppmvd corrected to 15% O_2)
    $ppmvd_a$ = the measured (CEMS) 12-month rolling short-term emissions for NO_X (ppmvd corr. to 15% O_2)
    $hours_g$ = 12-month rolling total valid hours of operation combusting natural gas

For the EU-006 annual CO emissions limit, measurements shall be in pounds (converted to tons) and be based on a 12-month rolling total starting at the first day of each calendar month. Each monthly total shall be calculated by adding each valid 24-hour block average (as determined above) from valid operating days within the calendar month. This monthly total shall be combined with the previous valid 11 calendar months and shall comprise a 12-month rolling total.

Annual (12-month rolling total) NO_X and CO limits shall be recalculated monthly and available on site for inspection purposes. Additionally, each year the facility shall submit all 12 months worth of calculations as part of the AOR submission.

32. Certification: The NO_X monitor shall be certified and operated in accordance with the following requirements. The NO_X monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the emission limits of this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E, of Appendix A of 40 CFR 60. The NO_X monitor shall be a dual range monitor. The span for the lower range shall not be greater than 30 ppm, and the span for the upper range shall not be greater than 100 ppm, as corrected to 15% O_2.

    The CO monitor and O_2 monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. The O_2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to the Department's Southwest District Office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, of Appendix A of 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The span for the CO monitor shall not be greater than 100 ppm, as corrected to 15% O_2. The RATA tests required for the O_2 monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60. The span for the O_2 monitor shall not be greater than 21 percent.

33. NO_X/CO CEMS Data Requirements: NO_X, CO and O_2 emissions data shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. NO_X and CO emissions data recorded during these episodes may be excluded from the block average calculated to demonstrate compliance with the emission limits of this permit as provided in this paragraph. Periods of data excluded for startup and shutdown shall not exceed two hours in any block 24-hour period. Periods of data excluded for malfunctions shall not exceed two hours in any 24-hour block period. All periods of data excluded for any startup, shutdown or malfunction episode shall be consecutive for each episode. Periods of data excluded for all startup, shutdown or malfunction episodes shall not exceed four hours in any 24-hour block period. The owner or operator shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction events shall not be excluded if the startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented.

    Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor

maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to the Department's Southwest District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.

Upon request from the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.

[Rules 62-4.070(3) and 62-212.400., F.A.C., and PSD avoidance]

[Note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures.]

COMPLIANCE DEMONSTRATIONS

34. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

35. Fuel Records: The permittee shall demonstrate compliance with the fuel sulfur limit for natural gas specified in this permit by maintaining records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. The analysis may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used to determine the fuel sulfur content for compliance with the 40 CFR 60.333 SO_2 standard. Fuel oil sampling for this emissions unit shall be conducted as per the requirements established in PSD-FL-185. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

36. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.

    (a) When requested by the Department, the CEMS emission rates for NO_X on this unit shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332.

    (b) Data collected from the NO_X CEM shall be used to report excess emissions in accordance with 40 CFR 60.334(c)(1) of NSPS, Subpart GG.

(c) A *custom fuel monitoring schedule* pursuant to 40 CFR 75 Appendix D may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) as provided for in PSD-FL-185.

37. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the hours of operation by fuel type, 12-month emission totals for NO_X and CO and amount of each fuel fired for the combustion turbine. Likewise, by the fifth calendar day of each month, the 12-month emission totals for the NO_X requirements that have been placed upon the existing EU-001 by this permit shall be recorded. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C.]

REPORTS

38. Emissions Performance Test Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.].

39. Quarterly Excess Emissions Reports: If excess CO, NO_X or visible emissions occur due to malfunction, the permittee shall notify the Compliance Authority 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. Following the NSPS format in 40 CFR 60.7, Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. Within thirty (30) days following each calendar quarter, the permittee shall submit a report on any periods of excess emissions that occurred during the previous calendar quarter to the Compliance Authority. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7]

40. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. This report shall include a summary of each of the prior year 12-month emission limitations, which are required for EU-001 and EU-006 by this permit. [Rule 62-210.370(2), F.A.C.]

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a) Have access to and copy and records that must be kept under the conditions of the permit;
b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

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

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.

G.13 This permit also constitutes:

a) Determination of Best Available Control Technology ( )
b) Determination of Prevention of Significant Deterioration ( ); and
c) Compliance with New Source Performance Standards (X).

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.

Memorandum

Florida Department of
Environmental Protection

TO: Howard L. Rhodes

THRU: Clair Fancy
Al Linero

FROM: Michael P. Halpin

DATE: June 22, 2001

SUBJECT: Calpine Eastern – Auburndale Cogeneration Facility

Attached for approval and signature is a minor air construction permit for the subject (new) emission unit.

The applicant proposes to install this new simple cycle combustion turbine as a minor source, avoiding a PSD Review and BACT Determination. Netting was utilized in order to avoid these reviews. The unit will be allowed to meet a NO_X emission rate of 25 ppmvd during natural gas firing (achieved by water injection) which is allowable under the NSPS. Oil firing is being authorized at a NO_X emission rate of 42 ppmvd for up to 400 hours per year.

Individual emission unit limits are included (for both the new and existing unit) in accordance with EPA's guidance on netting. The existing unit will be limited to 9 ppmvd NO_X on an annual equivalent basis while firing natural gas, and 177 TPY of total NO_X emissions. The new unit will be limited to 115 TPY of NO_X and 1400 total equivalent hours of operation (via a heat input limit). The permit is structured so as to ensure compliance with the PSD non-applicability determination via the use of CEMS for NO_X and CO. No other emissions from the new unit have any realistic chance of exceeding the PSD thresholds.

I recommend your approval and signature.

Attachments

/mph

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

7000 0600 0026 4129 8726

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

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Mr. Benjamin Borsch
Street, Apt. No.; or PO Box No.
The Pilot House, 2nd Fl, Lewis Wharf
City, State, ZIP+4
Boston, MA 02110

PS Form 3800, February 2000 See Reverse for Instructions

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

7000 0600 0026 4129 8665

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

Postmark Here

Recipient's Name (Please Print Clearly) (to be completed by mailer)
Robert K. Alff
Street, Apt. No.; or PO Box No.
The Pilot House, 2nd Fl, Lewis Wharf
City, State, ZIP+4
Boston, MA 02110

PS Form 3800, February 2000 See Reverse for Instructions

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:

Mr. Benjamin Borsch
Environmental Manager
Calpine Eastern Corp.
The Pilot House, 2nd Fl
Lewis Wharf
Boston, MA 02110

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery 6/29/01

C. Signature

X ☐ 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 0600 0026 4129 8726

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:

Robert K. Alff
Senior Vice President
Calpine Eastern Corporation
The Pilot House
2nd Floor, Lewis Wharf
Boston, MA 02110

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* | B. Date of Delivery 6/29/01

C. Signature

X ☐ 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 0600 0026 4129 8665

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789