

**AUBURNDALE POWER PARTNERS, LIMITED PARTNERSHIP**

**12500 Fair Lakes Circle Suite 200 Fairfax, Virginia 22033-3804**

**Telephone: (703) 222-0445 Fax: (703) 222-0516**

February 18, 1997

LTR.APP0064

**Via Fax and Fed-Ex**

Mr. Al Linero, P.E.  
Administrator, Division of Air Resources Management  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**RE: Auburndale Power Partners, Limited Partnership (APP)  
Auburndale Cogeneration Facility/Permit AC53-208321/PSD-FL-185  
APP's PSD Permit Modification Request dated January 30, 1997**

Dear Mr. Linero:

Pursuant to our meeting held on February 6th and recent phone conversations with Martin Costello, the following three clarifications of Item (2) of the referenced January 30th permit modification request are provided for your consideration:

- Item (2) of the January 30th permit modification letter requested that a footnote be added to Table 1 of Permit AC53-208321/PSD-FL-185 indicating that compliance with the allowable NO<sub>x</sub> concentration ppmvd emission limits shall be determined on a 24-hour average basis. As discussed at our recent meeting, the existing NO<sub>x</sub> continuous emissions monitoring system (CEMS) would be used to determine compliance with the 24-hour block average allowable NO<sub>x</sub> concentration expressed as ppmvd at 15% oxygen. Auburndale Power Partners, Limited Partnership (APP) would also use the NO<sub>x</sub> CEMS to monitor and report excess emissions pursuant to 40 CFR Part 60, Subpart GG. Because the NO<sub>x</sub> CEMS would be used to monitor compliance with the permit BACT limits as well as NSPS Subpart GG excess emissions, APP requests that Specific Condition 17 pertaining to steam to fuel ratio monitoring be replaced with the following language:

"The NO<sub>x</sub> CEMS will be used in lieu of the steam/fuel monitoring system and fuel bound nitrogen (FBN) monitoring, which are required in accordance with 40 CFR 60, Subpart GG, and are used as indicators of compliance with the Subpart GG NO<sub>x</sub> standard. FBN levels are not required for excess emission reports when excess emissions are reported and based on the NO<sub>x</sub> CEMS. Certification tests of the NO<sub>x</sub> CEMS will replace the calibration of the steam/water monitoring device required by 40 CFR 60.335(c)(2)."

- Because the NO<sub>x</sub> CEMS will be used for compliance monitoring, APP requests that Specific Condition No. 8 of Permit AC53-208321/PSD-FL-185 be revised to remove the requirement for annual NO<sub>x</sub> testing using Reference Method 20. Deletion of the NO<sub>x</sub> testing requirement would become effective upon implementation of Item (2); i.e., 24-hour block averaging and use of NO<sub>x</sub> CEMS for compliance monitoring.
- Pursuant to recent conversations with Martin Costello, APP also requests that the following language be added to Table 1 of Permit AC53-208321/PSD-FL-185 regarding implementation of the 24-hour block average NO<sub>x</sub> concentration emission limits:

“a. NO<sub>x</sub> emission limits in ppmvd at 15% O<sub>2</sub> are blocked 24-hour averages (midnight to midnight) calculated as follows:

Compliance with the concentration (ppmvd at 15% O<sub>2</sub>) emission limits for NO<sub>x</sub> shall be demonstrated by the continuous emission monitoring system (CEMS). For each day (midnight to midnight), a 24-hour block average shall be calculated for the previous 24 hours. The 24-hour block average for each day (midnight to midnight) shall be determined by summing the hourly average NO<sub>x</sub> concentrations (expressed as ppmvd at 15% O<sub>2</sub>) for all available monitored operating hours divided by the number of available monitored operating hours. A monitored operating hour is each hour in which fuel is fired in the combustion turbine and in which at least two CEMS emission measurements are recorded at least 15 minutes apart. CEMS data taken during periods of startup, shutdown, or malfunction as defined in 62-210, F.A.C.; when fuel is not fired in the combustion turbine; when the CEMS is not calibrated; and during routine CEMS calibration and quality assurance checks, shall be excluded from the 24-hour block average.”

As discussed during our meeting, APP requests that the effective date of Items (1) and (2) of the January 30th permit modification request, with Item (2) as revised by this letter (i.e. deletion of the ISO correction, 24-hour block averaging, use of NO<sub>x</sub> CEMS for compliance monitoring, and deletion of the annual NO<sub>x</sub> testing using Reference Method 20) be on or before December 31, 1998 with a provision that APP provide FDEP with thirty days prior notice should APP decide to implement any modification prior to December 31, 1998.

