

Hines - Air Correspondence

Jeff Kerner

- Mike Halpin



Progress Energy

March 22, 2005

Jim Pennington
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

Re: Progress Energy - Hines Energy Complex - Title V Permit - 1050234-008-AV

Dear Mr. Pennington:

We would like to change the heat input value for Hines Power Block 1 from lower heating value to higher heating value as referenced in Section III, Subsection A. of permit No. 1050234-008-AV.

On June 01, 2000 Mike Kennedy and sent a letter and application to Tom Ellison requesting that the heat input be increased for Hines Power Block 1 (please see Attachment B). As indicated in the attachment, the request is for the heat input to be in units of higher heating value. However, there was a typo in the revision to the Title V permit - The Title V permit listed the heating value in terms of lower heating (please see Attachment A - with the requested change).

This typo essentially gave Hines and increase in heat input of about 10 percent. The plant has historically considered the heat input curve in terms of higher heating value. Power blocks 2 & 3 are in terms of higher heating value - this change would make Power Block 1 consistent with units 2 & 3.

As we are requesting a decrease in heat input, we would hope this correction could be made by letter.

If you have any questions please feel free to contact Dave Meyer at (727) 820-5295. Thank you very much for your help in this matter.

I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this document is being submitted. I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

Sincerely,

A handwritten signature in cursive script that reads "Roger Zirkle".

Roger Zirkle
Plant Manager

Attachment A

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-001	170 MW Westinghouse 501F Combustion Turbine
-002	170 MW Westinghouse 501F Combustion Turbine

Emission units 001 and 002 each consist of a combined cycle Westinghouse 501F Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 1,915 mMBtu/hr (HHV) while firing natural gas and 2,020 MMBtu/hr (HHV) while firing fuel oil. NO_x emissions are controlled with dry low NO_x burners (DLN) and/or Selective Catalytic Reduction (SCR) for natural gas firing and wet injection for fuel oil firing. Each combustion turbine incorporates an unfired heat recovery steam generator.

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{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-195B; Rule 62-212.400(6), F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. At an ambient temperature of 59 °F, each combustion turbine shall not exceed 1,915 MMBtu/hr (HHV) while firing natural gas, or 2,020 MMBtu/hr (HHV) while firing fuel oil. See Attachment G-1 for a plot of heat input versus temperature. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and PSD-FL-195B]

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Attachment B – Hines Revised Heat Input Curve Permit Application



June 1, 2000

Mr. Tom Ellison
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

Dear Mr. Ellison:

Re: Hines Revised Heat Input Curve Permit Application

I have enclosed a copy of the revised heat input curve permit modification application for Florida Power Corporation's (FPC) Hines Units 1A and 1B. This was submitted to the DEP's Tallahassee office on May 15.

Please feel free to contact me at (727) 826-4334 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Michael Kennedy".

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

File: Hines Air Correspondence



bcc: D. A. Dingle
P. Crimi
J. M. Kennedy
J. A. Stenger

File: Hines Permit Applications

May 15, 2000

Mr. Scott Sheplak, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

Re: Revised Heat Input Curves - FPC Hines Facility

Enclosed are three originals of a construction permit application for the revision of the heat input curves for Units 1A and 1B at Florida Power Corporation's (FPC) Hines Energy Complex. Recall that Siemens/Westinghouse made an adjustment to improve the performance of the units, and this resulted in a minor change to the heat input curves for both natural gas and oil.

As the revised heat input curves show, the overall maximum heat input at 30 degrees F. for oil firing will not change from the curve incorporated into the permit on May 27, 1999. At 59 degrees F., the maximum heat input while firing oil will increase from the former 1,999 mmBtu/hour to 2,020 mmBtu/hour, which is an increase of 1.1%. The overall maximum heat input while firing natural gas will increase from 1,950 mmBtu/hour to 1,980 mmBtu/hour at 30 degrees F., which is an increase of 1.5%. At 59 degrees F., the maximum heat input while firing natural gas will increase from the current 1,866 mmBtu/hour to 1,915 mmBtu/hour, which is an increase of 2.6%.

In a discussion regarding this permit amendment on May 15, Mr. Al Linero of DEP and Mike Kennedy of FPC determined that the operating history of the Hines units is less than two years in duration; therefore, allowable emissions may be used as past actual emissions. In addition, FPC is not proposing to change any permitted emission limits.

