



August 12, 2008

Mr. Jeff Koerner, P.E.
Professional Engineer Administrator
Florida Department of Environmental Protection
Division of Air Resource Management
111 South Magnolia Drive, Suite 23
Tallahassee, Florida 32301

RECEIVED

AUG 13 2008

BUREAU OF AIR REGULATION

Re: Midulla Generating Station
Title V Air Operation FINAL Permit No.: 0490340-006-AV
Air Construction Permit PSD-FL-344
Request for Permit Revision, Pratt & Whitney FT8-3 Peakers Heat Input

Dear Mr. Koerner:

Project No. : 0490340-012-AV /
0490340-013-AC

Seminole Electric Cooperative, Inc. (Seminole) operates the Midulla Generating Station (MGS) located in Bowling Green, Hardee County, Florida. The MGS includes five (5) simple-cycle Pratt & Whitney (P&W) FT8-3 TwinPac combustion turbine (CT) peaking units; i.e., CT-4A & B, CT-5A & B, CT-6A & B, CT-7A & B, and CT-8A & B.

The Department issued Air Construction Permit No. PSD-FL-344 on June 29, 2005 authorizing construction and initial operation of the P&W peaking units. Title V Air Operation Permit No. 0490340-006-AV was last renewed and became effective on December 13, 2007, authorizing continuing operation of the MGS. The purpose of this letter is to request a concurrent revision to these two permits to allow for an increase in permitted capacity for the P&W FT8-3 CTs.

When firing natural gas, Section III, Condition B.1. of Final Permit No. 0490340-006-AV limits the TwinPac unit (i.e., two CTs) heat input to 635.6 million British thermal units per hour on a higher heating value basis (MMBtu/hr, HHV) at a compressor inlet temperature of 50°F and full load operation. During distillate oil firing, the TwinPac unit heat input is limited to 576.8 MMBtu/hr, HHV under the same operating conditions, but with a compressor inlet air temperature of 78°F. The corresponding heat input limitations are contained in Specific Condition No. 4 of Air Construction Permit No. PSD-FL-344. Operational data for the CTs indicates that these maximum heat inputs, which were based on P&W projections, underestimate the fuel consumption of the units by 6.2% for natural gas firing, and by 5.0% for distillate oil firing.

Accordingly, Seminole requests revisions to Final Permit No.: 0490340-006-AV, Section III Condition B.1. and Air Construction Permit No. PSD-FL-344, Specific Condition No. 4 to allow maximum heat inputs for each Twin Pac unit of 676.2 MMBtu/hr at 55.4 °F and 606.6 MMBtu/hr at 85.1 °F, HHV for gas and oil firing, respectively. Both heat input rates are also at a relative humidity of 80 percent, ambient air pressure of 14.63 psia, and baseload operation. The requested heat input

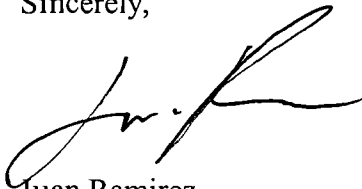
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values reflect the maximum rates at baseload over the ambient temperature operating range of the CTs based on data recently provided by P&W. Seminole does not request any other revisions to Final Permit No.: 0490340-006-AV or Air Construction Permit No. PSD-FL-344. The P&W peaking units will continue to comply with all of the current emission limitations and standards specified by Final Permit No. 0490340-006-AV.

In support of this Title V permit revision request, a completed Application for Air Permit - Long Form (Facility Information section only, including Responsible Official and Professional Engineer certifications) is enclosed.

If you have any questions or need additional information, please contact me at (813) 963-0994, Ext. 1219.

Sincerely,

A handwritten signature in black ink, appearing to read 'Juan Ramirez', with a stylized flourish at the end.