With regard to the public notice period associated with this permit modification request, APP would prefer the 30 day comment period. If possible we would appreciate whatever the Department can do to maintain the April 1 goal for obtaining the modified permit. Please call me at (703) 222-0445 if you have any further questions regarding this request.

Sincerely,



Bruce L. Franco, P.E.  
Executive Director

cc: Tom Davis

BLF/b

cc: *Matty Costello, BAR*  
*SWD*

**AUBURNDALE POWER PARTNERS, LIMITED PARTNERSHIP**

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

Telephone: (703) 222-0445 Fax: (703) 222-0516

January 30, 1997

LTR.APP0057

Via Fax and Fed-Ex

Mr. Al Linero, P.E.  
Administrator, Division of Air Resources Management  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**RECEIVED**

JAN 31 1997

BUREAU OF  
AIR REGULATION

**Subj: Auburndale Cogeneration Facility**  
**Permit AC53-208321/PSD-FL-185**

Dear Mr. Linero:

Florida Department of Environmental Protection (FDEP) Permit AC53-208321/PSD-FL-185 was issued to Auburndale Power Partners, Limited Partnership (APP) on December 14, 1992. This permit requires a reduction in the current nitrogen oxides (NO<sub>x</sub>) emission limitation of 25 parts per million by volume, dry (ppmvd) @ 15% O<sub>2</sub> and ISO conditions to 15 ppmvd @ 15% O<sub>2</sub> and ISO conditions effective September 30, 1997. Pursuant to our meetings held in July and September of 1996 to discuss this requirement, APP requests the following amendments to Permit AC53-208321 (PSD-FL-185):

- (1) Table 1 of Subject Permit (Allowable Emission Rates) contains emission limitations in ppmvd for nitrogen oxides (NO<sub>x</sub>) corrected to International Organization for Standardization (ISO) reference conditions and 15% O<sub>2</sub>. In accordance with current FDEP policy (reference FDEP policy memo DARM-EM-05 dated November 22, 1995), deletion of the NO<sub>x</sub> concentration ISO correction requirement from Table 1 is requested;
- (2) The air pollutant emission limits specified in Table 1 (Allowable Emission Rates) for NO<sub>x</sub> concentrations (in ppmvd at 15% O<sub>2</sub>) do not contain an explicit averaging period for compliance purposes. The Auburndale Cogeneration Facility is equipped with a continuous emissions monitoring system (CEMS) to monitor NO<sub>x</sub> concentrations as presently required by Specific Condition 16. of Permit AC53-208321 (PSD-FL-185). APP requests that a footnote be added to Table 1 stating that compliance with the allowable NO<sub>x</sub> concentration ppmvd at 15% O<sub>2</sub> emission limits shall be determined on a 24-hour block average (midnight to midnight) basis; and

- (3) Extension of the deadline for meeting the 15 ppmvd at 15% O<sub>2</sub> NO<sub>x</sub> concentration emission limit from September 30, 1997 to December 31, 1998.

Regarding item 2 above, the averaging time for any future NO<sub>x</sub> performance test conducted pursuant to the New Source Performance Standard (NSPS) program would remain at one hour as you advised during our meetings. As indicated by Specific Condition No. 20., APP is presently required to comply with NSPS 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines. The applicable 40 CFR 60 Subpart GG NO<sub>x</sub> emission limit is specified by §60.332(a)(1); i.e., a concentration limit of 75 ppmvd corrected to 15% oxygen, ISO reference conditions, and with adjustments for fuel bound nitrogen and heat rate. The 24-hour averaging period requested above would not apply to any future NSPS performance tests.

As advised at our July 8th meeting and confirmed in our September 24th meeting, APP is presently unable to meet the future 15 ppmvd at 15% O<sub>2</sub> NO<sub>x</sub> limitation during all hours of the year through increased steam injection and at the same time maintain its current steam export commitments. The supplier of the combustion turbine (CT), Westinghouse Electric Corporation, has confirmed that a higher steam to fuel ratio than the original design ratio is required to meet the 15 ppmvd at 15% O<sub>2</sub> NO<sub>x</sub> limitation; information from Westinghouse on this issue is provided as Attachment I. APP and Westinghouse are currently in the process of evaluating several emission control alternatives with the potential capability to allow APP to comply with the future 15 ppmvd at 15% O<sub>2</sub> NO<sub>x</sub> limitation including, but not limited to, combined steam and water injection, installation of auxiliary boiler(s), or installation of a selective catalytic reduction (SCR) control system.

