

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

October 24, 2008

Mr. Michael J. Brost
V.P., Electric System
JEA
St. Johns River Power Park
21 West Church Street
Jacksonville, Florida 32202

Re: Draft Air Permit Revision No. PSD-FL-010(H)
Project No. 0310045-024-AC
Pulverized Coal-Fired Boilers Nos. 1 and 2
Add Natural Gas Igniters for Startup, Shutdown, Low Load Operations and Flame Stabilization and Allow the Existing No. 2 Fuel Oil Igniters to be Used for Flame Stabilization and Shutdown

Dear Mr. Brost:

On September 15, 2008, you submitted an application requesting authorization to install and use natural gas igniters for startup, shutdown, flame stabilization and low load operation, and authorize the existing No. 2 distillate fuel oil igniters to be used for flame stabilization and shutdown on the existing pulverized coal-fired Boilers Nos. 1 and 2 at the St. Johns River Power Park facility. This facility is located at 11201 New Berlin Road in Jacksonville, Duval County, Florida. Enclosed are the following documents:

- Technical Evaluation and Preliminary Determination;
- Draft Permit Revision;
- Written Notice of Intent to Issue Air Permit Revision; and
- Public Notice of Intent to Issue Air Permit Revision.

The Public Notice of Intent to Issue Air Permit Revision is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Bruce Mitchell, at 850/413-9198.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures
TLV/sa/bm

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT REVISION

*In the Matter of an
Application for Air Permit Revision by:*

JEA
21 West Church Street
Jacksonville, Florida 32202

Authorized Representative:
Mr. Michael J. Brost
Vice President – Electric System

Air Permit No. PSD-FL-010(H)
Project No. 0310045-024-AC
St. Johns River Power Park
Pulverized Coal-Fired Boilers Nos. 1 and 2
Add Natural Gas Igniters
Duval County, Florida

Facility Location: JEA operates an electric utility in Jacksonville located at 11201 New Berlin Road in Duval County, Florida.

Project: The applicant proposes to install and operate natural gas igniters for startup, shutdown, flame stabilization and low-load operation on the existing pulverized coal-fired Boilers Nos. 1 and 2. In addition, the applicant requests authorization to use the existing No. 2 fuel oil (FO) igniters for flame stabilization and shutdown on the same boilers [they are already permitted to use No. 2 FO igniters for startup and low-load operation (Power Plant Siting Permit No. PA81-13)]. The original air construction permit, No. PSD-FL-010, required that the auxiliary boiler fire No. 2 FO while providing startup and shutdown capability for Boilers Nos. 1 and 2. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit Revision, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit revision to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit Revision in accordance with the conditions of the proposed Draft Permit Revision unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S., and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit Revision (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rules 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT REVISION

change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit Revision. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit Revision, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit Revision. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT REVISION

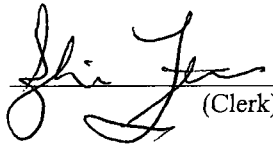
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit Revision) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 10/27/08 to the persons listed below.

Mr. Michael J. Brost, JEA (brosmj@jea.com)
Mr. John A. Worley, JEA (worlja@jea.com)
Mr. Kennard F. Kosky, Golder Associates, Inc. (kkosky@golder.com)
Mr. Richard Robinson, Duval County Environmental Quality Division (robinson@coj.net)
Ms. Kathleen Forney, U.S. EPA, Region 4 (forney.kathleen@epamail.epa.gov)
Ms. Heather Abrams, U.S. EPA Region 4 (abrams.heather@epamail.epa.gov)
Ms. Catherine Collins, Fish and Wildlife Service (catherine_collins@fws.gov)
Mr. Mike Halpin, DEP-Siting Coordination Office (mike.halpin@dep.state.fl.us)
Ms. Vicki Gibson, DEP-BAR (victoria.gibson@dep.state.fl.us) (for read file)

Clerk Stamp

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



(Clerk)

10/27/08
(Date)

Florida Department of
Environmental Protection

Memorandum

TO: Trina Vielhauer, Chief, Bureau of Air Regulation
THROUGH: Syed Arif, New Source Review Section SA
FROM: Bruce Mitchell *BAM*
DATE: October 23, 2008
SUBJECT: Draft Air Construction Permit Revision No. PSD-FL-010H
Project No. 0310045-024-AC
JEA – St. Johns River Power Park
Pulverized Coal-Fired Boilers Nos. 1 and 2
Addition of Natural Gas Igniters for Startup, Shutdown, Flame Stabilization and Low
Load Operation; and Allow the Use of No. 2 Fuel Oil for Flame Stabilization and
Shutdown (Already Allowed for Startup and Low Load Operation)

This project is subject to minor source preconstruction review. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit Revision;
- Public Notice of Intent to Issue Air Permit Revision;
- Technical Evaluation and Preliminary Determination;
- Draft Permit Revision; and
- P.E. Certification.

