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**FPL**

September 19, 2000

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BUREAU OF AIR REGULATION

Clair H. Fancy  
Chief - Bureau of Air Regulation  
State of Florida  
Department of Environmental Protection  
2600 Blair Stone Road  
Mail Station #5505  
Tallahassee, FL 32399-2400

**Re: Administrative Change of Title V Permit No.: 0110036-001AV,  
Port Everglades Power Plant, E.U. ID No. 005, Bank of Twelve Simple Cycle Gas Turbines,  
GT1 Through GT12.**

Dear Mr. Fancy:

FPL would like to request a change to the Port Everglades Title V permit referenced above to make it more consistent with the Title V permit governing the "sister" units at the Lauderdale Plant. FPL operates three banks of twelve each simple cycle gas turbines (GTs) between the Lauderdale and Port Everglades Plants. The GT banks are essentially identical, with two banks located at the Lauderdale Plant and one bank at the Port Everglades Plant. The GTs provide generation during peak periods, and are idle for much of the year. Capacity factors for the GTs are historically less than ten percent.

The two banks of GTs at the Lauderdale Plant have a five-year NO<sub>x</sub> test frequency (providing operation is no more than 320 hours/year/turbine on oil), while the Port Everglades GTs have an annual NO<sub>x</sub> test requirement. This inconsistency was recently discovered when the permits underwent a detailed review. It appears that during the permit comment period, comments addressing the NO<sub>x</sub> test frequency at Lauderdale were submitted by FPL, but not for the "sister" units at Port Everglades. FDEP adopted the comments regarding the Lauderdale GTs, and, in the absence of comments regarding the testing frequency of the Port Everglades GTs, left the testing frequency there annually.

FPL would like to propose the language in the Port Everglades Title V permit, Page 18, Specific Condition C.7 [Attachment No. 1]: be changed to the language in Lauderdale Plant Title V Permit 0110037-001AV: Page 21, Specific Condition B.16 [Attachment No.2].

Thank you for your assistance in this matter, and, if you should have any questions, please do not hesitate to contact Kevin Washington at (561) 691-2877.

Very truly yours,

Rudy Sanchez  
PGBU Broward - Plant General Manager  
Florida Power and Light Company



**Cc: Scott Sheplak**

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**Tom Tittle**

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218 SW 1st Ave.  
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**Attachments: 2**

Bcs: FPL

K. Pascale  
G. Moncrief  
M. Archer  
J. Hampp  
K. Washington  
File

### Monitoring of Operations

**C.6. Visible Emissions Testing Required.** The owner or operator shall conduct testing for visible emissions, using EPA Method 9, while the combustion turbine is operating at 90-100 percent of its capacity, according to the following schedule.

The owner or operator shall conduct testing for visible emissions while firing fuel oil for each simple-cycle turbine unit upon that turbine's exceeding 400 hours of operation on fuel oil, and every 150 hours of operation on fuel oil thereafter, in any given federal fiscal year (October 1 through September 30). Such tests shall be performed within 15 days of exceeding such operating hours, to allow for prior notification of the tests.

[Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, and AO 06-230618]

**C.7. Nitrogen Oxides.** Nitrogen oxides emissions shall be determined by a stack test on one representative turbine. Testing shall be performed each federal fiscal year, no later than September 30th.

[Rules 62-296.570(4)(a)3. and (4)(b)5., F.A.C.]

### Test Methods and Procedures

**C.8. Nitrogen Oxides.** The test method for nitrogen oxides emissions shall be EPA Method 20, incorporated by reference in Chapter 62-297, F.A.C. If the owner or operator obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall automatically become a condition of this permit.

[Rules 62-213.440, 62-296.570(4)(a)3. and 62-297.401, F.A.C.]

### Record Keeping and Reporting Requirements

**C.9. Records of Fuel Consumption and Operating Time Required.** The owner or operator shall make and maintain records of the hours of operation of each turbine and the total fuel oil consumption of all twelve turbines in sufficient detail to ensure compliance with specific condition C.6 of this permit.

[Rule 62-4.070(3), F.A.C.]

### Other Conditions

**C.10.** These emissions units are also subject to conditions D.1 through D.19 contained in Subsection D. Common Conditions. Common condition D.20 is not applicable to these emission units.

**B.16. Nitrogen Oxides.** Provided operation is no more than 320 hours/year/turbine on oil, NO<sub>x</sub> emissions for the combustion turbines shall be tested every five (5) years by EPA Method 20 tests as described in 40 CFR 60, Appendix A (July 1, 1996) on any representative unit in each bank of the combustion turbines. Tests shall be conducted both while burning 100% natural gas and 100% light distillate oil.

[Rule 62-296.570, F.A.C. ; Requested by the applicant in letter dated October 1, 1997] -

**B.17.** The test method for nitrogen oxides shall be EPA Method 20, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800 & 62-297.401, F.A.C.; AO06-230614]

**B.18.** The VOC emission factors for the combustion turbines shall be confirmed every five (5) years by EPA Method 25A tests as described in 40 CFR 60, Appendix A (July 1, 1996) on any representative unit in each bank of the combustion turbines. Tests shall be conducted both while burning 100% natural gas and 100% No. 2 fuel oil.

[AO06-230614, Specific Condition No. 9]

**B.19. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rule 62-297.310(2), F.A.C.]

**B.20. Applicable Test Procedures.**

(a) Required Sampling Time.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4)(a)2.c., F.A.C.]