Preliminary field testing of a combination of steam and water injection has shown promise that this technology may be able to achieve the required NO<sub>x</sub> concentration of 15 ppmvd at 15% O<sub>2</sub> while meeting our steam export commitments. Using a temporary field test arrangement, APP and Westinghouse plan to conduct further performance testing as well as longer duration operational testing of this technology during the first and second quarters of 1997. As part of this test program, the CT combustors will then be thoroughly inspected during APP's annual planned maintenance outage (currently scheduled by Florida Power Corp. for mid-October, 1997) for any physical damage that may result from the water injection tests. Because there are presently no Westinghouse CTs in commercial operation which employ a combination of steam and water injection, an extended operational evaluation period and internal turbine inspection are necessary to ensure that this innovative control technology can meet the required NO<sub>x</sub> emission standard while not causing any long-term detrimental effects on the combustion turbine performance or the reliability and life of its components.

Following the combined steam and water injection operational testing period and after the turbine inspection and any subsequent laboratory component evaluation results have been reported and analyzed, the various NO<sub>x</sub> control alternatives (e.g. combined steam and water injection, auxiliary boiler(s), and SCR) will be re-evaluated. A final decision will be made as to which technology should be employed to reduce APP's NO<sub>x</sub> emission to the 15 ppmvd at

15% O<sub>2</sub> limit and appropriate steps taken to ensure that the selected alternative is designed, procured, and installed during the 1998 annual outage that should be completed by October 31, 1998. To allow time for startup, troubleshooting, and compliance testing, APP requests a final compliance deadline of December 31, 1998.

The only reason why the existing facility can not achieve the 15 ppmvd at 15% O<sub>2</sub> emissions limit is that there is insufficient steam available for CT injection while maintaining process steam export commitments. Installation of auxiliary boilers to provide additional steam for injection into the CT solves this, as well as providing several additional benefits. As a result of a million dollar development program undertaken by APP and Westinghouse, the existing CT combustors push the envelope of steam injection technology and are very capable of achieving the 15 ppmvd at 15% O<sub>2</sub> limit provided that there is sufficient steam supply available. Supplementing the current injection steam with steam generated by auxiliary boiler(s) solves the one and only problem that prevents the existing facility, as it was originally designed and configured, from being able to comply with the 15 ppmvd at 15% O<sub>2</sub> emission limit. At this point in time, we know that only two of the three possible alternatives (auxiliary boilers and SCR) are commercially viable; and if the water injection technology fails to prove itself out and that situation were to remain true, then auxiliary boiler(s) is also APP's preferred solution. This is because the boiler(s) would only need to be fired as required; they would have no impact on plant efficiency when not operating; they can be maintained and repaired while the facility is operating (during hours that additional steam is not required to achieve 15 ppmvd at 15% O<sub>2</sub>); their operating characteristics, performance and maintenance costs/cycles can be predicted with confidence; they present less risk to the on-going commercial viability of the facility; and they provide additional operational flexibility beyond emissions control.

It is recognized that the auxiliary boiler approach would result in additional air emissions, including NO<sub>x</sub>, due to combustion of natural gas, however it is expected that the total NO<sub>x</sub> emissions of the auxiliary boiler(s) will not exceed 40 tons per year. If this alternative is selected, small (each greater than 10 MMBtu/hr but less than 100 MMBtu/hr input) natural gas-fired boiler(s) will be installed to provide reliability and flexibility in operations. Because each boiler will have a heat input greater than 10 MMBtu/hr and less than 100 MMBtu/hr, the boiler(s) will be subject to NSPS 40 CFR 60 Subpart Dc-Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Total potential emissions from the auxiliary boiler(s) will be less than the major modification significance levels for all PSD regulated pollutants and therefore the auxiliary boilers will not be subject to PSD permitting review.

With regard to the other NO<sub>x</sub> control options, the combined steam and water injection control technology compares favorably with the other alternatives with respect to operational and environmental considerations; however, its performance capability, economics, and commercial viability must still be established. An SCR NO<sub>x</sub> control system, although commercially proven, presents several disadvantages including additional particulates; ammonia emissions due to unreacted ammonia; an increase in the complexity of plant

operations by the addition of a sophisticated air pollution control system that requires the handling and storage of ammonia; injection nozzles subject to plugging and which can not be repaired on-line; catalyst life cycles that can not be definitively established; and most importantly, the fact that the additional backpressure it places on the CT exhaust would adversely impact the CT's efficiency/natural gas consumption, even during periods when SCR operation is not required to achieve 15 ppmvd at 15% O<sub>2</sub>.