FPC requests that, to the extent possible, the DEP co-process this construction permit amendment and the corresponding change to the draft Title V permit. However, due to the coming summer season demand for electricity, FPC requests that DEP issue the construction permit amendment as soon as possible in order to enable FPC to utilize the available capacity at Hines.

ONE POWER PLAZA, 263 - 13th Avenue South, 8B1A, St. Petersburg, FL 33701-5511 •
P.O. Box 14042, 8B1A • St. Petersburg • Florida 33733-4042 • (727) 820-5151
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Mr. Scott Snepiak, P.E.
May 15, 2000
Page Two

Thank you for your consideration of this request. Please contact Mike Kennedy at (727) 826-4334 if you have any questions.

Sincerely,



W. Jeffrey Pardue, C.E.P.
Director

Cc: Mr. Al Linero, DEP

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT
APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

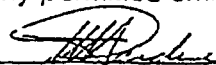
Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Florida Power Corporation	
2. Site Name : Hines Energy Complex	
3. Facility Identification Number :	1050234 [] Unknown
4. Facility Location : Bartow Street Address or Other Locator : 7700 County Road 555 City : Bartow County : Polk Zip Code : 33841	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

I. Part 1 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official : Name : W. Jeffrey Pardue, C.E.P. Title : Director, Environmental Services
2. Owner or Authorized Representative or Responsible Official Mailing Address : Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733
3. Owner/Authorized Representative or Responsible Official Telephone Numbers : Telephone : (727)826-4301 Fax : (727)826-4216
4. Owner/Authorized Representative or Responsible Official Statement : <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions units.</i>  _____ Signature 5/15/00 _____ Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
001	170 MW Westinghouse 501F Combustion Turbine Unit 1	AC
002	170 MW Westinghouse 501F Combustion Turbine Unit 2	AC

I. Part 3 - 1

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Purpose of Application and Category

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain :

- Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

- Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

- Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

- Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

- Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

I. Part 4 - 1

-] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

Category II : All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

-] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

-] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

-] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

-] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

I. Part 4 - 2

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

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Current operation permit number(s), if any :
1050223-002-AV

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

- Air construction permit for one or more existing, but unpermitted, emissions units.

I. Part 4 - 3

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Application Processing fee

Check one :

[X] Attached - Amount : \$ 250.00 [] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations : Proposed revision to the heat input curves for Power Block 1, Units 1A and 1B. Maximum heat input at 30 deg. F for oil firing does not change. Maximum heat input at 30 deg. F for natural gas firing increases from 1,950 to 1,980 mmBtu/hour.
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Jennifer A. Stenger Registration Number : 0052125
2. Professional Engineer Mailing Address : Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733
3. Professional Engineer Telephone Numbers : Telephone : (727)826-4132 Fax : (727)826-4216

I. Part 5 - 1

4. Professional Engineer Statement :

I, the undersigned, hereby certify, except as particularly noted herein, that :*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant 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

(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.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [x] 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions 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.

Jennifer A. Stanger

Signature
(seal)

5/15/00

Date

I. Part 6 - 1

* Attach any exception to certification statement.

I. Part 6 - 2

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

Effective : 3-21-96

Application Contact

1. Name and Title of Application Contact :
Name : J. Michael Kennedy, Q.E.P. Title : Manager, Air Programs
2. Application Contact Mailing Address :
Organization/Firm : Florida Power Corporation Street Address : P.O. Box 14042, MAC BB1A City : St. Petersburg State : FL Zip Code : 33733
3. Application Contact Telephone Numbers :
Telephone : (727)826-4334 Fax : (727)826-4216

Application Comment

This application is for the proposed revision of the heat input curves for Units 1A and 1B.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

10

1. Facility UTM Coordinates :					
Zone :	17	East (km) :	414.40	North (km) :	3073.90
2. Facility Latitude/Longitude :					
Latitude (DD/MM/SS) :		27 47 19	Longitude (DD/MM/SS) :		81 52 10
3. Governmental Facility Code :	4. Facility Status Code :	5. Facility Major Group SIC Code :	6. Facility SIC(s) :		
0	A	49			
7. Facility Comment :					
Facility consists of two combined cycle combustion turbines (CT) with a heat recovery steam generator for a total generating capacity of a nominal 500 MW; a 99 mmBtu/hr auxiliary boiler, and a 1,300 KW diesel generator.					