For pulverized coal-fired Boilers Nos. 1 and 2, the Draft Permit Revision authorizes the installation of natural gas igniters for startup, shutdown, flame stabilization and low load operation; and it authorizes the use of the No. 2 fuel oil (FO) for flame stabilization and shutdown (already authorized to use No. 2 FO for startup and low load operation in Power Plant Siting Permit No. PA81-13). The proposed work will be conducted at the existing JEA St. Johns River Power Park facility, which is located in Duval County, Florida. The Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project. I recommend your approval of the attached Draft Permit Revision.

Attachments

P.E. CERTIFICATION STATEMENT

APPLICANT

JEA
21 West Church Street
Jacksonville, Florida 32202

Air Permit No. PSD-FL-010H
Project No. 0310045-024-AC
St. Johns River Power Park
Pulverized Coal-Fired Boilers Nos. 1 & 2
Add Natural Gas Igniters
Duval County, Florida

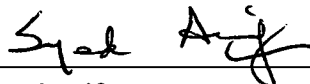
PROJECT DESCRIPTION

The applicant proposes to install and operate natural gas (NG) igniters for startup, shutdown, flame stabilization and low-load operation on the existing pulverized coal-fired Boilers Nos. 1 and 2. In addition, the applicant requests authorization to use the existing No. 2 distillate fuel oil (FO) igniters for flame stabilization and shutdown on the same boilers [they are already permitted to use No. 2 distillate fuel oil igniters for startup and low-load operation in Power Plant Siting Permit No. PA81-13]. The NG igniters will be used primarily in place of the No. 2 fuel oil igniters for startup, shutdown, low load operations and flame stabilization.

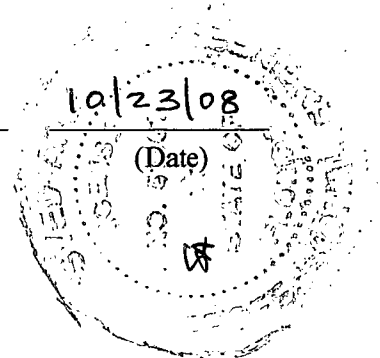
The use of NG igniters should result in lower emissions of nitrogen oxides (NOx), carbon monoxide (CO), sulfur dioxide (SO₂) and particulate matter/particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM/PM₁₀) than the current use of the No. 2 FO igniters. The emissions of volatile organic compounds (VOC) may increase (+1.85 tons per year) if the NG usage is at the same annual heat input rate when compared to No. 2 FO.

The overall net increase of emissions will be well below the Prevention of Significant Deterioration (PSD) significant emission rates. An air quality impact analysis was not required. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).



Syed Arif, P.E.
Registration No. 51861



PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT REVISION

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Project No. 0310045-024-AC
Draft Air Permit Revision No. PSD-FL-010(H)
JEA – St. Johns River Power Park
Duval County, Florida

Applicant: The applicant for this project is the JEA. The applicant's authorized representative and mailing address is: Mr. Michael J. Brost, Vice President – Electric System, JEA, 21 West Church Street, Jacksonville, Florida 32202.

Facility Location: JEA operates an electric utility in Jacksonville located at 11201 New Berlin Road in Duval County, Florida.

Project: The applicant proposes to install and operate natural gas (NG) igniters for startup, shutdown, flame stabilization and low-load operation on the existing pulverized coal-fired Boilers Nos. 1 and 2. In addition, the applicant requests authorization to use the existing No. 2 fuel oil (FO) igniters for flame stabilization and shutdown on the same boilers [they are already permitted to use No. 2 FO igniters for startup and low-load operation (Power Plant Siting Permit No. PA81-13)]. The original air construction permit, No. PSD-FL-010, required that the auxiliary boiler fire No. 2 FO while providing startup and shutdown capability for Boilers Nos. 1 and 2. The NG igniters will be used primarily in place of the No. 2 FO igniters for startup, shutdown, low load operations and flame stabilization.

