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February 24, 1999

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Mr. Clair Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

BAR conference room

Dear Mr. Fancy:

March 17 (10-12 noon, 1-3 p.m.)

Re: Status of Title V Permits

As you know, several of Florida Power Corporation's (FPC) Title V permits remain in the Initial Draft or Revised Draft stages and progress is being made very slowly. This is no one's fault in particular; it's difficult to establish any momentum when the involved parties are processing so many permits and some of the issues (e.g., periodic monitoring) are moving targets. As you and Mr. Scott Osbourn recently discussed, it may be helpful if all involved parties at FPC and the Department were to meet at one time to discuss any remaining unresolved issues.

FPC proposes, with your concurrence, to arrange for a one- or two-day meeting between FPC and the Department to resolve issues associated with the following Title V permits that remain in either the Initial Draft or Revised Draft stage: Anclote, Bartow, Crystal River, Suwannee, Tiger Bay, Bayboro and the University of Florida. It would be desirable to have you, Scott Sheplak and the permit engineers responsible for these facilities in attendance. Mr. Scott Osbourn and I will represent FPC.

It is FPC's desire to advance these Title V permits to the Final Permit stage as expeditiously as possible. FPC has recently requested additional extensions of time on the above-mentioned permits until April 1, 1999 and would like to resolve these permits prior to that date. We will contact you in the next day or two to coordinate a meeting date. If you should have any questions in the meantime, please contact either Scott Osbourn at (727) 826-4258 or me at (727) 826-4334.

Sincerely,

J. Michael Kennedy

J. Michael Kennedy, Q.E.P.
Manager, Air Programs

cc: Scott Sheplak
Doug Beason, OGC
Jeffrey Brown, OGC
Robert Manning, HGS&S

processor
Anclote Mike
Bartow Ed
Crystal Ed
Suwannee Bruce
Tiger Bay Jonathan
Bayboro Ed
UofF Bruce

{ See responses to FPC comments for Bartow or Crystal River for consistency }

cc: Scott, Bruce



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**BUREAU OF
AIR REGULATION**

August 8, 1997

Mr. Clair H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Magnolia Park Courtyard
Tallahassee, FL 32301

RE: Florida Power Corporation - University of Florida Cogeneration Plant
Draft Title V Permit No. 0010001-001-AV

Dear Clair:

Florida Power Corporation (FPC) is in receipt of the draft Title V permit for the above referenced facility and appreciates the Department's efforts in issuing the draft permit. FPC has reviewed the draft permit and is submitting the comments relative to the itemized specific conditions. FPC has requested, and the Department has agreed, to an extension of time until August 12, 1997 to resolve these issues or file a Petition for Administrative Hearing. Accordingly, FPC looks forward to the Department's response at the earliest convenience. As a minor editorial comment, please check the spelling of "Gainesville" throughout the document. In many places it was misspelled. Detailed comments are listed below:

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Facility Condition 5, Appendix U-1--Since the emergency generator is listed as an unregulated emissions unit, with no other limitations, the reference to a 32,000 gallons/year limitation should be deleted.

Facility Condition 6, Appendix E-1--The reference to "Lube Oil Vent" should be changed to "Lube Oil Vents", since both the gas turbine and electric generator have vents which were listed in the application. Regarding storage tanks, it would be more specific for future reference to list the type and size of tanks with the designation of "Fuel Oil Storage Tanks". This could be listed as: Fuel Oil Storage Tanks (2-193,200 gallon No. 2 fuel oil and emergency generator diesel tank) in Appendix E-1. The reference to "Vehicles" should be deleted since such sources are not regulated under Title V; the exception is for fugitive dust which is regulated under a separate condition. FPC is aware that the Department is undergoing rule changes to

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change the term "Exempt" to "Insignificant". FPC requests information on how this change may affect the Title V list.

Facility Condition 7--FPC understands that this condition has been promulgated as part of the State Implementation Plan (SIP) and is federally enforceable.

