PERMITTEE

JEA
21 West Church Street
Jacksonville, Florida 32202

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department)
Division of Air Resource Management
Bureau of Air Regulation, New Source Review Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Air Permit No. 0310047-019-AC/PSD-FL-386B
Minor Air Construction Permit
Kennedy Generating Station

The final permit for this project makes the following minor revisions: authorizes tuning of the dry low nitrogen oxide (DLN) combustors and automated combustion turbine control system in accordance with the manufacturer's recommendations, industry standards and determined best practices; adds the basis for the nitrogen oxides (NOx) limits, which is the NSPS (New Source Performance Standards), to the "Emissions Standards" table; adds a fuel-specific exemption for visible emissions annual testing when a unit does not operate for more than 400 hours in a federal fiscal year for a given fuel; and corrects the due date for the Annual Operating Report from March 1 to April 1. The existing facility is located in Duval County at 4215 Talleyrand Avenue in Jacksonville, Florida. The project results in a minor source air construction permit and is not subject to PSD preconstruction review.

NOTICE AND PUBLICATION

The Department distributed a draft minor air construction permit package on June 19, 2009. The applicant published the Public Notice in The Florida-Times Union on July 3, 2009. The Department received the proof of publication on July 9, 2009. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

No comments on the Draft Permit were received from the public, the Duval County Air Program, the Department's Northeast District Office, the EPA Region 4 Office or the applicant.

CONCLUSION

The final action of the Department is to issue the permit.

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

July 24, 2009

Sent by Electronic Mail – Received Receipt Requested

Mr. James M. Chansler, P.E., D.P.A.
Chief Operating Officer
JEA
21 West Church Street
Jacksonville, Florida 32202

Re: Project No. 0310047-019-AC (PSD-FL-386B)
Kennedy Generating Station
Combustion Turbine No. 8, Minor Permit Revisions

Dear Mr. Chansler:

JEA operates the Kennedy Generating Station, which is an existing power plant categorized under Standard Industrial Classification Code No. 491. The plant is located in Duval County at 4215 Talleyrand Avenue in Jacksonville, Florida. This permitting action revises Permit No. PSD-FL-386A, which authorized construction of Combustion Turbine No. 8 (Emissions Unit 16). A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit revision is issued pursuant to Chapter 403, Florida Statutes. Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes 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 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

Joseph Kahn, Director
Division of Air Resource Management

7/27/09
(Date)

JK/jfk/rbm

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that either this Notice of Final Air Permit Revision (including the Final Air Permit Revision and Final Determination), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested to the persons listed below.

Mr. James M. Chansler, Chief Operating Officer, JEA (chanjm@jea.com)
Mr. Bert Gianazza, P.E., JEA (giannb@jea.com)
Mr. Chris Kirts, DEP-NED (christopher.kirts@dep.state.fl.us)
Mr. Richard Robinson, Air Program Supervisor, Duval County (robinson@coj.net)
Mr. Mike Halpin, DEP Siting Office (mike.halpin@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epamail.epa.gov)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Clerk) 7/28/09 (Date)

This permitting action revises Permit No. PSD-FL-386A.

Section 3. Specific Conditions, Subsection A. CT No. 8 Simple Cycle Combustion Turbine

The following permit conditions are revised as follows. Deleted text is marked by ~~strikethrough~~ and new text is marked with double underline. All other conditions are unchanged and the affected emissions units remain subject to the applicable requirements.

5. DLN Combustion: The permittee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_X emissions from the combustion turbine when firing natural gas. Prior to the initial emissions performance tests required for the combustion turbine, the DLN combustors and automated combustion turbine control system shall be tuned to achieve the permitted levels for CO and NO_X. Thereafter, the system shall be maintained and tuned in accordance with the manufacturer's recommendations, industry standards or determined best practices.

   [Application Nos. 0310047-015-AC/PSD-FL-386 and 0310047-019-AC/PSD-FL-386B]

12. Emission Standards: Emissions from ~~each~~ the combustion turbine shall not exceed the following emissions standards.