Juan Ramirez
Senior Environmental Engineer

Enclosures:

2 copies DEP Form No. 62-210.900(1)

Pratt & Whitney FT8-3 Heat Input Curves for Natural Gas and No. 2 Fuel Oil



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

RECEIVED

AUG 13 2008

I. APPLICATION INFORMATION

BUREAU OF AIR REGULATION

Air Construction Permit – Use this form to apply for any air construction permit at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air permit. Also use this form to apply for an air construction permit:

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Seminole Electric Cooperative, Inc.	
2. Site Name: Midulla Generating Station	
3. Facility Identification Number: 0490340	
4. Facility Location... Street Address or Other Locator: 6695 County Road 663 City: Bowling Green County: Hardee Zip Code: 33834-6817	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: Mike Roddy, Manager, Environmental Affairs	
2. Application Contact Mailing Address... Organization/Firm: Seminole Electric Cooperative, Inc. Street Address: P.O. Box 272000 City: Tampa State: FL Zip Code: 33688-2000	
3. Application Contact Telephone Numbers... Telephone: (813) 963-0994 ext. 1224 Fax: (813) 264-7906	
4. Application Contact Email Address: wmroddy@seminole-electric.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 8-13-08	3. PSD Number (if applicable):
2. Project Number(s): 0490340-012-AV	4. Siting Number (if applicable):
0490340-013-AC	

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

- Air construction permit
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Operation of the Seminole Electric Cooperative, Inc. (SECI) Midulla Generating Station Pratt & Whitney (P&W) FT8-3 TwinPac combustion turbine (CT) peaking units is currently authorized by Department Prevention of Significant Deterioration (PSD) Permit PSD-FL-344 (issued on June 29, 2005) and Title V Air Operation Permit FINAL Permit No. 0490340-006-AV (effective date of December 13, 2007).

The purpose of this application is to request revisions to Final Permit No.: 0490340-006-AV, Section III Condition B.1. and Air Construction Permit No. PSD-FL-344, Specific Condition No. 4 to allow maximum heat inputs for each TwinPac unit of 676.2 MMBtu/hr at 55.4 °F and 606.6 MMBtu/hr at 85.1 °F, HHV for gas and oil firing, respectively. Please see accompanying cover letter.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
005	TwinPac Simple Cycle Unit CT4A and CT4B	N/A	N/A
006	TwinPac Simple Cycle Unit CT5A and CT5B	N/A	N/A
007	TwinPac Simple Cycle Unit CT6A and CT6B	N/A	N/A
008	TwinPac Simple Cycle Unit CT7A and CT7B	N/A	N/A
009	TwinPac Simple Cycle Unit CT8A and CT8B	N/A	N/A

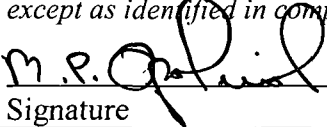
Application Processing Fee

Check one: Attached - Amount: \$ _____ Not Applicable

APPLICATION INFORMATION

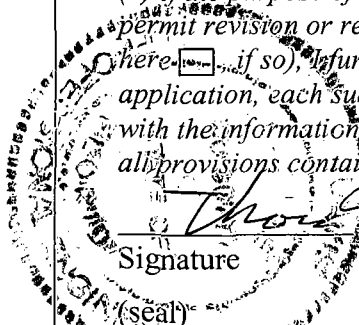
Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name: Michael Opalinski, Vice President of Technical Services
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: Seminole Electric Cooperative, Inc. Street Address: P.O. Box 272000 City: Tampa State: FL Zip Code: 33688-2000
4. Application Responsible Official Telephone Numbers... Telephone: (813) 963-0994 ext. 1233 Fax: (813) 228-1308
5. Application Responsible Official Email Address: mopalinski@seminole-electric.com
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature _____ Date <u>8/11/08</u>

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Thomas W. Davis Registration Number: 36777
2. Professional Engineer Mailing Address... Organization/Firm: Environmental Consulting & Technology, Inc. Street Address: 3701 Northwest 98th Street City: Gainesville State: Florida Zip Code: 32606-5004
3. Professional Engineer Telephone Numbers... Telephone: (352) 332-0444 ext. Fax: (352) 332-6722
4. Professional Engineer Email Address: tdavis@ectinc.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  _____ Signature 8/5/08 _____ Date

* Attach any exception to certification statement.

