

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF FINAL PERMIT AMENDMENT

In the Matter of an  
Application for Permit Amendment

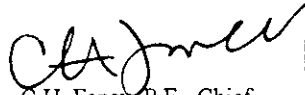
Auburndale Power Partners  
12500 Fair Lakes Circle Suite 200  
Fairfax, Virginia 22033-3804

DEP File No. 1050221-003 AC  
AC53-208321, PSD-FL-185  
Auburndale Cogeneration Facility  
Polk County

Enclosed is a letter that amends Permit Number AC53-208321 (PSD-FL-185). This letter extends the NO<sub>x</sub> compliance date on the 104 MW Westinghouse 501D combustion turbine while operating on gas by one year. This permit amendment is issued pursuant to Section 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

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

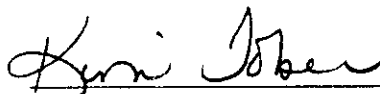
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT AMENDMENT (including the FINAL permit amendment) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 5-22-97 to the person(s) listed:

Mr. Bruce L. Franco, P.E., Auburndale Power Partners \*  
Mr. Tom Davis, P.E., ECT  
Mr. Brian Beals, EPA  
Mr. John Bunyak, NPS  
Mr. Bill Thomas, SWD

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
(Clerk)

5-22-97  
(Date)

## FINAL DETERMINATION

Auburndale Power Partners

Modification of Permit No. AC53-208321 (PSD-FL-185)  
Auburndale Cogeneration Facility

An Intent to Issue an air construction permit modification for Auburndale Power Partners Cogeneration Facility located in Auburndale, Polk County, Florida was distributed on March 5, 1997. The Notice of Intent was published in the Lakeland Ledger on March 12, 1997. Copies of the modification were available for public inspection at the Department offices in Tallahassee and Tampa. Comments from the applicant were submitted in response to the public notice. The applicant requested additional language which lists acceptable Relative Accuracy Test Audit (RATA) test methods. This request is acceptable and the list was included in specific condition No.8.

The final action of the Department will be to issue the permit modification as proposed in the public notice, but with the additional RATA test method language included.



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

May 19, 1997

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Bruce L. Franco, P.E.  
Executive Director  
Auburndale Power Partners, L.P.  
12500 Fair Lakes Circle, Suite 200  
Fairfax, Virginia 22030

Re: Permit Modification AC53-208321 (PSD-FL-185)  
DEP File Number: 1050221-003  
Extension of NO<sub>x</sub> Compliance Date, Compliance by CEMS for NO<sub>x</sub>, and  
Removal of ISO Correction

Dear Mr. Franco:

The Department has reviewed the request concerning the above referenced items relating to the gas turbine located at the Auburndale facility. This request is acceptable to the Department and the permit is hereby modified as follows:

### Specific Condition 1, Table 1

Amended per attached tables

### Specific Condition No. 8:

#### FROM:

Method 20      Determination of the Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines.

#### TO:

Method 20      Determination of the Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines (for compliance with 40 CFR 60.335 only and only for the initial test, no annual test or test prior to renewal of operation permits is required).

Pursuant to 40 CFR 75 Appendix A, Section 6.5.10, the following methods from 40 CFR Part 60 Appendix A or their approved alternatives are acceptable reference methods for performing relative accuracy test audits: Method 1 or 1A for siting; Method 2 (or 2A, 2C, or 2D) for velocity; Methods 3, 3A, or 3B for O<sub>2</sub> or CO<sub>2</sub>; Method 4 for moisture; Methods 6, 6A, or 6C for SO<sub>2</sub>; Methods 7, 7A, 7C, 7D, 7E for NO<sub>x</sub>, excluding the exception in Section 5.1.2 of Method 7E.

Specific Condition 13:

FROM:

During performance tests, to determine compliance with the proposed NO<sub>x</sub> standard, measured NO<sub>x</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

TO:

During performance tests, to determine compliance with the NSPS Subpart GG NO<sub>x</sub> standard, measured NO<sub>x</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

Specific Condition 17:

FROM:

A continuous monitoring system shall be installed to monitor and record the fuel consumption on each unit. While steam injection is being utilized for NO<sub>x</sub> control, the steam to fuel ratio at which compliance is achieved shall be incorporated into the permit and shall be continuously monitored. The system shall meet the requirements of 40 CFR Part 60, Subpart GG.

TO:

A continuous monitoring system shall be installed to monitor and record the fuel consumption on each unit. While water injection is being utilized for NO<sub>x</sub> control, the water (all phases) to fuel ratio shall be continuously monitored. The system shall meet the requirements of 40 CFR Part 60, Subpart GG. The NO<sub>x</sub> CEMS will be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring, which are required in 40 CFR 60.334. The NO<sub>x</sub> CEMS shall be used to report excess emissions during periods of startup, shutdown, and malfunction in lieu of FBN monitoring and the water/fuel monitoring system described in 40 CFR 60.334(c)(1).

Specific Condition 18:

FROM:

Sulfur, nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be based on a weighted 12 month rolling average from fuel deliver receipts. The records of fuel oil usage shall be kept by the company for a two-year period or regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05 percent sulfur by weight.

TO:

Sulfur and lower heating value of the fuel being fired in the combustion turbines shall be based on a weighted 12 month rolling average from fuel deliver receipts. The records of fuel oil usage shall be kept by the company for a two-year period or regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05 percent sulfur by weight.

Specific Condition 27:

FROM:

Pursuant to F.A.C. Rule 17-210.300(2), Air Operating Permits, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur, nitrogen contents and the lower heating value of the fuel being fired, fuel usage, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Southwest District Office by March 1 of each calendar year.