The use of NG igniters should result in lower emissions of nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂) and particulate matter/particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM/PM₁₀) than the current use of the No. 2 FO igniters. The emissions of volatile organic compounds (VOC) may increase (+1.85 tons per year) if the NG usage is at the same annual heat input rate when compared to No. 2 FO.

The overall net increase of emissions will be well below the Prevention of Significant Deterioration (PSD) significant emission rates. An air quality impact analysis was not required. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit Revision, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit Revision in accordance with the conditions of the proposed Draft Permit Revision unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT REVISION

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit Revision. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

Applicant

JEA
St. Johns River Power Park
21 West Church Street
Jacksonville, Florida 32202
Facility ID No. 0310045

County

Duval County, Florida

Project

Project No. 0310045-024-AC/PSD-FL-010H
Add Natural Gas Igniters on the Pulverized Coal-Fired Boilers Nos. 1 and 2

Permitting Authority

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation – New Source Review Section
2600 Blair Stone Road, Mail Station #5505
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/921-9533

October 24, 2008

1. APPLICATION INFORMATION

• Facility Description and Location

JEA's St. Johns River Power Park (SJRPP) facility is located at 11201 New Berlin Road, Duval County, Florida. The facility belongs to Major Group No. 49 (Electric, Gas and Sanitary Services), Group No. 491 (Electric Services), and Industry No. 4911 (Electric Services). The North American Industry Classification System (NAICS) Code is No. 221112 (Fossil Fuel Electric Power Generation). The UTM coordinates of this facility are: Zone 17; 446.9 km East; 3359.15 km North (Latitude is 30° 21' 52" North / Longitude is 81° 37' 25"). This site is in an area that is in attainment (or designated as unclassifiable or maintenance) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

• Facility Regulatory Categories

The facility is regulated according to the following categories.

Title III: The existing facility is a major source of hazardous air pollutants (HAP).

Title IV: The existing facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The existing facility is a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality. This facility belongs to one of the 28 major facility categories [Fossil fuel-fired boilers (or combination thereof) totaling more than 250 million British thermal units per hour (MMBtu/hr) heat input] specified in the definition of a major stationary source in Rule 62-210.200(Definitions), F.A.C.

NSPS: The existing facility operates two existing pulverized coal-fired boilers, Boilers Nos. 1 and 2, that are subject to the New Source Performance Standards (NSPS) in Subpart Da of Part 60 in Title 40 of the Code of Federal Regulations (40 CFR 60, Subpart Da).

• Processing Schedule

September 15, 2008: Received the application for a minor source air pollution construction permit.

October 10, 2008: Department received additional information via e-mail.

October 22, 2008: Department received additional information via e-mail; application complete.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-210	Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Review and BACT, and Non-attainment Area Review and LAER

3. FACILITY AND PROJECT DESCRIPTION

• General Facility and Process Description

JEA operates the existing SJRPP facility in Duval County, Florida. The facility is an electric utility and includes the following operations: Boilers Nos. 1 and 2, which are two fossil fuel-fired steam generators fired with pulverized coal, a blend of petroleum coke (petcoke) and coal, new No. 2 distillate fuel oil (FO; used for startup, shutdown and low-load operations), and “on-specification” used oil; and four pre-NSPS distillate fuel oil fired combustion turbines with a nominal rating of 52.5 megawatts (MW) each. Emissions from Boilers Nos. 1 and 2 are controlled with an electrostatic precipitator, a limestone scrubber, and low-nitrogen oxides (NO_x) burners.

The SJRPP facility also includes coal, petcoke, limestone and fly ash handling activities, of which various control devices, control strategies, and control techniques are required. The material handling and storage operations process ash, limestone, coal, coal coated with latex, and petcoke to support the operation of Boilers Nos. 1 and 2. Each material’s handling and storage operation employs one or more control strategies to limit emissions of particulate matter to meet specific emission limitations and/or visible emissions limits. The control strategies include the use of best operating/design practices, total or partial enclosures, conditioned materials, wet suppression, water sprays, and dust collection systems.

