



Florida Department of
Environmental Protection

Memorandum

TO: Michael G. Cooke

THRU: Trina Vielhauer 
J. K. Pennington

FROM: Michael P. Halpin 

DATE: May 17, 2004

SUBJECT: JEA - Brandy Branch Generating Station
PSD Permit Modification – Very low sulfur oil and hours of operation
DEP File No. PP 00-43 (PSD-FL-310)

Attached is the final permit modification relative to JEA's Brandy Branch PSD permit.

This is an existing facility which is currently in the process of modifying two of its three combustion turbines for combined cycle operation. Although natural gas is the primary fuel for all three CT's, the facility is also allowed to combust small amounts of low sulfur oil (0.05%) for limited time periods. JEA has now asked for permission to combust a lower sulfur oil (0.0065%) for longer periods of time. A review supports the applicant's contention that the ambient air quality standards will be met, and no PSD review is triggered, eliminating the requirement for a BACT Determination.

Notice was published in the Florida Times-Union on April 30, 2004. No comments were received.

I recommend your approval.

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

May 17, 2004

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

Re: DEP File No. 0310485-007-AC; Modification of Permit No. PSD-FL-310 (PA 00-43)
Brandy Branch Generating Station / Duval County

The applicant, JEA, applied on March 11, 2004, to the Department for a modification to PSD permit number PSD-FL-310 for its Brandy Branch Generating Station located in Duval County. The modification is to clarify the allowable fuels and associated hours of use, including provisions for the use of very, very low sulfur oil (0.0065% sulfur). 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 14, rewritten in entirety):

- 14.A. Allowable fuels: The facility is authorized to burn any combination of natural gas (2.0 grains sulfur / 100 scf), low sulfur fuel oil (0.05% sulfur) and lower sulfur fuel oil (0.0065% sulfur). The combinations of these fuels are subject to the hour limitations and record-keeping requirements set forth in 14.B. and 14.C. below. Unless otherwise authorized by this permit, CT operation below 50% output shall be limited to 2 hours during each calendar day.
- 14.B. Hours of operation: All units (combined and simple cycle) are authorized to operate 8760 hours per year while firing natural gas (2.0 grains sulfur / 100scf). The combined cycle units are authorized to operate up to a combined maximum of 576 actual plus "equivalent hours" per consecutive 12-month period while firing 0.05% sulfur oil OR a combined maximum of 1478 actual plus "equivalent hours" while firing 0.0065% sulfur oil per consecutive 12-month period, whichever occurs first. The simple cycle unit is authorized to operate up to a maximum of 750 actual plus "equivalent hours" per consecutive 12-month period, while firing either 0.05% or .0065% sulfur oil, whichever occurs first. Tracking of "equivalent hours" shall conform with and be recorded as defined in paragraph 14C. Additionally, the following requirements shall apply:
1. In the event that any of the 3 emission units (simple or combined cycle) fires No. 2 distillate fuel oil (0.05% sulfur) during a calendar day, that unit shall be limited to 16 hours of daily operation on any fuel. Additionally, the other 2 units shall not be fired on any of the allowable fuels for that calendar day.
 2. In the event that the simple cycle unit fires lower sulfur oil (0.0065% sulfur) during any calendar day, but for 8 hours or less, the combined cycle units may fire any combination of lower sulfur oil (0.0065% sulfur) or natural gas (2 grains / 100 scf) during that calendar day.
 3. In the event that the simple cycle unit fires lower sulfur fuel oil (0.0065% sulfur) for more than 8 hours during a calendar day, it shall be allowed 24 hours of daily operation while the combined cycle units shall not be fired on any fuel for the calendar day.
- 14.C. Record keeping requirements and fuel switching:

Upon prior written notification, JEA may switch between firing 0.05% or 0.0065% sulfur oil on a calendar day basis (i.e. switching is not authorized within any calendar day). A record shall be made every day for each emission unit documenting: the fuel type actually used, the number of actual hours of firing each fuel type, and
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(for the hours when any oil is fired) the "equivalent hours" for the fuel oil which was not fired. The following shall be used to determine the "equivalent hours": each actual hour of combustion of 0.05% sulfur distillate oil shall equate to 2.6 "equivalent hours" of lower sulfur oil (0.0065% sulfur) combustion and each actual hour of firing lower sulfur oil (0.0065% sulfur) shall equate to 0.39 "equivalent hours" of 0.05% sulfur oil combustion.


At the end of each calendar month, the total number of "equivalent hours" plus actual hours shall be determined. A running total shall be maintained in order to ensure compliance with Condition 14.B. above.

[Applicant Request, Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]

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 Resources
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 5/18/04 to the person(s) listed:

James M. Chandler, JEA *
N. Bert Gianazza, P.E., JEA
Gregg Worley, EPA
John Bunyak, NPS
Chris Kirts, NED
James L. Manning, P.E. RESD
Kyle Lucas, A.Q.S., Black & Veatch
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) 5/18/04 (Date)

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- 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. Chandler, P.E., D.P.A.
 Vice President, Operations and
 Maintenance
 JEA
 21 West Church Street
 Jacksonville, Florida 32202

2. Article Number **7000 1670 0013 3109 8437**
 (Transfer from service label)

PS Form 3811, August 2001 Domestic Return Receipt 102595-02-M-1540

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J. Richardson Agent Addressee

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Send to
Mr. James M. Chandler
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 City, State, ZIP+4
Jacksonville, Florida 32202