12/3/103

Dear Yi,

Please check ARMS for the above referenced Title V and NSR permitting project updates. I have linked the affected EUs with the permits. Please advise if you need anything. Take care and wishing you the best for the upcoming year! Take care.

Bruce

Mitchell, Bruce

From:

Friday, Barbara

Sent:

Tuesday, December 30, 2003 11:48 AM

To:

Walker, Elizabeth (AIR); Gracy Danois; Joel Huey; Kathleen Forney

Cc:

Mitchell, Bruce

Subject: New Posting #0010001

There is a new posting on Florida's website.

0010001005AV PROGRESS ENERGY FLORIDA, INC. UNIVERSITY OF FLORIDA COGENERATION PLANT

Final Permit Revision

If you have any questions, feel free to contact me.

Thanks, Barbara 12/18/03

Dear Barbara,

After signing, please post the following permitting package located at: o:BAR/Title V/Bruce/Permits.0010001.005AV.Revision.006AC.UofF

0010001.005AV.SOB 0010001.005AV.Revision.FD 0010001f.005.AV.Revision.UofF 0010001G.005AV 0010001H.005AV 0010001U.005AV

Many thanks!

Bruce



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

David B. Struhs Secretary

January 9, 2004

CERTIFIED MAIL - Return Receipt Requested

Mr. Wilson B. Hicks, Jr.
Plant Manager
Progress Energy Florida
University of Florida Cogeneration Plant
Mowery Road, Building 82, University of Florida
Gainesville, Florida 32611

Re:

FINAL Title V Air Operation Permit Revision No.: 0010001-005-AV

University of Florida Cogeneration Plant

Heat Input Curve

Dear Mr. Hicks:

Based on an e-mail from Mr. Matthew Lydon, received on January 8, 2004, we realize that the latest heat input curve was not included as part of the FINAL Title V Air Operation Permit Revision package when it was mailed out on January 5, 2004. We apologize for the error. Therefore, we are enclosing the latest heat input curve that was received on September 22, 2003.

If you have any questions, please contact Bruce Mitchell at 850/413-9198, or write to me at the letterhead address.

Sincerely,

Yames K. Pennington Program Administrator Bureau of Air Regulation

JP/bm

Enclosures

cc: Mr. Scott Osbourn, P.E., ENSRI

Mr. Chris Kirts, FDEP Northeast District Office

Ms. Norma Castlen, FDEP Northeast District Branch Office

Mr. J. Michael Kennedy, Application Contact, PEFI

USEPA, Region 4



September 18, 2003

Mr. Bruce Mitchell
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee. Florida 32399-2400

Dear Mr. Mitchell

Re:

Florida Power University of Florida Facility

Permit No. 0010001-005-AV

Progess Energy Florida requests the incorporation of the enclosed revised heat input curve into the above referenced permit.

RECEIVED

SEP 22 2003

BUREAU OF AIR REGULATION

The enclosed curve represents applied correction factors to the 2001 GE acceptance test curve. The correction factors reflect degradation as the result of normal operation of the engine.

As seen in the facility's attached 2003 annual compliance test report summary, the engine demonstrated compliance while maintaining operation to the current heat input curve. The compliance test demonstrated, on a pounds per hour basis, nitrogen oxide emissions that are 31 percent below the permitted emission limit and carbon monoxide emissions that are 42 percent below the newly revised emission limit as expressed in the draft 0010001-005-AV, 52 percent below the current permitted emission limit as expressed in the current permit 0010001-004-AC. However, the megawatt (MW) output of the engine was restricted between 48MW to 49MW. In this event, the total restriction due to maintaining adherence to the current heat input curve results in a 3MW to 4MW loss and the generator is restricted to a total output of 52MW.

Daily operation of the engine is restricted to approximately 45 MW of the achievable 52MW, due to a very conservative adherence to the current permitted heat input curve with the inlet temperature ranging from 68°F degrees to 80°F. The facility recognizes environmental compliance as a priority of the engine's operation. The incorporation of the attached corrected heat input curve would allow for flexible operation while maintaining all emission limits and permit conditions as expressed in the current draft permit 0010001-006-AC and draft permit 0010001-005-AV.

Thank you for your continued consideration of this submittal. Please contact Matt Lydon at (727) 826-4152 if you have any questions.

