

Florida Department of  
Environmental Protection

Memorandum

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TO: Michael G. Cooke

THRU: *R* Trina Vielhauer  
J. K. Pennington *JKP*

FROM: Michael P. Halpin *MH*

DATE: March 1, 2005

SUBJECT: Progress Energy Florida  
Hines Power Block 2 and 3  
Heat Input Increase

Attached for approval and signature is a construction permit for the subject facility. The permit provides an authorization for each of the CT's (four total) at Power Blocks 2 and 3 to operate with maximum heat inputs between 6 and 7% above that which was initially authorized. Neither a PSD Review nor a new determination of Best Available Control Technology (BACT) was required as a result of this request, due to the estimated emission increases falling below the appropriate thresholds.

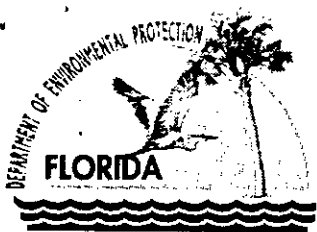
For informational purposes, please be advised that a concurrent revision to the Title V permit was made and noticed publicly, however that revision cannot be finalized concurrently due to the longer Title V comment period. Additionally, the applicant sought, and the Department allowed for issuance of the final AC permit revisions immediately upon the public comment period expiring. Therefore, pending public comments to the contrary, a final Title V permit revision can be issued in about 3 weeks.

The project was noticed in the Lakeland Ledger on February 14, 2005 and no comments were received.

I recommend your approval and signature.

Attachments

/mph



Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

March 1, 2005

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Roger Zirkle, Plant Manager  
Progress Energy Florida -Hines Energy Complex  
100 Central Avenue, CX1B  
St. Petersburg, Florida 33701

Re: Project No. 1050234-011-AC: Revision of Permit No. PSD-FL-296  
Project No. 1050234-013-AC: Revision of Permit No. PSD-FL-330

The applicant, Progress Energy Florida, applied on February 1, 2005, to the Department for a modification to PSD Permit numbers PSD-FL-296, PSD-FL-330 for its Hines Energy Complex located in Polk County. The modification is to allow the facility to utilize the fully installed capacity of the Power Block 2 and 3 combined cycle units by modifying the maximum heat input ratings. The Department has reviewed the modification request. The referenced permits are hereby modified as follows:

*For PSD permit PSD-FL-296 (Section III), changes are as follows:*

3. Combustion Turbine Capacity: The maximum heat input rates, based on the higher heating value of the fuels, and an ambient air temperature of 59 °F, shall not exceed ~~1945~~ 2048 mmBtu/hr when firing gas and ~~2020~~ 2155 mmBtu/hr when firing distillate fuel oil. This maximum heat input rate will vary depending upon ambient conditions and the combustion turbine characteristics that are described by the manufacturer's curves required by condition 6 of this section. Operation of these emissions units at less than 60% of capacity (based on heat input rates) is not allowed, except as required to cycle the units through periods of startup, shutdown and malfunction. The terms startup, shutdown and malfunction are defined at Rule 62-210.200, F.A.C. [Rules 62-4.070(3) and 62-210.200, F.A.C., limitation on potential to emit]

*For PSD permit PSD-FL-330 (Section III), changes are as follows:*

7. Permitted Capacity - Gas Turbines: The maximum heat input rate to each gas turbine is ~~1,915~~ 2,048 MMBtu per hour when firing natural gas and ~~2,020~~ 2,155 MMBtu per hour when firing distillate oil (based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate fuels, and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.]

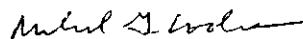
All other conditions of the referenced permits remain unchanged. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

*"More Protection, Less Process"*

*Printed on recycled paper.*

Executed in Tallahassee, Florida.



Michael G. Cooke, Director  
Division of Air Resource  
Management

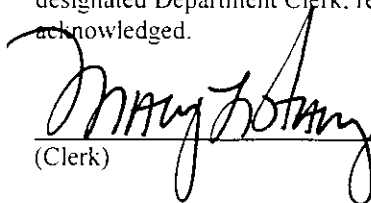
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 3/3/05 to the person(s) listed:

- Roger Zirkle, Progress Energy Florida \*
- Dave Meyer, Progress Energy Florida
- Scott Osbourn, Golder
- Buck Oven, PPSO
- Gerald Kissel, Southwest District Office
- Gregg Worley, EPA Region 4
- John Bunyak, National Park Service

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



(Clerk)

3/3/05  
(Date)

PLACE STICKER AT TOP OF ENVELOPE

**SENDER: COMPLETE THIS SECTION**

- 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.

**1. Article Addressed to:**

Mr. Roger Zirkle, Plant Manager  
 Progress Energy Florida-Hines Energy  
 Complex  
 100 Central Avenue, CX1B  
 St. Petersburg, Florida 33701

**2. Article Number**

(Transfer from service label)

7000 1670 0013 3109 8925

**COMPLETE THIS SECTION ON DELIVERY**

**A. Signature**

X *[Signature]*  Agent  Addressee

**B. Received by (Printed Name)**

**C. Date of Delivery**

*Bill Hines* *3/9*

**D. Is delivery address different from item 1?**  Yes  No  
 If YES, enter delivery address below:

**3. Service Type**

- Certified Mail  Express Mail
- Registered  Return Receipt for Merchandise
- Insured Mail  C.O.D.

**4. Restricted Delivery? (Extra Fee)**  Yes

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**U.S. Postal Service  
 CERTIFIED MAIL RECEIPT**

(Domestic Mail Only; No Insurance Coverage Provided)

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Postage	\$
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Mr. Roger Zirkle, Plant Manager  
 Progress Energy Florida-Hines Energy  
 Complex  
 100 Central Avenue, CX1B  
 St. Petersburg, Florida 33701

PS Form 3800, May 2000

See Reverse for Instructions