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Facility Condition 8--FPC suggests the words "and could" be added to the condition, i.e. "...particulate matter at this facility and could include..". Reasonable precautions may not include all of these actions in all areas of the facility. Moreover, other actions deemed reasonable should not be excluded. The suggested wording would provide flexibility in assuring that the intent of the rule is met.

Facility Condition 11--This condition should be deleted for several reasons. First, there are no existing permit conditions that would require such a condition (see AC 01-204652; PSD-FL-181). Second, the facility has demonstrated compliance with the federally enforceable emissions cap of 194.3 tons NOx per year over the last several years. If the emissions cap is exceeded, then the Department has mechanisms for enforcement. At this point in time, reference to the 39.7 tons/year is not an applicable requirement. Finally, if FPC, as the applicant, requires to increase the cap, then the Department's rules in 62-212.400 would apply regarding contemporaneous emissions increases and decreases over a five year period. If a modification is triggered, then the Department has the authority to establish BACT pursuant to its rules. If the Department desires to provide historical information for future review, it could be added to Appendix H-1.

Facility Condition 12--It would appear that this condition is unnecessary since these emissions units were not referenced in the Title V application and FPC would have no authority to operate these units. Moreover, this condition has already been complied with and is therefore obsolete and should be deleted.

Facility Condition 13--Similar to Facility Condition 11, the wording of this condition has no historical basis. The words "all", "and all relevant data" and "at any time" do not appear in any previous condition. This condition should be reworded to reflect the intent of Specific Condition 5 of AC 01-204652/PSD-FL-181. Suggested language would be:

13. The permittee shall maintain fuel use and other records to demonstrate compliance with Facility Condition 10 for a period of 5 years.

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Emission Unit (E.U.) 001, Condition A.1.--This condition also has no historical basis and is not necessary and should be deleted. The nameplate capacity is referenced in the emission unit description.

E.U. 001, Condition A3--The permit history for this emission unit and the application cites "natural gas and distillate oil (including on-specification used oil) with a maximum sulfur content

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of 0.5 percent" as the appropriate fuels. The condition should better reflect the historical language. The phrase "at all times" seems unnecessary for the intent of this condition. Also, the rule citation does not seem appropriate. This should be checked.

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E.U. 001, Condition A.5--The term "allowables" should be changed to "emission limits" for clarity. This condition includes many items listed as "standards" which were not standards or emission limits in the original and subsequent changes to the construction permit and should only be centered over the lbs/hr and tons/yr columns. The column "Standard" should be changed to "Basis" as in the previous construction permits. The column titled "Fuel" should also reflect the actual construction conditions which reference "Oil" rather than "No. 2 fuel oil". The opacity limitations cited in the table are limits that should be listed as such. Also, the basis for the CO emission limits are "@ 15% O₂". The table should be changed as follows:

Pollutant	Fuel	Basis	Emission Limit (lb/hr)	Emission Limit (tons/year)
NOx	Gas	25 ppmvd @ 15% O ₂	39.6	142.7
	Oil	42 ppmvd @ 15% O ₂	66.3	7.3
SO ₂	Oil	0.5% S by Weight		
VE	Gas/Oil		10%/20%	Opacity
CO	Gas	42 ppmvd @ 15% O ₂	38.8	158.8
	Oil	75 ppmvd @ 15% O ₂	70.5	7.7

E.U. 001, Condition A.6.--This condition also does not have any historical basis, since the construction permit did not include particulate emission limits. Also, Condition A.3. coupled with the opacity limits in Condition A.5. more than provide for the intent of this condition. Therefore, this condition should be deleted.

E.U. 001, Condition A.7.--This condition should reflect that it applies to non-NSPS emission limits, e.g., "For non-NSPS emission limits, excess emissions"

For the NSPS emission limits, the excess emissions provisions of 40 CFR Part 60, 60.8(c) should be included as a condition. The relevant portions of this condition states: "Operation during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test under 40 CFR 60.8, nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown and malfunction be considered a violation of the applicable emission limit."

