

Florida Department of  
Environmental Protection

Memorandum

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To: Joseph Kahn, Division of Air Resource Management  
Through: Trina Vielhauer, Bureau of Air Regulation  
Jeff Koerner, New Source Review Section  
From: Bruce Mitchell, New Source Review Section  
Date: July 23, 2009  
Subject: Air Permit No. 0310047-019-AC/PSD-FL-386B  
JEA, Kennedy Generating Station  
Combustion Turbine No. 8, Minor Permit Revision  
Duval County, Florida

The final permit for this project is attached for your approval and signature, which 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.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. I recommend your approval of the attached final permit for this project.

Attachments

TLV/jfk/rbm

## FINAL DETERMINATION

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### 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

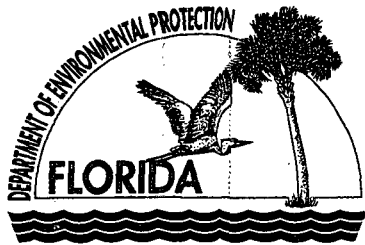
The Department distributed a draft minor air construction permit package on June 19, 2009. The applicant published the Public Notice in The Florida-Times Union on July 3, 2009. The Department received the proof of publication on July 9, 2009. No requests for administrative hearings or requests for extensions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

**FINAL PERMIT REVISION**

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**CERTIFICATE OF SERVICE**

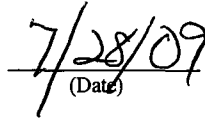
The undersigned duly designated deputy agency clerk hereby certifies that either this Notice of Final Air Permit Revision (including the Final Air Permit Revision and Final Determination), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail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

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

  
\_\_\_\_\_  
(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 ~~strike through~~ 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<sub>x</sub> 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<sub>x</sub>. 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 <sup>c</sup>	Averaging Time	Compliance Method	Basis
CO <sup>a</sup> (Gas)	9.0 ppmvd @ 15% O <sub>2</sub>	3-hour test avg.	EPA Method 10 Test	Avoid PSD
	32.0 lb/hour			
CO <sup>a</sup> (Oil)	20.0 ppmvd @ 15% O <sub>2</sub>	3-hour test avg.	EPA Method 10 Test	
	66.0 lb/hour			
NO <sub>x</sub> <sup>b</sup> (Gas)	15.0 ppmvd @ 15% O <sub>2</sub>	4 hour rolling average	CEMS	<u>NSPS and</u> Avoid PSD
	108.3 lb/hour	3-hour test avg.	CEMS and EPA Method 19	
NO <sub>x</sub> <sup>b</sup> (Oil)	42 ppmvd @ 15% O <sub>2</sub>	4 hour rolling average	CEMS	<u>NSPS and</u> Avoid PSD
	335.0 lb/hour	3-hour test avg.	CEMS and EPA Method 19	
PM/PM <sub>10</sub> <sup>c</sup>	10% Opacity	6-minute block	EPA Method 9 Test	BACT
	Fuel sulfur specifications	N/A	Record Keeping	
SO <sub>2</sub> <sup>d</sup> (Gas)	2 grains S/100 SCF of gas	N/A	Record Keeping	Avoid PSD
SO <sub>2</sub> <sup>d</sup> (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~~ obtaining a renewed ~~renewing the~~ Title V operating permit.
- b. Continuous compliance shall be demonstrated with the 4-hour rolling average NO<sub>x</sub> emissions limit (ppmvd @ 15% O<sub>2</sub>) by data collected from the required continuous emissions monitoring system (CEMS). Compliance with the NO<sub>x</sub> emissions limit (lb/hr) shall be demonstrated by converting the NO<sub>x</sub> 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<sub>10</sub> 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<sub>10</sub> 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<sub>2</sub>) 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 1<sup>st</sup> to September 30<sup>th</sup>), annual compliance tests for visible emissions shall be conducted. For each visible emissions test, emissions of NO<sub>x</sub> 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]

## Livingston, Sylvia

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**From:** Livingston, Sylvia  
**Sent:** Tuesday, July 28, 2009 1:03 PM  
**To:** 'chanjm@jea.com'  
**Cc:** 'giannb@jea.com'; Kirts, Christopher; 'robinson@coj.net'; 'abrams.heather@epa.gov'; 'forney.kathleen@epa.gov'; Halpin, Mike; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)  
**Subject:** JEA - KENNEDY; 0310047-019-AC/ PSD-FL-386B  
**Attachments:** 0310047-019-AC.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

**Click on the following link to access the permit project documents:**

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0310047.019.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0310047.019.AC.F_pdf.zip)

**Owner/Company Name:** JEA  
**Facility Name:** KENNEDY  
**Project Number:** 0310047-019-AC/ PSD-FL-386B  
**Permit Status:** FINAL  
**Permit Activity:** CONSTRUCTION  
**Facility County:** DUVAL  
**Processor:** Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

## Livingston, Sylvia

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**From:** Gianazza, N. Bert [GianNB@jea.com]  
**Sent:** Tuesday, July 28, 2009 3:23 PM  
**To:** Livingston, Sylvia  
**Cc:** Chansler, James M. - Chief Operating Officer; Holbrooks, Kevin E. - Director, Compliance  
**Subject:** RE: JEA - KENNEDY; 0310047-019-AC/ PSD-FL-386B

Sylvia,

My R.O. and I have received this and can view the document.

Thanks, Bert

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**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Tuesday, July 28, 2009 1:03 PM  
**To:** Chansler, James M. - Chief Operating Officer  
**Cc:** Gianazza, N. Bert; Kirts, Christopher; robinson@coj.net; abrams.heather@epa.gov; forney.kathleen@epa.gov; Halpin, Mike; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)  
**Subject:** JEA - KENNEDY; 0310047-019-AC/ PSD-FL-386B

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## Livingston, Sylvia

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**From:** Robinson, Richard [ROBINSON@coj.net]  
**Sent:** Tuesday, July 28, 2009 1:55 PM  
**To:** Livingston, Sylvia  
**Cc:** Hall, Darrel; Hunter Barnes, Gloria; Smith, Harry; Tilley, Lori; Woosley, Jerry  
**Subject:** RE: JEA - KENNEDY; 0310047-019-AC/ PSD-FL-386B

Hi Sylvia,

I was able to access the subject documents through the e-mail link below. On all future permits in which we are the compliance authority, please use our new mailing address, phone number and fax number listed in my e-mail signature below.

Thanks,

Richard

***Richard L. Robinson, P.E.***

Environmental Engineering Manager  
Air Quality Branch  
Environmental Quality Division  
Environmental and Compliance Department  
City of Jacksonville, Florida  
Jake Godbold City Hall Annex  
407 North Laura Street, Third Floor  
Jacksonville, FL 32202  
Phone: (904) 255-7201  
Fax: (904) 588-0518  
E-Mail: [robinson@coj.net](mailto:robinson@coj.net)

**SAVE THE DATE: 2009 EPB/UNF Environmental Symposium on August 28th - "Sustainability for Jacksonville's Future"**

**Visit COJ.net keyword "environmental symposium" for registration information.**

Please note: that under Florida's very broad public records law, e-mail communications to and from City officials may be subject to public disclosure.

 Please consider the environment before printing this email.

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**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]

**Sent:** Tuesday, July 28, 2009 1:03 PM

**To:** chanjm@jea.com

**Cc:** giannb@jea.com; Kirts, Christopher; Robinson, Richard; abrams.heather@epa.gov; forney.kathleen@epa.gov; Halpin, Mike; Gibson, Victoria; Mitchell, Bruce; Walker, Elizabeth (AIR)

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