Progress Energy

Via Electronic Mail
November 14, 2006

Mr. Jeffrey F. Koerner, PE
Professional Engineer Administrator
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 5500
Tallahassee, Florida 32399-2400

RE: Comments on Draft Air Construction Permit Project No.: 1050234-015-AC/PSD-FL-195(D)/PSD-FL-296(C)/PSD-FL-330(B) and Draft/Proposed Title V Air Operation Permit Renewal Project No. 1050234-014-AV
Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Hines Energy Complex
Facility ID 1050234

Dear Mr. Koerner:

Please find below comments on the draft Air Construction Permit modification and Title V Air Operation Permit renewal/revision for the Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("PEF") Hines Energy Complex. Any suggested changes will be shown in red with strikethrough for deletion and underline for insertion.

Draft Air Construction Permit Modification PSD-FL-195(D)

1. In Condition C.1 the first and last sentences from the PSD-FL-195(B) are indicated in the opening paragraph. However, the remaining language in the opening paragraph (see below) was not listed. Are those sentences removed?

> "…Testing of emissions shall be conducted with the source operating at capacity (maximum heat input rate for the tested operating temperature). Capacity is defined as 90-100 percent of permitted capacity. If it is impracticable to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for purposes of additional compliance testing to regarding the rated capacity in the permit, with prior notification to the Department…"

Progress Energy Service Company, LLC
100 Central Avenue
Saint Petersburg, FL 33701

Draft/Proposed Title V Permit Project No. 1050234-014-AV

1. Statement of Basis. The maximum heat input rating in the first paragraph under Power Block 2 is based on the HHV and not LHV:

> **Power Block 2: Emission Units -014 (CT2A) and -015 (CT2B).**
>
> Emission units 014 and 015 each consist of a combined cycle Westinghouse 501FD Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 2,048 MMBtu/hr (HHV), while firing natural gas, and 2,155 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the ~~LHV~~ HHV of each fuel, and 100% load.....

2. Placard Page. The permittee mailing address on the placard page should be as follows:

> **Permittee:**
> FPC dba Progress Energy Florida, Inc.
> 100 Central Avenue, ~~BH1A-HF4~~
> St. Petersburg, Florida 33701-5511

3. Section I. Facility Information, Subsection B., Summary of Emissions Unit ID No(s). and Brief Description(s). To make the Power Block 1 (EU ID Nos. -001 and -002) descriptions consistent through out the permit, change "501F" to "501FC" under the brief description on Page 2.

4. Section II. Facility-wide Conditions. In Facility-wide Condition 14. and through out the permit, please change the abbreviation for Progress Energy Florida, Inc. from "PEFI" to "PEF".

> 14. FPC vs. PEFI. Where previous text referenced "FPC", for Florida Power Corporation, they have been changed to "PEFI" to represent Progress Energy Florida, Inc. FPC is doing business as PEFI.

5. Section III. Emissions Unit(s) and Conditions, Subsection A, EU ID Nos. -001 and -002. In Specific Condition A.5.c, please add a reference to Specific Condition A.6.

6. Section III. Emissions Unit(s) and Conditions, Subsection E, EU ID Nos. -014 and -015. As in item 2. above, please change the reference to LHV to HHV in the EU description:

> Emission units 014 and 015 each consist of a combined cycle Westinghouse 501FD Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 2,048 MMBtu/hr (HHV), while firing natural gas, and 2,155 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the ~~LHV~~ HHV of each fuel, and 100% load.....

7. Section III. Emissions Unit(s) and Conditions, Subsection F, EU ID Nos. -016 and -017. The construction permit PSD-FL-330 is referenced in Specific Condition F.3. Consider including the permit modification projects (i.e. PSD-FL-330(A)) in this reference.

8. Section III. Emissions Unit(s) and Conditions, Subsection F, EU ID Nos. -016 and -017. In Specific Condition F.6, references are made to installing the gas turbines, water injection, SCR system, and HRSG as well as design and construction of the SCR System and HRSG. This language appears to be a carry over from the construction permit. Consider removing the verbs "install", "designed", and "constructed."

9. Section III. Emissions Unit(s) and Conditions, Subsection F, EU ID Nos. -016 and -017. To make the language similar to Power Block 2, please add oil-to-gas or gas-to-oil to the opening paragraph of Specific Condition F.11:

> **F.11.** CEMS Data Exclusion. As provided in this paragraph, NOx and CO emissions data recorded during periods of startup, shutdown, fuel switches (oil-to-gas or gas-to-oil), and documented malfunctions may be excluded from the block average calculated to demonstrate compliance with the emission limits of specific condition **F.8.**

10. Section III. Emissions Unit(s) and Conditions, Subsection F, EU ID Nos. -016 and -017. Similar to item 8. above, Specific Condition F.20 states "...the permittee shall install, calibrate, operate and maintain...." As the ammonia flow meter is already in place on Power Block 3, please remove "install."

11. Section III. Emissions Unit(s) and Conditions, Subsection H, Common Conditions. As discussed in item 4. above, change the abbreviation for Progress Energy Florida, Inc. from "PEFI" to "PEF" in Specific Conditions H.11, H.13, and H16.

12. Appendix I-1, List of Insignificant Emissions Units and/or Activities and Appendix U-1, List of Unregulated Emissions Units and Activities. As discussed in item 4. above, change the abbreviation for Progress Energy Florida, Inc. from "PEFI" to "PEF".

13. Appendix I-1, List of Insignificant Emission Units and Activities. PEF reviewed the emissions units and/or activities listed in Appendix I-1. Please add the following two insignificant emissions units to the list:
    7. Vehicle fueling station with storage – gasoline and diesel
    8. Hydraulic oil storage (300, 200, and 166 gallons)

14. Appendix U-1, List of Unregulated Emission Units and Activities. PEF reviewed the unregulated emissions units and/or activities listed in Appendix U-1 and found that an update was required. The following presents these changes to the list in strikethrough/underline format:

EU. ID No.	Brief Description of Emissions Units and/or Activities
-xxx	~~Three~~ Two Lube Oil Storage Tanks (~~two with 7000 gallon capacity, one with 555~~10,000 gallon and 6,200 gallon capacity)
	~~Two Waste Oil Storage Tanks (500 gallon capacity)~~
	One No. 2 Fuel Oil Storage Tank (3.80 million gallon capacity)
	~~One Diesel Fuel Storage Tank (500 gallon capacity)~~
	~~One~~ Three Ammonium Storage Tanks (30,000 gallon capacity each)
	One Sodium Hypochlorite Storage Tank (~~1800~~ 10,000 gallon capacity)
	Fuel loading and unloading activities
	Lube oil vents with demisters
	Non-halogenated solvents

Thank you for your assistance. Please let me know at (727) 820-5962, if you have any questions.

Sincerely,

Ann Quillian, PE
Ann.Quillian@pgnmail.com
Senior Environmental Specialist

cc: Cindy Zhang-Torres - FDEP Southwest District
Martin J. Drango, PE - PEF Hines Energy Complex