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This suggestion would provide clarity to the various limits and is consistent with representation made by Department personnel at the public rulemaking workshops.

E.U. 001, Condition A.11--FPC recommends that this condition be replaced with an alternate which reflects a more stringent monitoring method and is consistent with the proposed construction permit amendment and future rulemaking, i.e., Compliance Assurance Monitoring. It should be noted that the reference to water-to-fuel monitoring does not specifically apply to this emission unit since water is not used as a control technique. This emission unit uses steam for NO_x control. There is no definition or other implication in these outdated NSPS that water and steam are equivalent. Further evidence of the outdated nature of this NSPS would be its application to dry low NO_x (DLN) combustors, where the units could not possibly meet the intent of the language in question. The proposed alternate method is more stringent than the current condition and is consistent with Department policy. The proposed condition is as follows:

A.11. The NO_x emission rate in lb/hr and tons/year from the cogeneration facility stack shall be calculated using the 40 CFR Part 75 continuous emission monitoring (CEM) system to determine lbs/mmBtu and fuel flow monitoring to determine heat input. Excess emissions pursuant to 40 CFR 60.334 shall be determined using the Part 75 CEM system.

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E.U. 001, Condition A.14.--Several of the ASTM methods listed are not listed as current methods for sulfur analysis. The current methods are ASTM D1072-90(94) and ASTM D4084-94 and should be added.

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E.U. 001, Condition A.18.--The performance tests required under 40 CFR 60.8 have already been conducted and compliance with the less stringent NSPS emission limits have been demonstrated. This condition is therefore unnecessary based on the Department's policy of eliminating less stringent requirements. FPC proposes alternate language for performing compliance testing. Also, in accordance with Section 403.0872(13)(b) Florida Statutes, FPC requests that compliance with the NO_x emissions limits be determined on a 30-day rolling average.

A.18. Compliance with the lb/hr NO_x emissions limits listed in Condition A.5. and B. 4. shall be determined as a 30-day rolling average using the Part 75 CEM system. The emission limit shall be based on either Condition A.5. if the turbine is operating alone or the numerical addition of the NO_x limits in Conditions A.5. and B.4. if both the turbine and duct burners are operating. Compliance with emission limits for sulfur content, CO and VE limits shall be determined annually using fuel analysis for sulfur content, EPA Method 10 for CO and EPA or DEP Method 9 for VE.

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E.U. 001, Condition A.19.--The current ASTM methods for sulfur analysis are: D 129-95, D 1266-91, D 1552-95 and D 4294-90(1995).

E.U. 001, Condition A.20.--This condition is unnecessary based on the approval of the Custom Fuel Monitoring Schedule in Condition A.14.

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E.U. 001, Condition A.22. The reference to "110 percent" in the fourth line should be changed to "105 percent", based on the Department's recent policy guidance on combustion turbines.

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E.U. 001, Condition A.24.--Section (b), (c) and (e) should be deleted since there is neither a PM limit nor requirement for particulate matter tests using EPA or DEP Method 5.

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E.U. 001, Condition A.27.--The word "submit" should be added to the third line of paragraph a. to clarify the meaning, i.e., "... period, submit only the summary..."

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E.U. 001, Condition A.30.--FPC proposes that this condition be replaced to reflect the alternate language of Condition A.11. In addition, Section b. needs to be changed to reflect the applicable sulfur content of 0.5 percent and that BACT was not established for sulfur dioxide. The recommended condition is as follows:

A.30. For the purpose of reports under 40 CFR 60.7(c) and monitoring emissions pursuant to Facility Condition 13, periods of excess emissions that shall be reported are defined as follows:
a. Nitrogen Oxides. Any period in which the averaged NOx emissions exceed the emission rates listed in Condition A.5. for the combustion turbine. When the duct burner (Emission Unit 002) is operating with the combustion turbine, the excess emission shall be any one-hour period in which the average NOx emissions exceed the sum of the emission rates listed in Condition A.5. and Condition B.4.
b. Sulfur Dioxide. Any daily period during which the sulfur content of the fuel being fired in the turbine exceeds 0.5 percent by weight.

