Memorandum

Florida Department of Environmental Protection

To:

Joseph Kahn, Division of Air Resource Management

Through:

Trina Vielhauer, Bureau of Air Regulation/

Jeff Koerner, New Source Review Section

From:

Tammy McWade, New Source Review Section

Date:

February 2, 2010

Subject:

Final Air Permit No. 0310045-026-AC

JEA Northside Generating Station Unit 3Refurbishment Project

The final permit for this project is attached for your approval and signature. The project requires a minor air construction permit to authorize extensive repair, replacement and maintenance of various equipment and components on existing Unit 3, a nominal 564 megawatt electric utility steam generator. The proposed work will be performed at the existing Northside Generating Station, which is located in Duval County at 4377 Heckscher Drive in Jacksonville, Florida. The project is considered a new source review reform project.

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/ttm

FINAL DETERMINATION

PERMITTEE

JEA Northside Generating Station 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. 0310045-026-AC Minor Air Construction Permit JEA Northside Generating Station

JEA Northside Generating Station is an electric utility power plant located in Duval County at 4377 Heckscher Drive in Jacksonville, Florida. This permit authorizes the repair, replacement and maintenance of various equipment and components on existing Unit 3, a nominal 564 megawatt (MW) electric utility steam generating unit.

NOTICE AND PUBLICATION

The Department distributed an initial draft permit package for the proposed project on October 20, 2009. On November 24, 2009, the Department received a request to modify the original application to include work on the electric generator rotor and assembly. On January 13, 2010, the Department distributed a revised draft minor air construction permit package. The applicant published the Public Notice in The Florida Times-Union on January 17, 2010. The Department received the proof of publication on January 25, 2010. 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 Revised Draft Permit were received from the public, the EPA Region 4 Office or the applicant.

CONCLUSION

The final action of the Department is to issue the permit with no changes from the draft.



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

PERMITTEE

JEA 21 West Church Street Jacksonville, FL 32202

Authorized Representative:

Mr. James M. Chansler, P.E., D.P.A., Vice President

Air Permit No. 0310045-026-AC Permit Expires: September 1, 2011

Northside Generating Station ARMS ID No. 0310045 Unit 3 Revised Refurbishment Project

PROJECT AND LOCATION

This permit authorizes repair, replacement and maintenance of various equipment and components on existing Unit 3, a nominal 564 megawatt (MW) electric utility steam generating unit. The proposed work will be conducted at the Northside Generating Station, which is an electric utility power plant (Standard Industrial Classification No. 4911). The existing facility is located in Duval County at 4377 Heckscher Drive in Jacksonville, Florida. The UTM coordinates are Zone 17; 446.9 km East and 3359.15 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, 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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) 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 $\frac{2\sqrt{10}\sqrt{10}}{\sqrt{10}}$ to the persons listed below.

Mr. James Chansler, JEA (chanjm@jea.com)

Mr. N. Bert Gianazza, JEA (gianNB@jea.com)

Ms. Rita Felton-Smith, DEP Northeast District Office (<u>rita.felton-smith@dep.state.fl.us</u>)

Mr. Richard L. Robinson, Duval County Environmental Quality Division (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. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)

Ms Heather Abrams, EPA Region 4 (abrams.heather@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.

FACILITY DESCRIPTION

JEA operates the existing Northside Generating Station (NGS) and St. Johns River Power Park (SJRPP). The existing fossil fuel fired steam-electric plant consists of the following equipment:

- NGS Unit 1 (EU-027) and NGS Unit 2 (EU 026) are circulating fluidized bed boilers each rated at a nominal 297.5 megawatts (MW) and firing coal, petroleum coke, distillate oil and on-specification used oil;
- NGS Unit 3 (EU-003) is a fossil fuel fired boiler rated at a nominal 563.7 MW and fires natural gas, residual fuel oil, landfill gas and on-specification used oil;
- NGS Peaking Units 3, 4, 5 and 6 (EU-006 EU-009) are combustion turbines each rated at a nominal 56.2 MW firing distillate oil; and
- SJRPP Unit 1 (EU-016) and SJRPP Unit 2 (EU-017) are each fossil fuel fired boilers rated at a nominal 679.6 MW and firing pulverized coal, coal/petroleum coke blends, distillate fuel oil (startup and low-load operation) and on-specification used oil.