Currently, the boilers are permitted to use No. 2 distillate fuel oil (FO) igniters for startup and low-load operation (Power Plant Siting Permit No. PA81-13). Low load operation and flame stabilization is necessary using igniters to maintain “good combustion practices” to minimize the formation of air pollutants. When combustion conditions are less than optimal for “good combustion practices” with solid fuel alone, supplemental heat is required and the igniters provide this function. The conditions that can inhibit “good combustion practices” are typically influenced by, but not limited to, low load operation, fuel conditions (including wet fuel), pulverizer/burner function and/or primary and secondary air function. During startup and low-load operations, the existing No. 2 FO igniters are used to maintain flame stability until the coal and or coal and petcoke is introduced into the boilers and flame stability on solid fuel is established. During shutdown, the fuel oil is utilized in a shutdown condition when taking out pulverizers in order to ensure safe furnace conditions in accordance with burner logic.

• Project Description

On September 15, 2008, the Department received a request to authorize the installation and use of natural gas (NG) igniters for startup, shutdown, low-load operations and flame stabilization. The submittal also included a request to authorize the use of the existing No. 2 FO igniters for flame stabilization and shutdown [the existing No. 2 distillate fuel oil igniters are already authorized to be used for startup and low load operation (Power Plant Siting Permit No. PA81-13)]. The original air construction permit, No. PSD-FL-010, required that the auxiliary boiler fire No. 2 FO while providing startup and shutdown capability for Boilers Nos. 1 and 2. For the NG igniters, the proposed project includes installation of NG piping and instrumentation, igniter gas header, igniter gas header junction box and igniter group control cabinet. The NG igniters will be used primarily in place of the No. 2 FO igniters for startup, shutdown, low load operations and flame stabilization.

4. PSD APPLICABILITY

The addition and use of the NG igniters should result in lower emissions of NO_x, carbon monoxide (CO), sulfur dioxide (SO₂) and particulate matter/particulate matter with an aerodynamic diameter equal to or less than 10 microns (PM/PM₁₀), than the current use of the No. 2 FO igniters. Only the emissions of volatile organic compounds (VOC) may increase (+1.85 TPY) if the NG usage is at the same annual heat input rate that the No. 2 FO has been used historically, but the overall net increase of emissions will be well below the PSD significant emission rates. Based on the most recent 5 years of annual operating reports, the emissions due to No. 2 FO usage are less than 1 percent of the total emissions from the boilers.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The following table shows the future projected actual emissions for PSD applicability for the subject project:

Pollutant	NG Emission Factors ¹ (lb/10 ⁶ scf)	Projected Actual Emissions for the NG Igniters ^{2,3} (TPY)	Past Actual Emissions for the No. 2 FO igniters ⁴ (TPY)	Net Change (TPY)	PSD Significant Emission Rates (TPY)	PSD Applies?
NOx	280	119.57	165.35	-45.8	40	No
CO	84	35.87	74.2	-38.3	100	No
SO ₂	0.6	0.26	4.56	-4.3	40	No
PM	1.9	0.81	1.83	-1.02	25	No
PM ₁₀	1.9	0.81	0.83	-0.02	15	No
VOC	5.5	2.35	0.50	1.85	40	No

¹ Emission Factors from Tables 1.4-1 and 1.4-2, AP-42 Emissions Factors.

² Based on: 1,400 hr/yr of operation; 872,850 MMBtu/yr annual heat input; 1,022 MMBtu/10⁶ standard cubic feet (scf) of NG; 1.37 x 10⁶ scf of NG/hr; and 854.1 x 10⁶ scf of NG/yr.

³ Based on 28 NG igniters for each boiler with each igniter rated at 25 MMBtu/hr heat input.

⁴ Used years 2003 – 2007.

Since the actual net emission increases will be less than the significant emissions rates for each pollutant, then the proposed project is a minor modification to a major facility and PSD new source review does apply.

5. EMISSIONS STANDARDS

There are no specific emissions limiting standards applicable to the igniters. The emissions limiting standards that are applicable are those attributed to the Boilers Nos. 1 and 2, which are contained in the current Title V Air Operation Permit, No. 0310045-016-AV, and are not being changed.