The ability of the existing steam injection system to achieve 15 ppmvd at 15% O<sub>2</sub> in any given hour is a function of the ambient temperature and the export steam rate delivered to APP's two steam hosts. Since both of these factors can vary over a wide range and neither is entirely predictable, it is difficult to determine how many hours out of the year supplemental control of NO<sub>x</sub> will be required or exactly when it will be needed, although, it is clear that supplemental control of NO<sub>x</sub> will not be required during every operating hour of the year and maybe not even every year. This situation makes it very difficult to justify a large capital expenditure in addition to what has already been spent on the combustor development program and the combustors themselves, just to patch what may be only an intermittent event that is dependent on the weather and the growth *or decline* of our steam hosts' businesses. This is especially true for an expenditure such as SCR which offers no other advantages other than NO<sub>x</sub> control and has so many disadvantages associated with it.

The requested deadline extension of 15 months for meeting the 15 ppmvd NO<sub>x</sub> concentration limit will result in higher NO<sub>x</sub> emissions during the extension period due to continued operation at the present actual NO<sub>x</sub> CT exhaust concentration of less than 25 ppmvd. However, FDEP Permit AC53-208321/PSD-FL-185 authorized the use of No. 2 fuel oil for an initial 18 month period based on the anticipated unavailability of natural gas. As discussed during our meetings, APP undertook extraordinary measures to make natural gas available at the time of initial operations and therefore the firing of No. 2 fuel oil was able to be avoided. Because NO<sub>x</sub> emissions are significantly greater when fuel oil is combusted in comparison to natural gas (i.e., by a factor of almost two), the avoidance of fuel oil combustion resulted in a substantial decrease in actual NO<sub>x</sub> emissions. Therefore, on a cumulative basis, facility NO<sub>x</sub> emissions, including the deadline extension, will be well below the level originally authorized by FDEP Permit AC53-208321/PSD-FL-185 had natural gas not been available at the time of initial startup. It is also important to note that the APP facility is located in an area (Polk County) which is classified attainment for all criteria pollutants, including NO<sub>2</sub> and ozone. Prior dispersion modeling demonstrated that NO<sub>x</sub> ambient impacts will be insignificant under worst-case conditions; i.e., during oil-firing. Accordingly, ambient impacts of NO<sub>x</sub> will remain insignificant during the deadline extension period.

In summary, a 15 month extension to the current September 30, 1997 deadline is requested to allow sufficient time to evaluate the commercial potential of the combined steam and water injection NO<sub>x</sub> control technology, make a final control alternative decision based on the best available data, and then design, procure, install, start-up, shake-down and compliance test the selected alternative. APP proposes to submit its final control alternative decision, as well as a

design, procurement, and construction schedule, to the Department no later than February 28, 1998. Provided that the additional permitting required to facilitate the use of auxiliary boiler(s) is completed, the February 28, 1998 date will allow time to make a reasoned decision among the NO<sub>x</sub> control alternatives based on the best available information while also providing adequate time to implement any control alternative selected and demonstrate compliance by the final December 31, 1998 deadline. This schedule is also structured to allow APP time to obtain agreement on the final path forward from its partners, banks, EPC contractor and combustion turbine vendor. With regard to the permitting of the auxiliary boilers, it is our intent to begin this process shortly after the permit modifications requested herein have been obtained.

APP submitted an initial Title V application to the Department in October 1995. In response to Department questions, additional information regarding the Title V permit application was submitted to the Department in November 1996. APP requests that the information contained in this permit modification letter be considered as an amendment to the previously submitted Title V permit application, and that any modified terms and conditions of Permit AC53-208321/PSD-FL-185 also be included in the draft Title V permit.

A permit modification fee check in the amount of \$250.00 is attached. Since our goal is to obtain these permit amendments by April 1, 1997, I would like to schedule a meeting with the Department sometime during the first two weeks of February. I already plan to be in Florida next week and can make myself available at your convenience to discuss the ensuing permit process and answer any questions you may have on this permit amendment request. I will call you tomorrow to see if we can set a specific date and time.

Sincerely,



Bruce L. Franco, P.E.  
Executive Director

BLF/bp

Attachments

CC: SWD  
EPA  
NPS  
H. Hirst  
C. Holladay



## ATTACHMENT I

**Westinghouse  
Electric Corporation**

Generation Systems Division  
4400 Alafaya Trail  
Orlando, Florida 32826

January 30, 1997

Auburndale Power Partners, Limited Partnership  
12500 Fair Lakes Circle, Suite 200  
Fairfax, Virginia 22033

Attention: Bruce Franco

Subject: Auburndale Power Partners, Limited Partnership  
Auburndale Cogeneration Facility / 15 ppm NOx Compliance

Dear Mr. Franco:

Westinghouse Electric Corporation is supporting the Auburndale Cogeneration Facility's efforts to reduce their NOx emissions. The following is a summary of our efforts to date.

