

<u>Via Electronic Mail</u> September 11, 2007

Mr. Scott Sheplak, PE
Air Permitting South Section
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 5505
Tallahassee, Florida 32399-2400
Scott.Sheplak@dep.state.fl.us

RE: Response to Request for Additional Information
Application for Title V Permit Renewal
Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Higgins Power Plant
Permit Project No. 1030012-005-AV
Facility ID 1030012-005-AV

Dear Mr. Sheplak:

On August 17, 2007, Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("PEF") received your August 16, 2007 letter to David Fernandes requesting additional information regarding the recently submitted Title V permit renewal application for the Higgins Power Plant. Below addresses each of the Department's questions individually.

1. The fossil fuel fired steam generators previously known as SG 1, SG 2, & SG 3 (Emissions Unit ID Numbers -001, -002 and -003) which had been on long term reserve shutdown since January 24, 1994 were torn down (imploded) on October 20,2006. Based on these dates, the fossil fuel fired steam generators had been in a long term reserve shutdown status for approximately 12 years. Please describe the operational status of the remaining combustion turbines.

As indicated in the previously submitted Title V permit application (see pages 7, 14, 29, 44, 59), the four combustion turbine peaking units (EU Nos. -004, -005, -006, and -007) are still in operation.

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- a. Are the remaining peaking units (CTP1 CTP4, Emission Unit ID Numbers -004-007) on "cold standby", "long term reserve shutdown" or "shutdown"?
- No. The peaking units are in operation and active, as noted in Field 4, Emissions Unit Status Code on pages 14, 29, 44, 59 of the previously submitted permit application.
- b. Please provide the hours of operation for each remaining peaking unit during calendar years 2002 2006, as reported in the annual operating reports (AORs).

See the following table:

Annua	l Hours of Opera	tion for Higgins F	Peaking Units (Pe	r AOR)
Year	CTP 1	CTP 2	CTP 3	CTP 4
2002	340	330	1006	982
2003	849	879	1149	1031
2004	677	653	641	89
2005	569	544	539	608
2006	536	386	665	666

c. In the Certificate of Representation Report attached as part of the acid rain application the "Operating Status" is listed as "Operating" for the remaining combustion turbine peaking units. Please explain this status description from the Clean Air Interstate Rule (CAIR) Program.

As indicated above and in the previously submitted Title V permit application (see pages 7, 14, 29, 44, 59), the four combustion turbine peaking units (EU Nos. -004, -005, -006, and -007) are still in operation. Therefore, they are highlighted as such in the Certificate of Representation Report.

- d. The next questions are specific to peaking units CTP2 (EU ill No. 005) and CTP4 (EU ID No. 007).
 - 1) What was the "operational problem" that prevented oil burning in units CTP2 (EU ID No. 005) and CTP4 (EU ID No. 007) as described in Attachment FAI-6 of the renewal application?

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The gas and liquid fuel have separate fuel systems. The liquid fuel system on CTP2 and CTP4 is having combustion stability issues that cause the turbines to trip offline when a liquid fuel run is attempted. The root cause analysis is on-going to determine where the problem resides, and subsequently how it will be rectified. There are no similar problems when operating on gas. This issue is isolated to liquid fuel operations only.

2) Are the CTP2 and CTP4 units able to operate or are they simply not able to operate on fuel oil?

CTP2 and CTP4 can operate on gaseous fuels. It is just fuel oil operation that is a problem.

3) A repair timeframe of late 2007 or early 2008 was provided in the compliance plan to correct the "operational problem". Please provide a more definitive repair schedule to include specific dates with milestones along with the specific required repairs.

The Higgins combustion turbine peaking units are used any time during the year when needed, but the majority of the operation occurs during the warmer months. Due to capital constraints and system planning, the repair is now scheduled for the May 2008 planned outage to be completed prior to the start of the summer run time period (which begins in June).

e. Note Rule 62-210.300(2)(a)3., F.A.C. (copy enclosed) contains specific applicable requirements that apply to the duration (term) of an air operation permit for units that are on "cold standby", "long term reserve shutdown" and "shutdown". Therefore, the status of the remaining units affects the duration the air operation permit.

Also, specific applicable requirements apply to units that are in "cold standby" or "long term reserve shutdown" (see Rule 62-210.300(2)(a)3 .d., F.A.C .). If the remaining units are in this operational status, have the requirements of Rule 62-210.300(2)(a)3 .b.(I) (UI), F.A.C. been met?

As indicated above and in the previously submitted Title V permit application (see pages 7, 14, 29, 44, 59), the four combustion turbine peaking units (EU Nos. -004, -005, -006, and -007) are still in operation. Therefore, the requirements for cold standby or long term reserve shutdown do not apply.

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2. Applicants for Title V permits are required to submit Procedures for Startup and Shutdown (see Emissions Unit Additional Information item 4. of the application form). A generic procedure was provided in Attachment CTP-3 of the application. The procedures submitted need to contain the best operational practices followed during periods of startup and shutdown to minimize excess emissions preferably as prescribed by the turbine manufacturer, Pratt & Whitney.

The Higgins combustion turbine peaking units are late 1960s - early 1970s vintage aero-derivative engines. They are not like the GE Frame type machines, which can operate at various modes. Rather these units have a simpler operation of either on or off.

If PEF notes a problem, then the corrective action is to shut down the unit to evaluate and troubleshoot the problem. This is the best operational practice by which to minimize the emissions as well as adverse impact on the operating unit.

If you have any questions, please let Ann Quillian, (727) 820-5962, or me, (727) 827-6325, know.

Sincerely,

David Fernandes Plant Manager Higgins Power Plant

David.Fernandes@pgnmail.com

cc:

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Sheplak, Scott

From:

Quillian, Ann [Ann.Quillian@pgnmail.com]

Sent:

Tuesday, September 11, 2007 1:56 PM

To:

Sheplak, Scott

Cc:

Fernandes, David; Schaefer, Gustave; Kennedy, J-Michael; Zhang-Torres@dep.state.fl.us;

phesslin@co.pinellas.fl.us; grobbins@co.pinellas.fl.us

Subject:

Letter-Mr. Scott Sheplak - Higgins Power Plant - Project #1030012-005-AV

Attachments: HigginsTVRenewalRAIResponse9112007.pdf

RE: Response to Request for Additional Information

Application for Title V Permit Renewal

Florida Power Corporation d/b/a Progress Energy Florida, Inc.

Higgins Power Plant

Permit Project No. 1030012-005-AV

Facility ID 1030012-005-AV

Please find attached <<HigginsTVRenewalRAIResponse9112007.pdf>> the Florida Power Corporation d/b/a Progress Energy Florida, Inc.'s ("PEF") response to your August 16, 2007 letter to David Fernandes requesting additional information regarding the recently submitted Title V permit renewal application for the Higgins Power Plant.

Ann Quillian, PE EH&S Services (PEF-903) Progress Energy Florida, Inc. PO Box 14042 Saint Petersburg, FL 33733