6. AIR QUALITY ANALYSIS

Because the proposed project is not subject to PSD preconstruction review requirements, an air quality analysis is not required.

7. CONCLUSION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the permit. Bruce Mitchell is the project engineer responsible for reviewing the application and drafting the permit changes. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT

NOTICE OF PERMIT REVISION

In the Matter of an
Application for Permit Revision by:

JEA
21 West Church Street
Jacksonville, Florida 32202

Authorized Representative:

Mr. Michael J. Brost, Vice President – Electric System

Air Permit No. PSD-FL-010H
Project No. 0310045-024-AC
St. Johns River Power Park
Add Natural Gas Igniters on the Pulverized
Coal-Fired Boilers Nos. 1 and 2

JEA operates the existing St. Johns River Power Park located at 11201 New Berlin Road in Jacksonville, Duval County, Florida. The facility is an electric utility. The applicant requested authorization to install and operate natural gas igniters for startup, shutdown, low load operation and flame stabilization, on the pulverized coal-fired Boilers Nos. 1 and 2. In addition, the applicant requested authorization to use the existing No. 2 distillate fuel oil igniters for flame stabilization and shutdown on Boilers Nos. 1 and 2 [the existing No. 2 distillate fuel oil igniters are already authorized to be used for startup and low load operation (PA81-13)]. The original air construction permit, No. PSD-FL-010, required that the auxiliary boiler fire No. 2 FO while providing startup and shutdown capability for Boilers Nos. 1 and 2. A copy of this Notice of Permit Revision 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 (F.S.).

Any party to this order 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 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

(DRAFT)

Joseph Kahn, Director
Division of Air Resource Management

(Date)

JK/tlv/sa/bm

DRAFT PERMIT REVISION

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Revision (including the Draft Permit Revision) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on _____ to the persons listed below.

- Mr. Michael J. Brost, JEA (brosmj@jea.com)
- Mr. John A. Worley, JEA (worlja@jea.com)
- Mr. Kennard F. Kosky, Golder Associates, Inc. (kkosky@golder.com)
- Mr. Richard Robinson, Duval County Environmental Quality Division (robinson@coj.net)
- Ms. Kathleen Forney, U.S. EPA, Region 4 (forney.kathleen@epamail.epa.gov)
- Ms. Heather Abrams, U.S. EPA Region 4 (abrams.heather@epamail.epa.gov)
- Ms. Catherine Collins, Fish and Wildlife Service (catherine_collins@fws.gov)
- Mr. Mike Halpin, DEP-Siting Coordination Office (mike.halpin@dep.state.fl.us)
- Ms. Vicki Gibson, DEP-BAR (victoria.gibson@dep.state.fl.us) (for read file)

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)

DRAFT PERMIT REVISION

This permit revision modifies original Permit No. PSD-FL-010.

For pulverized coal-fired Boilers Nos. 1 and 2, the following permit revision (new specific condition) incorporates the authorization to use No. 2 fuel oil for startup and low load operation from the original Power Plant Siting Permit No. PA81-13. The new specific condition also recognizes the requirement that No. 2 fuel oil be used during startup and shutdown of the boilers, as was imposed on the auxiliary boiler in the original air construction permit No. PSD-FL-010. New text is marked with double underline.

PSD-FL-010: New Specific Condition. V.11.

- V.11. No. 2 fuel oil and/or natural gas shall be used for the pulverized coal-fired Boilers Nos. 1 and 2 during start-up, shutdown, flame stabilization and low load operation.

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Friday, October 24, 2008 3:30 PM
To: 'brosmj@jea.com'; 'worlja@jea.com'
Cc: 'kkosky@golder.com'; 'robinson@coj.net'; 'forney.kathleen@epamail.epa.gov'; 'abrams.heather@epamail.epa.gov'; 'catherine_collins@fws.gov'; Halpin, Mike; Gibson, Victoria; Walker, Elizabeth (AIR); Mitchell, Bruce; Arif, Syed
Subject: JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)
Attachments: 0310045-024-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". 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/0310045.024.AC.D_pdf.zip

Owner/Company Name: JEA
Facility Name: NORTHSIDE/SJRPP
Project Number: 0310045-024-AC/ PSD-FL-010(H)
Permit Status: DRAFT
Permit Activity: CONSTRUCTION/ Natural Gas Igniters
Facility County: DUVAL
Processor: BRUCE MITCHELL

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Permit project documents are 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.