Figure 9460_Gas Fuel: 07/05/08
Seminole Power SwiftPac's - 0302
Est. Max Heat Input vs. Ambient Temp
FT8-3 Swift Pac, Gas Fuel, WI to 25/42 ppm NOx, 72.290 60Hz, 13.8 kV
14.63 psia, 80 % RH, 2.5 inch H2O inlet loss, 5.0 inch exhaust loss

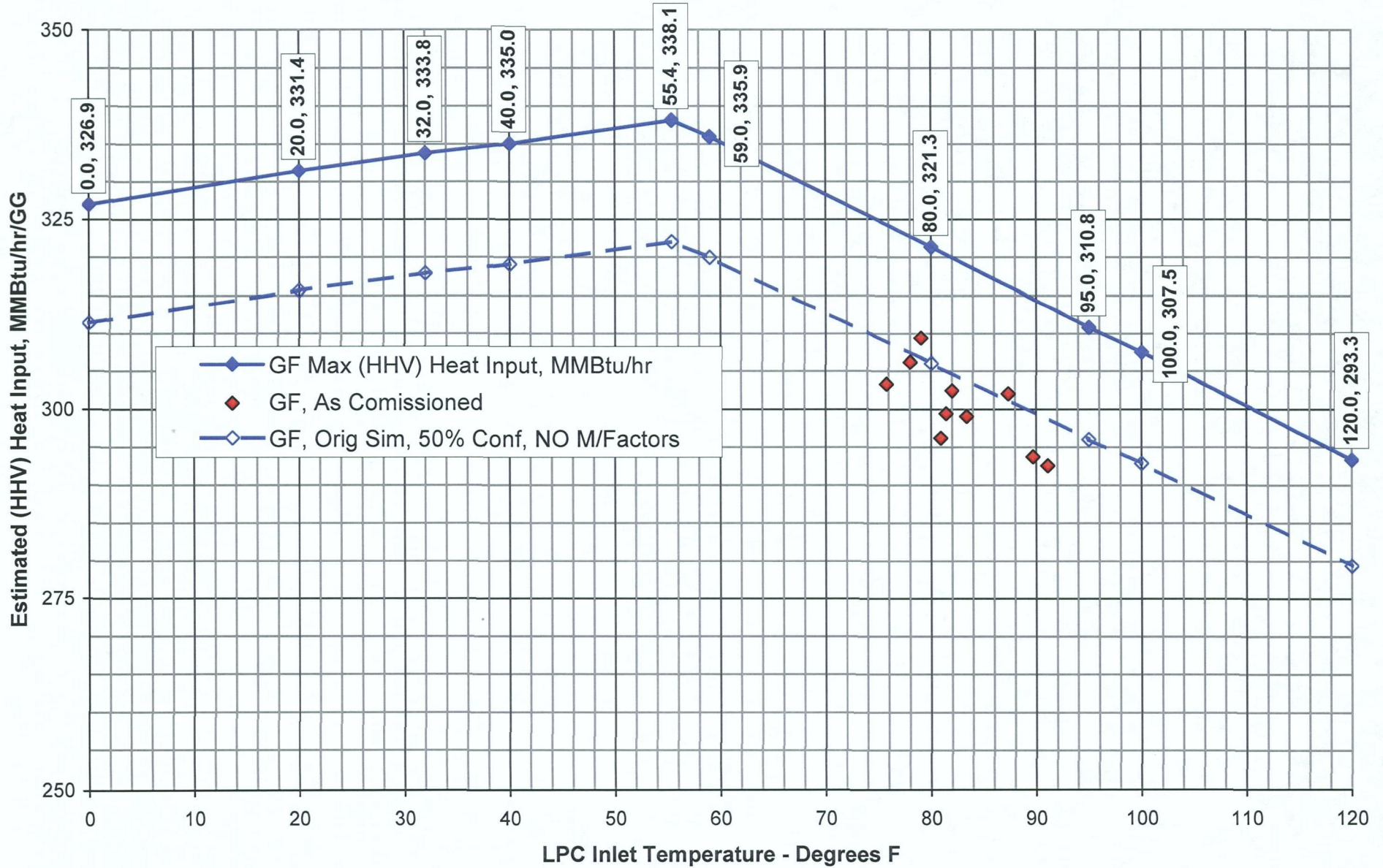


Figure 9460_Liquid Fuel: 07/05/08
Seminole Power SwiftPac's - 0302
Est. Max Heat Input vs. Ambient Temp
FT8-3 Swift Pac, Gas Fuel, WI to 25/42 ppm NOx, 72.290 60Hz, 13.8 kV
14.63 psia, 80 % RH, 2.5 inch H2O inlet loss, 5.0 inch exhaust loss