Facility Contact

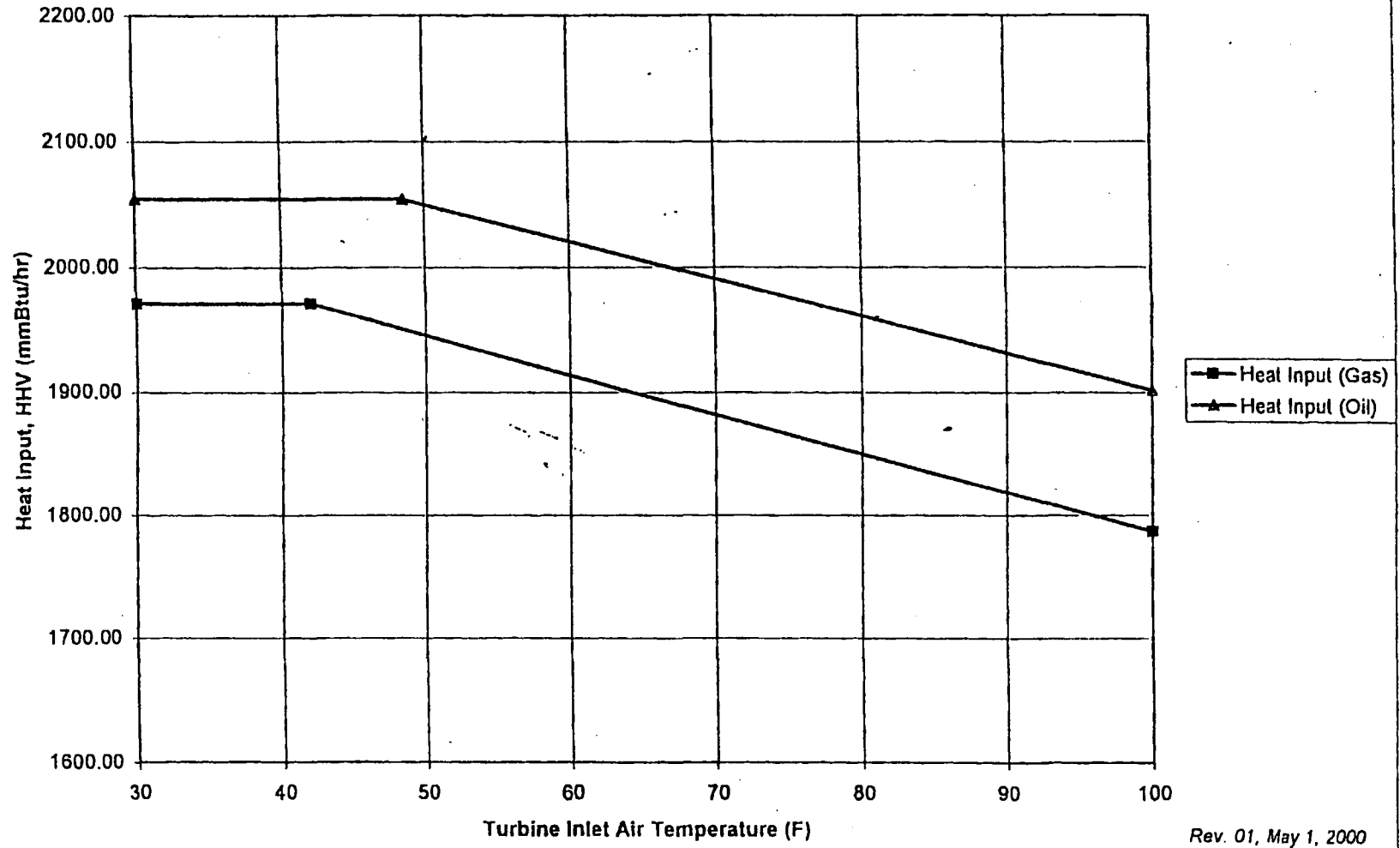
1. Name and Title of Facility Contact :					
Paul V. Crimi Asset Manager					
2. Facility Contact Mailing Address :					
Organization/Firm :	Florida Power Corporation				
Street Address :	3219 State Road 630 East				
City :	Ft. Meade	State :	FL	Zip Code :	33841
3. Facility Contact Telephone Numbers :					
Telephone :		(863)519-6101	Fax :		(863)519-6110

II. Part 1 - 1

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

Effective : 3-21-96

Hines Energy Complex - Power Block 1
CT Heat Input, HHV (per CT) vs. Turbine Inlet Air Temperature, Rev. 01



Rev. 01, May 1, 2000