After an extensive and costly development program, Westinghouse has produced the DF-42 combustor system to meet low NOx level emission requirements. This low emissions combustor uses water or steam injection to lower NOx levels. Westinghouse has tested and evaluated the performance of the DF-42 combustor using steam injection at the Auburndale Cogeneration Facility and has found that the steam flow required to meet the 15 ppmvd at 15% O2 NOx requirement is greater than originally projected.

Currently, the Auburndale plant does not produce sufficient steam to simultaneously meet the maximum export steam flow commitments and the 15 ppmvd at 15% O2 NOx emissions requirement. Therefore, consideration is being given to increasing the steam generation capacity by the addition of an auxiliary boiler, utilizing a combination of water and steam injection for NOx control, or adding a selective catalytic reduction system (SCR). Westinghouse is currently performing detailed calculations to determine the extent of the steam shortage under various combinations of operating and ambient conditions.

Of these three methods, the combination of water and steam injection is expected to have a good possibility for success with relatively minor impacts on the existing plant design and operation. During the October 1996 plant outage, a water injection system was installed on the combustion turbine at Auburndale. During an initial limited test of the combined water and steam injection system in December 1996, performed at base load and at low water injection rates, combustion remained very stable, steam injection was reduced appreciably, and NOx levels below 15 ppmvd at 15% O2 were achieved. However, CO emissions began to rise more rapidly than expected, as the water injection rate was increased. Although further investigation is required, the higher CO emission levels might be a result of water injection mechanical problems and may be reduced after repairs are made.



Further testing of the combined water and steam injection system cannot take place until mid-March, when the process steam flows can be interrupted to make adjustments to the water injection system. The combination of water injection and steam injection is expected to allow the export steam flow commitments and 15 ppmvd at 15% O<sub>2</sub> NO<sub>x</sub> limit to be met simultaneously. Additional testing is planned and will allow an evaluation of this expectation, as well as any impacts on CT components, plant operations, and other emissions.

We hope this information is useful. If we can be of further assistance on this matter, please feel free to contact us at any time.

Sincerely,

A handwritten signature in cursive script, appearing to read "B. Richardson for".

Ben Richardson, Principal Engineer  
Operating Plant Technical Support

CHECK NUMBER 006490

DATE 01/21/97

INVOICE	DESCRIPTION	DATE	PURCHASE ORDER NUMBER	GROSS AMOUNT	DISCOUNT	NET AMOUNT
011697		01/16/97	100887	250.00		250.00
TOTALS				250.00		250.00

PATENT NO. 4227720 AND 4310180

WARNING • THE FACE OF THIS DOCUMENT CONTAINS A VOID FEATURE WITHIN A RED BACKGROUND • WARNING

**AUBURNDALE POWER PARTNERS L.P.**  
 18101 VON KARMAN AVE., STE 1700  
 IRVINE, CA 92715-1046

BANK OF AMERICA NT & SA  
 1850 GATEWAY BOULEVARD  
 CONCORD, CA 95420

11-35  
 1210

CHECK DATE	CHECK NUMBER	AMOUNT
01/21/97	006490	*****\$250.00

PAY Two hundred fifty and 00/100 Dollars

TO  
 THE  
 ORDER  
 OF

FLORIDA DEPARTMENT OF  
 ENVIRONMENTAL PROTECTION  
 TWIN TOWERS OFFICE BLDG  
 2600 BLAIR STONE ROAD  
 TALLAHASSEE, FL 32399-2400

**\$250.00**  
 TWENTY FIVE ZERO ZERO ZERO

*Kevin M. Smith*  
 AUTHORIZED SIGNATURE

⑈006490⑈ ⑆121000358⑆ 12335⑈ 12971⑈



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

November 5, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bruce Franco  
Auburndale Power Partners, LP  
12500 Fair Lakes Circle, Suite 200  
Fairfax, Virginia 22033-3804

Re: Combustion Turbine Nitrogen Oxides Limit  
AC53-208321, PSD-FL-185

Dear Mr. Franco:

Per our discussions of July 8 and September 24, it is our understanding that Auburndale Power Partners requires more time to comply with the timetable set forth in the construction permit to reduce emissions of Nitrogen Oxides (NOx) from 25 to 15 parts per million (ppm) in an economically feasible manner.

At this time the unit is in compliance with the permit conditions and the 15 ppm NOx limit will not apply until October 30, 1997. We understand that Auburndale Power Partners LP requires approximately one more year to design, procure, install, and test a more economically feasible alternative control technology. In order to consider such a change, it will be necessary to submit an application for a permit modification with a fee of \$250 along with a short technical and economic justification which should address the incremental cost per ton of NOx removed (from 25 to 15 ppm) by steam injection. A schedule should be included for the selection and implementation of the final alternative (such as Selective Catalytic Reduction, Dry Low-NOx combustion, process modifications, etc.) to provide reasonable assurance that the 15 ppm limit will be met when projected by APP. Information from Westinghouse confirming the situation will be useful in reviewing the request.