A fly ash processing system is also located on site, but separately owned and operated by Separation Technologies (previously Separation Technologies, Inc.).

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PROJECT DESCRIPTION

Unit 3 (EU-003) is an existing nominal 564 megawatt electric utility steam generating unit permitted to fire residual fuel oil, natural gas, landfill gas and on-specification used oil. JEA predicts an increase in demand for power between January 2011 and December 2016. Because it may be necessary to depend on Unit 3 for at least a part of this projected demand, the applicant proposes an extensive maintenance project to ensure the reliability of Unit 3. During the Unit 3 maintenance outage scheduled for the fall of 2010, JEA proposes the repair, replacement and maintenance of various equipment and components related to the electric generator and rotor assembly, fuel oil piping, structure, induced and forced draft fans, steam tubing, soot-blowing, duct work and feed water system. JEA expects to complete the project by January 2011.

The project is not intended to regain lost capacity and will not result in any increase in the boiler heat input rate, fuel consumption or actual emissions. There are no known defects or deficiencies restricting operation and the unit can currently sustain the permitted heat input rate. Records indicate that Unit 3 is currently capable of operating at permitted capacity. Pursuant to Rule 62-212.400, F.A.C., JEA provided information to show that the project will not exceed the significant emissions rates that require preconstruction review for the Prevention of Significant Deterioration (PSD) of Air Quality. In accordance with Rule 62-212.300, F.A.C., this permit requires JEA to provide reports summarizing the actual emissions for each year during the five-year period following completion of the project to show that the project did not result in any PSD significant emissions increases.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.
- Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to: Air Quality Branch, Environmental Quality Division, Environmental and Compliance Department, City of Jacksonville, 407 North Laura Street, 3rd Floor, Jacksonville, Florida 32202 and Phone 904/255-7100.
- 3. <u>Appendices</u>: The following Appendices are attached as part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); and Appendix C (Common Conditions).
- 4. <u>Applicable Regulations, Forms and Application Procedures</u>: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1) (a), F.A.C.]

7. Source Obligation:

- a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FOSSIL FUEL-FIRED STEAM GENERATOR (EU 003)

This section of the permit addresses the following emissions unit.

ID No.	Emission Unit Description
003	NGS Unit 3 is a fossil fuel-fired steam generator with a nominal nameplate rating of 563.7 MW.

Northside Generating Station Unit 3 began commercial operation in 1977. It is a fossil fuel-fired steam generator with a nominal nameplate rating of 563.7 megawatts (electric). The unit fires residual fuel oil, natural gas, liquefied petroleum gas (LPG), on-specification used oil, landfill gas and blends of fuel oil/natural gas/landfill gas. The maximum heat input rates are: 5033 million British thermal units (MMBtu) per hour when firing fuel oil; 5260 MMBtu per hour when firing natural gas or natural gas/landfill gas; or 5033 - 5260 MMBtu per hour when firing blends fuel oil/natural gas/landfill gas. LPG is used as the igniter fuel when natural gas is not available. Fuel additives (e.g., magnesium oxide, hydroxide or sulfonate or calcium nitrate origin) are used to enhance combustion and/or control acidity. Pollutant emissions from this emissions unit are uncontrolled. The combustion gases exhaust through a stack that is 300 feet tall. Sulfur dioxide (SO₂) and nitrogen oxides (NO_X) are monitored with continuous emissions monitoring systems (CEMS).

{Permitting Notes: This emissions unit is regulated under: Phase II of the Acid Rain Program; Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; Rule 62-296.702, F.A.C., Reasonably Available Control Technology (RACT) Particulate Matter, Fossil Fuel Steam Generators; Permit No. AC16-85951; Permit No. 0310045-012-AC; and Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

PROPOSED WORK

- 1. <u>Unit 3</u>: The permittee is authorized to conduct the following work on Unit 3 including repair, replacement and maintenance various equipment and components including (but not limited to) the following:
 - Electric generator rotor and assembly;
 - Handcuff replacement on the primary superheater elements;
 - Condenser structural assessment and repairs;
 - Fiberglass circulating piping assessment and repairs;
 - Feed water and heater drains piping flow corrosion inspection and repairs;
 - Fuel oil piping condition assessment and repairs;
 - Boiler soot-blowing system piping replacement;
 - No. 4 feed water heater replacement;
 - Furnace left and right water-wall replacement;
 - Boiler waterside chemical cleaning;
 - Replacement of Distributed Control System (DCS) and field devices;
 - 480 V motor control center (MCC) refurbishment;
 - Boiler duct work repair and replacement;
 - Rebuild water rack;
 - East air heater to wind-box expansion joint replacement;
 - Induced draft fans A and B rotor replacements;