Pollutant	Emission Standard [e]	Averaging Time	Compliance Method	Basis
CO [a] (Gas)	9.0 ppmvd @ 15% O_2	3-hour test avg.	EPA Method 10 Test	Avoid PSD
	32.0 lb/hour			
CO [a] (Oil)	20.0 ppmvd @ 15% O_2	3-hour test avg.	EPA Method 10 Test	
	66.0 lb/hour			
NOx [b] (Gas)	15.0 ppmvd @ 15% O_2	4 hour rolling average	CEMS	NSPS and Avoid PSD
	108.3 lb/hour	3-hour test avg.	CEMS and EPA Method 19	
NO_X [b] (Oil)	42 ppmvd @ 15% O_2	4 hour rolling average	CEMS	NSPS and Avoid PSD
	335.0 lb/hour	3-hour test avg.	CEMS and EPA Method 19	
PM/PM_{10} [c]	10% Opacity	6-minute block	EPA Method 9 Test	BACT
	Fuel sulfur specifications	N/A	Record Keeping	
SO_2 [d] (Gas)	2 grains S/100 SCF of gas	N/A	Record Keeping	Avoid PSD
SO_2 [d] (Oil)	0.05% sulfur by weight	N/A	Record Keeping	Avoid PSD

a. The permittee shall conduct an initial test to demonstrate compliance with the CO emissions limits for the unit as constructed. Subsequent compliance tests shall be conducted ~~during the year~~ prior to obtaining a renewed ~~renewing the~~ Title V operating permit.

b. Continuous compliance shall be demonstrated with the 4-hour rolling average NOx emissions limit (ppmvd @ 15% O_2) by data collected from the required continuous emissions monitoring system (CEMS). Compliance with the NO_X emissions limit (lb/hr) shall be demonstrated by converting the NO_X CEMS data collected during the initial CO test by using the applicable F-Factor and EPA Method 19.

c. The fuel sulfur specifications combined with the efficient combustion design and operation of the combustion turbine represents BACT for PM/PM_{10} emissions. No stack tests are required. Compliance with the CO and visible emissions standards shall serve as indicators of good combustion. *{Permitting Note: Maximum expected PM/PM_{10} emissions are approximately 19 lb/hour on natural gas and 45.0*

lb/hr on oil.}

d. The fuel sulfur specifications effectively limit the potential emissions of sulfur dioxide (SO_2) from each combustion turbine. No stack tests are required.

e. The mass emission rate standards are based on a turbine inlet condition of 59° F and the higher heating value of each fuel. Mass emission rates may be adjusted for actual test conditions in accordance with the performance curves and/or equations on file with the Department.

[Rule 62-212.400 (BACT), F.A.C.; Rule 62-4.070(3), F.A.C.; Rule 62-212.400(12), F.A.C. (Source Obligation); Rule 62-297.310(7)(a)3, F.A.C.; and 0310047-019-AC/PSD-FL-386B]

18. Annual Testing ~~Prior to Renewal~~: During each federal fiscal year (October 1st to September 30th), annual compliance tests for visible emissions shall be conducted. For each visible emissions test, emissions of NO_x recorded by the CEMS shall also be reported. If the unit does not operate for more than 400 hours in ~~any~~ federal fiscal year for a given fuel, then an annual visible emissions test is not required for that fuel. If annual visible emissions testing is not required due to this exclusion, a visible emissions compliance test shall be conducted prior to obtaining a renewed Title V operating permit ~~once per each five-year period, coinciding with the term in its air operation permit~~.

[Rules 62-4.070(3), 62-297.310(7)(a) and (b), F.A.C.; and 0310047-019-AC/PSD-FL-386B]

Section 4. Appendix C. Common Conditions

20. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by ~~March~~April 1st of each year. [Rule 62-210.370(3), F.A.C. and 0310047-019-AC/PSD-FL-386B]