Sincerely,

Wilson B. Hicks Plant Manager

Wilm B. the

Responsible Official

enclosures

University of Florida
Heat Input Curve for the GE LM6000-PC-ESPRINT Combustion Turbine

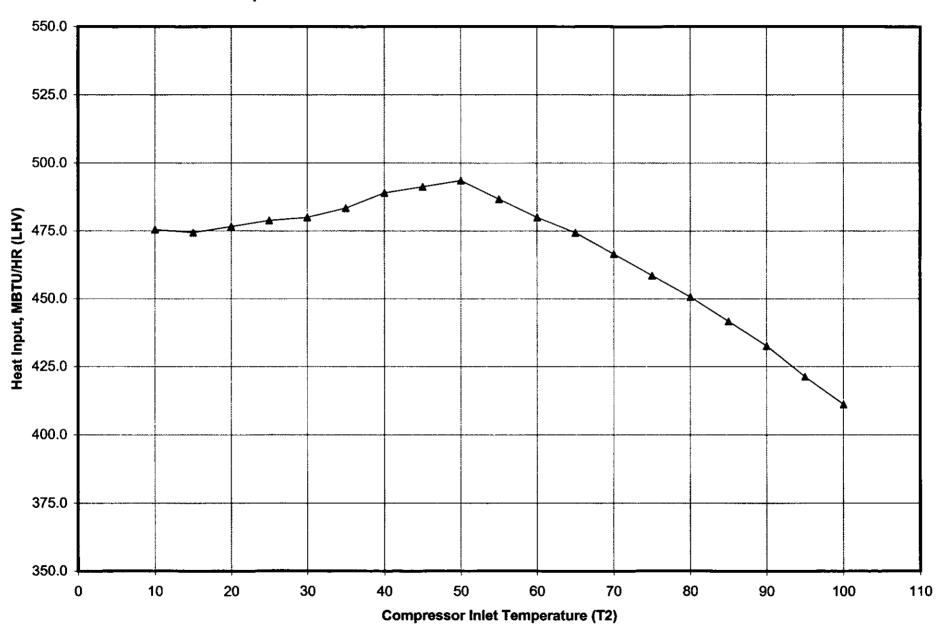


Table 2 Executive Summary

Plant: Florida Power - University of FLorida Cogen. Facility

Location: Gainesville, Florida Test Dates: April 29, 2003

Test Engineer: JTL Technician: LRF, DTA

Source: GE Model LM-6000PC- Esprint Turbine

	FDER Permit Limit	Subpart GG Limit	100% Load
NOx (lb/hr)	39.6	n.a.	27.32
NOx (ppmvd @ 15% O2)	25	126	18.30
CO (lb/hr)	35.8	n.a.	17.14
CO (ppmvd @ 15% O2)	36	n.a.	18.87
SO2 (vol % @ 15% O2)	0.015	0.015	4.17E-06

INTEROFFICE MEMORANDUM

TO:

Michael Cooke

THRU:

Trina Vielhauer Scott Sheplak

FROM:

Bruce Mitchell

SUBJECT:

FINAL Title V Air Operation Permit Revision No.: 0010001-005-AV Progress Energy Florida, Inc.: University of Florida Cogeneration Facility

DATE:

December 19, 2003 -- Dig 45

The attached FINAL Title V Air Operation Permit Revision, No. 0010001-005-AV, is being issued to incorporate: 1) the terms and limitations for the operation of the new nominal 48 megawatts (MW) General Electric (GE) LM6000-PC-ESPRINT combustion turbine established in Air Construction Permit, No. 0010001-003-AC, which replaced the existing 43 MW GE LM6000-PA combustion turbine at the University of Florida Cogeneration Plant; 2) the changes established in Air Construction Permit, No. 0010001-004-AC, which allowed an increase in heat input to the combustion turbine; 3) the changes established in Air Construction Permit, No. 0010001-006-AC, which reduced the short-term allowable limits for CO and altered some compliance language associated with NO_X established in previously issued Air Construction Permits, Nos. 0010001-003-AC and 0010001-004-AC; and, 4) the correction of the emissions unit IDs based on ARMS data. The new model will utilize spray intercooling to maximize throughput, thus reducing supplemental firing in the duct burner for meeting steam and power requirements.

There were <u>no</u> comments received from Region 4, U.S. EPA, during their 45-Day comment period, which concluded on December 18th. Therefore, it is recommended that the FINAL Permit be signed.

Attachments

MGC/sms/bm

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY			
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	A. Signature Addressee B. Received by (Printed Name) C. Date of Delivery Althory 2000 D. Is delivery address different from item 12			
1. Article Addressed to: Mr. Wilson B. Hicks, Jr. Plant Manager Progress Energy Florida University of Florida Cogeneration Plant	If YES, enter delivery address below: No			
Mowery Road, Building 82, University of Florida Gainesvile, Florida 32611	3. Service Type XXX Certified Mail			
	4. Restricted Delivery? (Extra Fee) Yes			
2. Article Number 7001 1140 0002 1578 0447 (Transfer from service label)				
PS Form 3811, August 2001 Domesţic Retu	um Receipt 102595-02-M-1540			

	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)					
2440	Mr. Wilson B. H	licks", Jr., Pla	nter Manager			
7 B	Postage	\$				
157	Certifled Fee					
02	Return Receipt Fee (Endorsement Required)		Postmark Here			
0005	Restricted Delivery Fee (Endorsement Required)					
머	Total Postage & Fees	\$				
1,1,40	The wilson b. micks, or , I talk religer					
7007	Street, Apt. No.; or PO Box No. Mowery Road, Building 82					
7[City, State, ZIP, 4 Cainesville, Florida 32611					
	PS Form 3800, January 2001 See Reverse for Instruction:					