0310045-024-AC.p
df (1 MB)

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)

850/921-0771

sylvia.livingston@dep.state.fl.us

Tracking:

Recipient	Delivery	Read
✓ 'brosmj@jea.com'		
✓ 'worija@jea.com'		
'kkosky@golder.com'		
✓ 'robinson@coj.net'		
✓ 'forney.kathleen@epamail.epa.gov'		
✓ 'abrams.heather@epamail.epa.gov'		
✓ 'catherine_collins@fws.gov'		
Halpin, Mike	Delivered: 10/24/2008 3:30 PM	Read: 10/24/2008 3:32 PM
Gibson, Victoria	Delivered: 10/24/2008 3:30 PM	Read: 10/24/2008 3:34 PM
Walker, Elizabeth (AIR)	Delivered: 10/24/2008 3:30 PM	
Mitchell, Bruce	Delivered: 10/24/2008 3:30 PM	
Arif, Syed	Delivered: 10/24/2008 3:30 PM	

Livingston, Sylvia

From: Brost, Mike J. - VP, Electric Systems [BrosMJ@jea.com]
Sent: Monday, October 27, 2008 2:29 PM
To: Livingston, Sylvia
Cc: Worley, Jay A. - Director, Environmental Programs
Subject: RE: Re-send - JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)

I can view the documents.

Mike Brost

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Monday, October 27, 2008 12:17 PM
To: Brost, Mike J. - VP, Electric Systems; Worley, Jay A. - Director, Environmental Programs
Cc: kkosky@golder.com; robinson@coj.net; forney.kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; catherine_collins@fws.gov; Halpin, Mike; Gibson, Victoria; Walker, Elizabeth (AIR); Mitchell, Bruce; Arif, Syed
Subject: Re-send - JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)

Dear Sir/ Madam:

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Owner/Company Name: JEA
Facility Name: NORTHSIDE/SJRPP
Project Number: 0310045-024-AC/ PSD-FL-010(H)
Permit Status: DRAFT
Permit Activity: CONSTRUCTION/ Natural Gas Igniters
Facility County: DUVAL
Processor: BRUCE MITCHELL

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10/28/2008

Livingston, Sylvia

From: Worley, Jay A. - Director, Environmental Programs [WorJA@jea.com]
Sent: Monday, October 27, 2008 2:23 PM
To: Livingston, Sylvia
Cc: Worley, Jay A. - Director, Environmental Programs
Subject: RE: Re-send - JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)

Ms. Livingston, I have received and can access the documents. Thanks, Jay Worley

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Monday, October 27, 2008 12:17 PM
To: Brost, Mike J. - VP, Electric Systems; Worley, Jay A. - Director, Environmental Programs
Cc: kkosky@golder.com; robinson@coj.net; forney.kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; catherine_collins@fws.gov; Halpin, Mike; Gibson, Victoria; Walker, Elizabeth (AIR); Mitchell, Bruce; Arif, Syed
Subject: Re-send - JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)

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<<0310045-0234-AC-D.pdf>>

10/27/2008

Livingston, Sylvia

From: Robinson, Richard [ROBINSON@coj.net]
Sent: Monday, October 27, 2008 1:59 PM
To: Livingston, Sylvia
Subject: RE: Re-send - JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)

Sylvia,

I received the zipped documents.


Thanks,

Richard

Richard L. Robinson, P.E.
Environmental Engineering Manager
Air Quality Branch
Environmental Quality Division
Environmental and Compliance Department
City of Jacksonville, Florida
117 West Duval Street, Suite 225
Jacksonville, FL 32202

Phone: (904) 630-4900
Fax: (904) 630-3638
E-Mail: robinson@coj.net

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.

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Monday, October 27, 2008 12:17 PM
To: brosmj@jea.com; worlja@jea.com
Cc: kkosky@golder.com; Robinson, Richard; forney.kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; catherine_collins@fws.gov; Halpin, Mike; Gibson, Victoria; Walker, Elizabeth (AIR); Mitchell, Bruce; Arif, Syed
Subject: Re-send - JEA- St. Johns River Power Park; 0310045-024-AC/ PSD-FL-010(H)

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Owner/Company Name: JEA

10/28/2008