We confirm that the Department is reviewing a similar request made by DESTEC/Tiger Bay who have opted for Selective Catalytic Reduction for their GE unit and we received another request from Kissimmee Utilities Authority to allow more time to retrofit a GE LM 6000 unit with Dry-Low NOx technology capable of meeting the same 15 ppm limits.

Bruce Franco  
Page 2  
11/5/96

The Department will give equal consideration to these extension requests but cannot commit to granting them until we have developed reasonable assurance through review of the applications that they are justified. In any case, an extension would still be contingent upon public notice of the request and opportunities for EPA and the National Park Service to comment on the proposals. We can commit to processing the requests within 45 days provided the applications are complete when received.

If you have any questions regarding this matter, please call me at (904)488-1344.

Sincerely,

A handwritten signature in cursive script, appearing to read "A. A. Linero", followed by the date "11/5".

A. A. Linero, P.E., Administrator  
New Source Review Section

AAL/aal/l

cc: C H. Fancy, BAR  
Tom Davis, ECT



Environmental Consulting & Technology, Inc.

Environmental Consulting & Technology, Inc. - ECT

3701 Northwest 98th Street  
Gainesville, Florida 32606  
904/332-0444

TELECOPY COVERSHEET

TO: Al Lindero  
TELECOPY NUMBER: (904) 922-6979  
FROM: Tom Davis  
DATE: 11/04/86 CHARGE NO.: \_\_\_\_\_

WE ARE TRANSMITTING 3 PAGES, INCLUDING COVERSHEET. IF THE  
TRANSMISSION WAS NOT COMPLETE OR IF THE MESSAGE WAS NOT LEGIBLE,  
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352/332-0444--SWITCHBOARD

352/332-6722--FACSIMILE MACHINE

352/332-6733--FACSIMILE MACHINE (Accounting)

COMMENTS: \_\_\_\_\_  
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The original of the transmitted document will be sent by:

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(X) This fax is the ONLY form of delivery



Environmental Consulting & Technology, Inc.

November 4, 1996

Mr. Al Linero, P.E.  
Administrator, Division of Air Resources Management  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Auburndale Cogeneration Facility  
Construction Permit AC53-208321

Dear Mr. Linero:

With reference to our recent telephone conversation, a draft letter from FDEP to Auburndale Power Partners (APP) is attached for your review. If possible, APP would like to receive the FDEP letter by fax tomorrow [Attention Bruce Franco, fax number (941) 965-1924] in preparation for a meeting later this week with APP's bankers.

Your cooperation in this matter is appreciated. Please contact me at (352) 332-6230, Ext. 351 if there are any questions regarding this request.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

A handwritten signature in cursive script that reads 'Thomas W. Davis'.

Thomas W. Davis, P.E.  
Senior Engineer

Attachment

3701 Northwest  
98th Street  
Gainesville, FL  
32606

(352)  
332-0444

FAX (352)  
332-6722

November 4, 1996

Mr. Bruce Franco  
Auburndale Power Partners, Limited Partnership  
12500 Fair Lakes Circle, Suite 200  
Fairfax, VA 22033-3804

Re: Auburndale Power Partners  
AC53-208321, PSD-FL-185

Dear Mr Franco:

Florida Department of Environmental Protection (FDEP) Permit AC53-208321 (PSD-FL-185) issued to Auburndale Power Partners (APP) on December 14, 1992 requires a reduction in the current nitrogen oxides (NO<sub>x</sub>) emission limitation of 25 parts per million by volume, dry (ppmvd) to 15 ppmvd effective October 30, 1997.

As you advised at our July 8th meeting and confirmed in our September 24th meeting, APP is presently unable to meet the future 15 ppmvd NO<sub>x</sub> limitation through increased steam injection and also maintain its current steam export commitments. You also advised that the supplier of the combustion turbine (CT), Westinghouse Corporation, has confirmed this conclusion based on a determination that a higher steam to fuel ratio than the original design ratio is required to meet the 15 ppmvd NO<sub>x</sub> limitation. APP and Westinghouse are currently in the process of evaluating several alternatives to meeting the future 15 ppmvd NO<sub>x</sub> limitation including, but not limited to, CT process modifications, installation of an auxiliary boiler(s), and installation of a selective catalytic reduction (SCR) control system.

Please be advised that FDEP would support extending the effective date of the 15 ppmvd NO<sub>x</sub> limitation (currently October 30, 1997) for an approximate one year period to allow APP sufficient time to develop and implement a solution to meet the lower 15 ppmvd NO<sub>x</sub> limitation. Such an extension would be contingent on administrative permitting procedures including public notice requirements. We anticipate that the permit amendment process, assuming no public objections are raised, will take no longer than 45 days.