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E.U.002, Description--This emission unit is not an Acid Rain Unit as defined in 40 CFR Part 72 since none of the steam produced through the use of the duct burners is used to produce electricity. All the steam produced in the HRSG goes to supply the steam needs of the University of Florida. Under the definitions in 40 CFR 72.2, the duct burner is not an "Utility Unit" since no electric energy is produced from its use.

E.U. 002, Condition B.1.--The permitted capacity for the duct burners was expressed in the construction permit as 197.7 thousand (M)cf/hr, which is equivalent to 188 MMBtu/hr (LHV) as noted in the source description. The 187.3 MMBtu/hr should be changed to 188 MMBtu/hr to reflect this authorized heat input.

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E.U. 002, Condition B.4.--Similar to comments made for Condition A.5., the term "Allowable" should be changed to "Emission Limits" and "Standard" should be changed to "Basis". Opacity should be listed as an emission limit. In the introductory sentence and in the table the reference to fuel is redundant to Condition B.2 and should be deleted from the table. The proposed changes to the table are as follows:

Pollutant	Basis	Emission Limit (lb/hr)	Emission Limit (tons/year)
NOx	0.1 lb/mmBtu	18.7	24.6
VE		10% Opacity	
CO	015 lb/MMBtu	28.1	36.9

E.U. 002, Condition B.6.--There are no particulate or opacity limitations under 40 CFR 60.43b for natural gas firing [see 60.43b(a), (b), (c) and (d)]. Therefore, this condition should be deleted.

E.U. 002, Condition B. 7.--This condition is taken out of context of the precise NSPS applicable to duct burner systems and should be deleted. The actual NSPS condition states: "*For purposes of paragraph (i) of this section, the nitrogen oxides standard under this section applies at all times including periods of startup, shutdown, or malfunction.*" 60.44b(h). Section 60.44b(i) states: "Except as provided under paragraph (j) of this section, compliance under this section is determined on a 30-day rolling average basis." Under Section 60.48b(h), duct burner systems are not required to install a CEM system to measure NOx, thus only an initial performance test is required. Therefore, there is no way to determine a 30-day rolling average making 60.44b(h), 60.44b(i) and this condition non applicable requirements.

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E.U. 002, Condition B.10--This condition states the conditions under which the performance tests under 40 CFR 60.8 shall be conducted. These tests have been previously conducted and accepted by the Department as meeting the NSPS requirement under 60.8. Therefore, monitoring should be conducted as proposed in Condition A.11. FPC proposes that this condition be replaced with the following:

B.10. Monitoring for NOx emissions from the duct burner system shall be conducted as described in Condition A.11.

E.U. 002, Condition B.11.-- As noted above in the comments to Condition B.7., this condition is not applicable and should be deleted.

E.U. 002, Condition B.13.--This condition is not applicable since a CEM system for NOx is not required by Section 60.48b(h). This condition should be deleted.

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Emission Unit Description--The reference to "69.9 mmBtu/hr" should be "69.6 MMBtu/hr" to be consistent with the application.

E.U. 003/004, Condition C.1.--The reference to "Low Sulfur" in the context of the No. 2 fuel oil should be deleted from the table. The sulfur content of the fuel (i.e., 0.5 percent) could be included since this is the standard specification for No. 2 Fuel Oil (ASTM D 366-92, Table 1).

E.U. 003/004, Condition C.1.--The second sentence should be deleted, since Condition D.1. does not include any fuel usage limitation for these emission units.

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E.U. 003/004, Condition C.4.--The first sentence is not consistent with the construction permit for the cogeneration facility that describes the usage for these emission units. The words "purposes only" should be deleted.

