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January 16, 2002

Mr. A. A. Linero
Florida Department of Environmental Protection
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Auburndale Power Partners, L.P.
Construction of Wet Compression Addition

1050331-005-AC

Dear Mr. Linero:

As discussed in our letter to you of October 3, 2001 and the department's response dated October 19, 2001 Auburndale Power Partners, L.P. (APP) intends to install and operate a wet compression system on emissions unit EU-001, the cogeneration turbine generator. This letter presents APP's view of this addition as well as answers to questions presented in the department's October 19th letter.

Following the modification, in June of 2001, of the APP permit for emissions unit EU-001 to allow for the addition of emissions unit EU-006, the operation of EU-001 is constrained by 4 separate limits on the NOx emission during natural gas fired operation (the wet compression system will be operated only during natural gas fired operation):

- 15 ppm (corrected) for a 24 hour average;
- 78.6 lb/hour emission;
- 177 Tons per year, and
- 9 ppm (corrected) for an annual average.

APP has not requested a change in any of these limits and will not exceed any of these limits following the addition of the wet compression system.

Although APP understands the department's position to be that the addition of the wet compression system constitutes a physical change for the purpose of increasing heat input and production under certain ambient conditions, the data submitted with the letter of October 3 was intended to demonstrate that APP would be able to operate the unit within the limits existing in the current permit following the installation of the wet compression system. Because the permit contains both short term (pound per hour) and long term (ton per year) limits, APP will be unable to increase emissions beyond those modeled in previous applications or contemplated by the department in previous permitting while maintaining compliance with the permit. This change will not result in a change in the facility's potential to emit, because that potential is already artificially limited by the constraints of the permit as modified in June of 2001. In this regard, APP believes that the department would be justified in modifying the APP permit to allow for the installation and operation of the wet compression system without making additional requirements in the permit limiting the operation of this system.

Specific answers to the questions in the department's October 19 letter are below.

1. Will fogging be used for oil operation or only natural gas?

APP Response:

The wet compression system will be operated only during natural gas operation.

2. Please identify the specific ambient temperature range during which the use of foggers is requested and the corresponding CT heat input vs. temperature relationship (curve) for each fuel where the use of foggers is requested.

APP Response:

APP requests use of the wet compression system at an ambient temperature of 60 degrees F and above. Please see attachment 1 showing ambient temperature – heat input data.

3. Your letter stated that the fogger design is intended to replicate 60 degree F operation. Please identify the heat input at 60 degrees F for each fuel where the use of foggers is requested.

APP Response:

Please see attachment 1 showing ambient temperature data.

4. Please specify the annual hours for which the use of foggers is requested. Alternately, you may use National Weather Service data to calculate hours above 60 degrees, however the Department intends to limit the use of foggers via annual hours. According to the National Weather Service, normal daily temperatures for Tampa, Florida exceed 59 degrees for each month.

APP Response:

As discussed above, APP believes that the permit as modified already contains sufficient restrictions to prevent the operation of this system from creating an increase in emissions above currently permitted levels, and that no additional restrictions are appropriate. The design of the system does not allow for operation below an ambient temperature of 55 degrees F. APP does not propose to operate the system below an ambient temperature of 60 degrees F. Based on National Weather Service data for Tampa, the number of hours when the ambient temperature is above 60 degrees can be anticipated to be approximately 7854 hours per year.

APP appreciates your prompt consideration of this issue.

Sincerely,

AUBURNDALE POWER PARTNERS, L.P.



Benjamin M. H. Borsch, P.E.
Environmental Manager

**ATTACHMENT 1
HEAT INPUT CURVES
WET COMPRESSION OPERATION**

Figure 1 attached shows the results of test operation of the wet compression system on the APP cogeneration turbine (EU-001). This data shows that operation of the unit gave heat input values in the range 1275 – 1310 MMBtu/hr at base load for operation at ambient temperatures from 70 to 92 degrees Fahrenheit. A regression line has been applied to provide a predicted operating line for the unit.

Figure 2, attached, shows a comparison between the regression line generated in Figure 1 and the unit data supplied with the 1992 permit application. This comparison shows that the approximate effect of the wet compression system is to allow the unit to operate closer to the cold day operating scenario under a range of higher ambient temperature conditions.