Please call me at (352) 332-6230, Ext. 351 if you have any questions regarding this matter.

Sincerely,

Al Linero, P.E.,  
Administrator, Division of Air Resources Management

Fold at line over top of envelope

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- 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):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
 Bruce Franco  
 Auburndale Power Partners  
 12500 Fair Lakes Circle  
 Suite 200  
 Fairfax, VA 22033-3804

4a. Article Number  
 P 339 251 175

4b. Service Type  
☐ Registered ☐ Insured  
☒ Certified ☐ COD  
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery  
 11-8-96

5. Signature (Addressee)

6. Signature (Agent)  
 Beverly Hickey

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

PS Form 3811, December 1991 U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

P 339 251 175

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	11-5-96
AC53-208321 P50-F1-185	

PS Form 3800, April 1995





# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

March 18, 1996

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Don Fields  
Executive Director  
Auburndale Power Partners, L. P.  
1501 Derby Avenue  
Auburndale, Florida 33823

Dear Mr. Fields:

RE: Amendment to Construction Permit No. AC53-208321, PSD-FL-185(B)  
AIRS ID No. 1050221-001-AC

The Department has reviewed your September 15 request to delete the annual testing requirements for sulfuric acid mist and VOC's emissions. The Department's determination on this amendment request is as follows:

### **Amendment of the annual testing requirements.**

### **Specific Condition No. 8 is amended as follows.**

#### **From:**

8. Compliance with the NO<sub>x</sub>, SO<sub>2</sub>, CO, PM, PM<sub>10</sub>, and VOC standards shall be determined (while operating at 95-100% of the permitted maximum heat rate input) within 180 days of initial operation and annually thereafter, by the following reference methods as described in 40 CFR 60, Appendix A (July 1991 version) and adopted by reference in F.A.C. Rule 17-2.700.

- Method 1. Sample and Velocity Traverses
- Method 2. Volumetric Flow Rate
- Method 3. Gas Analysis
- Method 5. Determination of Particulate Matter Emissions from Stationary Sources
- Method 9. Determination of the Opacity of the Emissions from Stationary Sources
- Method 8. Determination of the Sulfuric Acid of the Emissions from Stationary Sources
- Method 10. Determination of the Carbon Monoxide Emission form Stationary Sources
- Method 20. Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
- Method 25 A. Determination of the Volatile Organic Compounds Emissions from Stationary Sources.

Other DER approved methods may be used for compliance testing after prior Departmental approval.

**To:**

8. Compliance with the NO<sub>x</sub>, SO<sub>2</sub>, CO, PM, PM<sub>10</sub>, VOC, and H<sub>2</sub>SO<sub>4</sub> mist standards shall be determined (while operating at 95-100% of the permitted maximum heat rate input) within 180 days of initial operation and annually thereafter for all pollutants except for VOC and H<sub>2</sub>SO<sub>4</sub> mist, by the following reference methods as described in 40 CFR 60, Appendix A (July 1991 version) and adopted by reference in F.A.C. Rule 62-297.400. The compliance testing for VOC and H<sub>2</sub>SO<sub>4</sub> mist will be required upon permit renewal (every 5 years).

- Method 1. Sample and Velocity Traverses
- Method 2. Volumetric Flow Rate
- Method 3. Gas Analysis
- Method 5. Determination of Particulate Matter Emissions from Stationary Sources
- Method 8. Determination of the Sulfuric Acid of the Emissions from Stationary Source (upon permit renewal).
- Method 9. Determination of the Opacity of the Emissions from Stationary Sources
- Method 10. Determination of the Carbon Monoxide Emission form Stationary Sources
- Method 20. Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines
- Method 25A. Determination of the Volatile Organic Compounds Emissions from Stationary Sources (upon permit renewal).

Other DEP approved methods may be used for compliance testing after prior Department approval.

This letter amendment must be attached to the construction permit, No. AC 53 - 208321, PSD-FL-185, and shall become part of the permit.

Sincerely,



Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/aal/kw

cc: B. Thomas, SWD  
J. Harper, EPA  
J. Bunyak, NPS  
T. Davis, P. E.

Memorandum

Florida Department of  
Environmental Protection

*Clair*

TO: Howard Rhodes

FROM: Clair Fancy *CHF*

DATE: March 14, 1996

SUBJECT: Amendment to Construction Permit No. AC53-208321, PSD-FL-185  
AIRS ID No. 1050221-001-AC

Attached is a letter modifying a construction permit for this facility. This modification will delete the annual testing requirements for sulfuric acid mist and volatile organic compound emissions. Initial compliance tests demonstrated a 12 to 15 percent of the allowable emission limits. Compliance tests for these pollutants will be required upon operating permit renewal (every five years). I recommend your approval and signature.