TO:

Pursuant to F.A.C. Rule 62-210.370(3), Annual Operating Report for Air Pollution Emitting Facility, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur and the lower heating value of the fuel being fired, fuel usage, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Southwest District Office by March 1 of each calendar year.

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

Sincerely,



Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/mc

Enclosures

FROM:

Auburndale Power Partners - AC53-208321 (PSD-FL-185)

TABLE 1 - ALLOWABLE EMISSION RATES

Pollutant	Fuel <sup>A</sup>	Allowable Emission Standard/Limitation	Basis
NO <sub>x</sub>	Gas	15 ppmvd @ 15% O <sub>2</sub> & ISO (78.6 lbs/hr; 344.3 TPY) <sup>B</sup>	BACT
	Gas	25 ppmvd @ 15% O <sub>2</sub> & ISO (131.0 lbs/hr; 573.8 TPY)	BACT
	Oil	42 ppmvd @ 15% O <sub>2</sub> & ISO (230.0 lbs/hr; 1,007.4 TPY)	BACT
CO	Gas	21 ppmvd (43.5 lbs/hr; 190.5 TPY) <sup>C</sup>	
	Gas	15 ppmvd (43.5 lbs/hr; 190.5 TPY)	BACT
	Oil	25 ppmvd (73.0 lbs/hr; 319.7 TPY)	BACT
VOC	Gas	6.0 lbs/hr; 26.3 TPY	BACT
	Oil	10.0 lbs/hr; 43.8 TPY	BACT
PM <sub>10</sub>	Gas	0.0134 lb/MMBtu (10.5 lbs/hr; 46.0 TPY)	BACT
	Oil	0.0472 lb/MMBtu (36.8 lbs/hr; 161.2 TPY)	BACT
SO <sub>2</sub>	Gas	40.0 lbs/hr; 175.2 TPY	BACT
	Oil	70.0 lbs/hr; 306.6 TPY	BACT
H <sub>2</sub> SO <sub>4</sub>	Gas	7.5 lbs/hr; 32.9 TPY	BACT
	Oil	14 lbs/hr; 61.3 TPY	BACT
Opacity	Gas	10% opacity <sup>D</sup>	BACT
	Oil	10% opacity	BACT
Hg	Gas	1.10 x 10 <sup>-5</sup> lb/MMBtu (0.001 lb/hr; 0.06 TPY)	Appl.
	Oil	3.0 x 10 <sup>-6</sup> lb/MMBtu (0.004 lb/hr; 0.016 TPY)	Appl.
As	Oil	1.61 x 10 <sup>-4</sup> lb/MMBtu (0.20 lb/hr; 0.05 TPY)	BACT
F	Oil	3.30 x 10 <sup>-5</sup> lb/MMBtu (0.04 lb/hr; 0.17 TPY)	Appl.
Se	Oil	2.0 x 10 <sup>-6</sup> lb/MMBtu (0.003 lb/hr; 0.014 TPY)	BACT
Pb	Oil	1.04 x 10 <sup>-4</sup> lb/MMBtu (0.13 lb/hr; 0.510 TPY)	BACT

A) Fuel: Natural Gas. Emissions are based on 8360 hours per year operating time burning natural gas and 400 hours per year operating time burning No. 2 fuel oil.  
Fuel: No. 2 Distillate Fuel Oil (0.05% S). Emissions are based on 8760 hours per year burning fuel oil.

B) The NO<sub>x</sub> maximum limit will be lowered to 15 ppm by 9/30/97 (about 18 months after natural gas is first fired) using appropriate combustion technology improvements or SCR.

C) 21 ppmvd at minimum load.  
15 ppmvd at base load.

D) 10% opacity at full load conditions.

Fold at line over top of envelope to

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

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

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

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

Consult postmaster for fee.

3. Article Addressed to:

Bruce L. Franco, Inc.  
Auburndale Power Partners  
12500 Fair Lakes Circle  
Suite 200  
Fairfax, VA 22030

4a. Article Number

P265 659 187

4b. Service Type

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

7. Date of Delivery

5.27.97

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)

X Christi Bryden

PS Form 3811, December 1994

Domestic Return Receipt

Thank you for using Return Receipt Service.

P 265 659 187

US Postal Service

**Receipt for Certified Mail**

No insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	Bruce Franco
Street & Number	Auburndale PP, VA
Post Office, State, & ZIP Code	Fairfax, VA
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	5-22-97
AC53-208321	
P50-F1-185	

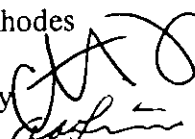

PS Form 3800, April 1995


# Memorandum

## Florida Department of Environmental Protection

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TO: Howard Rhodes

THRU: Clair Fancy   
Al Linero  5/14

FROM: Cleve Holladay 

DATE: May 12, 1997

SUBJECT: Auburndale Power Partners, Combustion Turbine, Gas Operation  
Extension of Compliance Date for 15 ppm NO<sub>x</sub> Rate

I have attached a permit modification extending the applicability date by one year for the ratchet-down provision for NO<sub>x</sub> emissions. The provision is applicable to a 104 MW Westinghouse 501D combustion turbine while operating on gas.

APP has provided documentation that the 501D does not provide sufficient steam from the HRSG to meet both the needs of the "steam host" and injection to lower NO<sub>x</sub> emissions. The extension will allow APP and Westinghouse time to test a system which relies on steam and water injection. They will also evaluate other options, such as installing auxiliary steam boilers, prior to making a final commitment to SCR. Based on information provided to APP by Westinghouse and APP's specific request, a December 31, 1998 compliance date is more realistic.

Kissimmee Utilities Authority (KUA), Orange Cogen, and DESTEC/Tiger Bay are experiencing similar problems. DESTEC/Tiger Bay has already had its compliance date deferred by one year, and we are concurrently modifying KUA's permit.

I believe there is good justification for the delay. I recommend your approval and signature.