



Florida Department of  
Environmental Protection

Memorandum

TO: Michael G. Cooke

THRU: Trina Vielhauer   
J. K. Pennington

FROM: Michael P. Halpin 

DATE: January 18, 2005

SUBJECT: JEA  
Brandy Branch Generating Station

Attached for approval and signature is a construction permit for the subject facility. The permit provides an authorization for Unit 1 to operate on natural gas down to loads of 62 megawatts (approximately 35% output). This is an existing facility and neither a PSD Review nor a new determination of Best Available Control Technology (BACT) was required as a result of this request.

In support of the request, JEA had provided test results, under tests which were authorized by the Department during October of 2004, which indicate that CO levels can be consistently maintained under 11 ppmvd @ 15% O<sub>2</sub> while operating at 65 megawatts. Currently, the permit limits CO emissions to 15 ppmvd @ 15% O<sub>2</sub> while firing natural gas and minimizes operation below 50% output (approximately 90 megawatts) as a result of expected increases in CO while operating at loads below 50%.

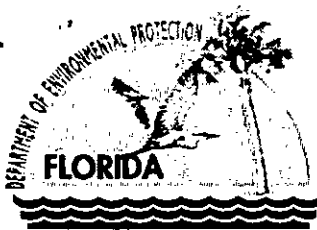
A review supports the applicant's contention that the existing permit condition limiting the low load to 50% may be relaxed while ensuring that all other permit conditions (emission limits) will be met. Due to operating variability, I have set the low load limit at 62 MW, providing JEA with a slight (5%) cushion.

The project was noticed in the Florida Times Union on December 16, 2004 and the only comment received was from ERMD (in Jacksonville); this comment was accommodated in the final permit (see Final Determination, attached).

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

January 18, 2005

Mr. James M. Chansler, P.E., D.P.A.  
Vice President, Operations and Maintenance  
JEA  
21 West Church Street  
Jacksonville, Florida 32202

Re: DEP File No. 0310485-010-AC; Modification of Permit No. PSD-FL-267 (PA 00-43)  
Brandy Branch Generating Station / Duval County

The applicant, JEA, applied on November 23, 2004, to the Department for a modification to PSD permit number PSD-FL-267 for its Brandy Branch Generating Station located in Duval County. The modification is to allow for Unit 1 to operate on natural gas down to loads of at least 65 gross megawatts. In support of the request, JEA has provided test results, under tests which were authorized by the Department during October of 2004, which indicate that CO levels can be consistently maintained under 11 ppmvd @ 15% O<sub>2</sub> while operating at 65 gross megawatts on natural gas. Currently, the permit limits CO emissions to 15 ppmvd @ 15% O<sub>2</sub> while firing natural gas and minimizes operation below 50% output as a result of expected increases in CO while operating at lower loads.

The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

### III. Emissions Unit(s) Specific Conditions

Applicable Standards And Regulations (Specific Condition 26, rewritten in entirety):

26. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration. Operation below 50% output while firing fuel oil (and below 62 gross megawatts while firing natural gas) shall be limited to 2 hours per unit cycle (breaker closed to breaker open). Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C.

All other terms and conditions of this permit 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.

Executed in Tallahassee, Florida.

Michael G. Cooke, Director  
Division of Air Resource  
Management

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## FINAL DETERMINATION

JEA

Brandy Branch Generating Station  
DEP File No. 0310485-010-AC, PA 00-43

The Department distributed a public notice package on December 6, 2004 to allow the applicant to allow for low load operation of Unit 1 at the Brandy Branch Generating Station located near Baldwin in Duval County. The Public Notice of Intent to Issue was published in the Florida Times Union on December 16, 2004.

### COMMENTS/CHANGES

No comments were received by the Department from the public, the applicant or from EPA.

Minor comments were received from ERMD (Jacksonville) regarding the lack of adequate test data (provided by the applicant) to warrant issuance of a permit modification which allows operation at reduced loads while firing fuel oil. As a result of the ERMD comments, the final permit language has been modified as follows:

### DRAFT LANGUAGE

#### III. Emissions Unit(s) Specific Conditions

*Applicable Standards And Regulations (Specific Condition 26. rewritten in entirety):*

26. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration. Operation below ~~50% output~~ 62 gross megawatts shall be limited to 2 hours per unit cycle (breaker closed to breaker open). Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C.

### FINAL LANGUAGE

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### CONCLUSION

The final action of the Department is to issue the permit with the minor changes described above.

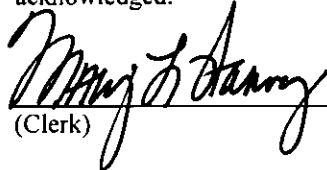
**CERTIFICATE OF SERVICE**

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 1/20/05 to the person(s) listed:

- James M. Chansler, JEA \*
- N. Bert Gianazza, P.E., JEA
- Gregg Worley, EPA
- John Bunyak, NPS
- Chris Kirts, NED
- Robert S. Pace, P.E. EQD
- Hamilton S. Oven, DEP-Siting

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) \_\_\_\_\_

1/20/05  
(Date)

**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. James M. Chansler, P.E.**  
**D.P.A.**  
**Vice President, Operations and Maintenance**  
**JEA**  
**21 West Church Street**  
**Jacksonville, Florida 32202**

2. Article Number **7000 1670 0013 3110 2226**  
*(Transfer from service label)*

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  Addressee  
*Pat Amerat*

B. Received by (Printed Name) **JAN 25** Date of Delivery

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

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

**U.S. Postal Service  
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Mr. James M. Chansler, P.E. D.P.A.  
 Vice President, Operations and Maintenance  
 JEA - 21 West Church Street  
 Jacksonville, Florida 32202