The Public Notice was published on February 11, 1996 in The Ledger, a newspaper published at Lakeland, Polk County, Florida. No comments were received during the public notice period.

CHF/th/w

Attachment

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- 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:

Don Fields, Ex. Director  
Auburndale Power Plant, LP  
1501 Derby Ave  
Auburndale, FL 33823

4a. Article Number

2127633189

4b. Service Type

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

7. Date of Delivery

3-22

5. Signature (Addressee)

Lesly L. Morgan

6. Signature (Agent)

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

PS Form 3811, December 1991

★U.S. GPO: 1993-352-714

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

2 127 633 189



**Receipt for  
Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Post to:	Don Fields
Street and No.	Auburndale Power
P.O. Box and ZIP Code	Plant, LP
City	Auburndale, FL
State	FL
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	3-19-96
AC53-208321	
PSD-FI-185(B)	
1050221-001-AC	

PS Form 3800, March 1993

**AUBURNDALE POWER PARTNERS,  
LIMITED PARTNERSHIP**

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February 21, 1996

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

**RECEIVED**  
FEB 26 1996  
**RECEIVED**  
FEB 26 1996  
BUREAU OF  
AIR REGULATION  
BUREAU OF  
AIR REGULATION

**Re: Amendment of Permit No. AC53-208321, PSD-FL-185(B)  
Auburndale Power Partners, Limited Partnership**

Dear Mr. Fancy:

On January 26, 1996, Auburndale Power Partners (APP), Limited Partnership received the FDEP draft amendment for the referenced permit. The letter included the requirement for publication of the Notice of Intent To Issue Permit Amendment within 30 days. The Notice was published in the legal ad section of The Ledger newspaper in the issue of February 11, 1996.

The enclosed copy of the Affidavit of Publication, issued by The Ledger newspaper, is being submitted as proof of publication. The Affidavit of Publication was received by APP on February 20, 1996. If you have any questions or need any other information to proceed in this matter, do not hesitate to contact me.

Sincerely,



Donald W. Fields  
Executive Director  
Auburndale Power Partners, Limited Partnership

cc: D. Sanches  
A. Santiago  
RF

**Certification of a Copy**

State of Florida)

) ss.:

County of Polk)

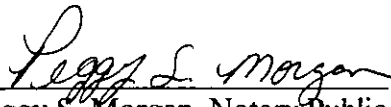
On this 20th day of February 19 96, I attest that the preceding

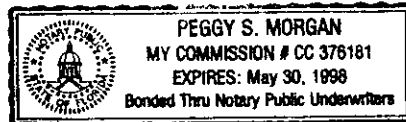
or attached document is a true, exact, complete and unaltered copy of

Affidavit of Publication, Notice of Intent ~~dated~~ Published Feb. 11, 1996,

presented to me by the document's custodian, Axel A. Santiago.

I also attest to the fact that the photocopied document(s) is neither a public record nor a publicly recordable document.

  
Peggy S. Morgan, Notary Public  
State of Florida



# AFFIDAVIT OF PUBLICATION

## THE LEDGER Lakeland, Polk County, Florida

Case No .....

STATE OF FLORIDA)  
COUNTY OF POLK)

Before the undersigned authority personally appeared Nelson Kirkland, who on oath says that he is Classified Advertising 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 .....

Issue Permit Amendment.....

in the .....

Court, was published in said newspaper in the issues of .....

February 11;.....

1996.....

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.....

Nelson Kirkland  
Classified Advertising Manager

by Nelson Kirkland who is  
personally known to me

Sworn to and subscribed before me this 15th.....

day of February..... A.D. 19 96

(Seal)

Notary Public

My Commission Expires .....

Order #  
405562



F 790

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF INTENT TO ISSUE PERMIT  
AMENDMENT  
1050221-001-AC  
PSD-FL-185  
AC53-208321

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Auburndale Power Partners, located at 1501 Derby Avenue, Auburndale, Florida 33823. This action will amend the annual testing requirements for sulfuric acid mist and volatile organic compound emissions of its gas and oil-fired electrical power generating facility in Polk County. The initial compliance tests demonstrated emissions of 12 to 16 percent of their permitted limit. Compliance testing for these pollutants will be required upon permit renewal (every five years). There will be no emission increase as a result of this change. Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-8.207, Florida Administrative Code.

The application/request is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301

Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8218

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department of Environmental Protection, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. All comments received within 14 days of the publication of this notice will be considered in the Department's final determination.

F790 - 2-11-1996