E.U. 003/004, Condition C.5.--The applicable visible emissions limit for these emission units is provided for in Rule 62-296.406(1). This rule allows 20 percent opacity except for either one six-minute period per hour which opacity shall not exceed 40 percent for a two-minute period.

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E.U. 003/004, Condition C.12.--This condition should include the methods currently used to record fuel usage and calculate emissions for that portion of the NOx emissions cap that Boilers 4 and 5 would contribute. It is recommended that a paragraph (c) be added as follows:

(c) For the purposes of determining annual NOx emissions from Boilers 4 and 5, the fuel usage shall be recorded. The fuel usage would be used along with the applicable EPA AP-42 emission factors to calculate annual NOx emissions from these emission units.

E.U. 003/004, Condition C.13.--FPC requests that EPA Method 9 also be included as a test method of opacity for flexibility in performing compliance tests.

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E.U. 003/004, Condition C.15.--This condition reflects the previous case-by-case BACT established under Rule 62-296.406(3) which established a 1.5 percent sulfur limit for these emission units. Since FPC has accepted the use of No. 2 fuel oil for these units, thereby limiting sulfur to 0.5 percent or less, it appears that this condition and Condition C.16. are unnecessary. An alternate condition is proposed as follows:

C.15. Fuel Monitoring. The permittee shall demonstrate compliance with Condition C.3. by the vendor providing verification that No. 2 fuel oil or oil meeting ASTM requirements for No. 2 fuel oil is being supplied.

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Common Condition D.1.--The hourly natural gas usage for the combustion turbine was amended in the construction permit to 420.3 M ft³/hr from 367.9 M ft³/hr. Also, the conditions referenced in the footnote as double asterisk (**) are A.5. and B.4. rather than No. 1 and No. 2 as listed.

Common Condition D.2.--This condition, which is from the construction permit for the cogeneration facility, is obsolete. Compliance with the emission limits have already been demonstrated. If the emission limits are not met, it should be treated as any other non-compliance situation within the rules of the Department.

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Common Condition D.3.--This condition should be changed to reflect the proposed language for monitoring in Conditions A.11. and C.12. FPC proposes the following language:

D.3. To demonstrate compliance with the facility NOx emission cap of 194.3 tons/year, the NOx emissions determined through Condition A.11. and C.12. shall be added and provided to the Department in each annual operating report required by Rule 62-210.370(3).

Section IV. Acid Rain Part--Based on our discussion in the description of E.U. 002, the phrase "and duct burner with a common stack" in the table should be deleted. The duct burner is not an Acid Rain Unit.

Table 1-1, Air Pollutant Emission Allowables and Terms--This table needs to be modified consistent with the comments made to specific conditions (i.e., Conditions A.5. and B.4.). Also, this Table should clearly state that it is for information purposes only. The items which require change are listed below:

1. Change "Allowable" to "Emission Limit".
2. Change "Standard(s)" to "Basis"
3. Clearly distinguish "Basis" and "Emission Limits" in columns.
4. Change "35.0" under lb/hr for NOx and gas firing to "39.6".

The "regulations" listed in the table do not accurately reflect the authority for emission limits. BACT was only established for CO. The emissions limits for NOx, SO₂ and VE were proposed by FPC and listed in the construction permit as Established by Manufacturer (EBM). Moreover, since BACT has already been conducted and an emission limit established for CO, the Department's general authority should be the appropriate citation.

Table 2-1, Compliance Testing Requirements--This table should also state that it is for information purposes only. Changes to the table should reflect to our previous comments.

Appendix TV-1, Title V Conditions--FPC is not providing comments to these conditions as part of this application. Comments regarding this appendix are being submitted through the Florida Electric Power Coordinating Group and are applicable to this application as if submitted with this letter.

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Your consideration of our comments is greatly appreciated.

Sincerely,



Scott H. Osbourn
Senior Environmental Engineer

cc: Chris Kirts, NE District
Charles Logan, DEP
Ken Kosky, Golder Associates
Robert Manning, HGS&S

8/11/97 Scott Sheplap
Bruce Mitchell