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FOSSIL FUEL-FIRED STEAM GENERATOR (EU 003)

- Upgrade drum level transmitters;
- Closed cooling strainer cabinet replacement;
- Feed water heater and boiler feed water pump valve inspection and repair;
- Force draft fan motor replacement;
- Main steam line and cold reheat line elevation sag correction;
- Boiler feed pump turbine blade replacement; and
- Other changes as appropriate to ensure safe, reliable operations of the unit will be required.

[Application No. 0310045-026-AC]

PERFORMANCE RESTRICTIONS

2. <u>Capacities and Fuels</u>: The proposed work shall not result in any increase in the boiler heat input rate, fuel consumption rates and steam generation rates. [Rule 62-4.070(3), F.A.C. and Application No. 0310045-026-AC]

TESTING REQUIREMENTS

- 3. Actual Emissions Reporting: This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and the project avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
 - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
 - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - (1). The name, address and telephone number of the owner or operator of the major stationary source;
 - (2). The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
 - (3). If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - (4). Any other information that the owner or operator wishes to include in the report.
 - c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
 - d. For this project, the permittee estimated the following baseline actual emissions: 243 tons/year of carbon monoxide (CO); 1,916 tons/year of NO_X; 6,791 tons/year of SO₂; 232 tons/year of particulate matter (PM), 232 tons/year particulate matter of 10 microns or less (PM₁₀); and 29 tons/year of volatile organic compounds (VOC).
 - e. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FOSSIL FUEL-FIRED STEAM GENERATOR (EU 003)

in reporting the actual annual emissions for Unit 3:

- (1). The permittee shall use data collected from the CEMS to determine and report the actual annual emissions of SO_2 and NO_X .
- (2). The permittee shall use the data collected from the required stack tests to determine and report the actual annual emissions of PM/PM₁₀. The permittee shall follow the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.
- (3). Unless otherwise approved by the Department, the permittee shall use the same emissions factors for reporting the actual annual emissions of CO and VOC as used in the application to establish baseline emissions.
- (4). As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Application No. 0310045-026-AC; and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

SECTION 4. APPENDICES

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Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. Common Conditions

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit

"AO" identifies the permit as an Air Operation Permit

"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant

Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit BACT: best available control technology

μg: microgramAAQS: Ambient Air Quality StandardBtu: British thermal units

acf: actual cubic feet CAM: compliance assurance monitoring

acfm: actual cubic feet per minute CEMS: continuous emissions monitoring system

ARMS: Air Resource Management System cfm: cubic feet per minute

(Department's database) CFR: Code of Federal Regulations

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide CO₂: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute **EPA**: Environmental Protection Agency

ESP: electrostatic precipitator (control system for

reducing particulate matter)

EU: emissions unit

F: fluoride

F.A.C.: Florida Administrative Code **F.A.W.**: Florida Administrative Weekly

F.D.: forced draft **F.S.**: Florida Statutes

FGD: flue gas desulfurization **FGR**: flue gas recirculation

ft²: square feet ft³: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury
I.D.: induced draft
ID: identification
kPa: kilopascals

Ib: pound

MACT: maximum achievable technology MMBtu: million British thermal units MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous

Air Pollutants

NO_x: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O₂: oxygen Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic

diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist **scf**: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system

used for reducing emissions of nitrogen oxides)

SO₂: sulfur dioxide TPD: tons/day TPH: tons per hour TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 624.160, F.A.C.

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permitconditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiateenforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approveddrawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditionsof this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total projectwhich are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement TrustFund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Departmentrules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (andrelated appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of thispermit, as required by Department rules. This provision includes the operation of backup orauxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition of specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time thenoncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject toenforcement action by the Department for penalties or for revocation of this permit.
- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data andother information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted sourcearising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

General Conditions

- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonabletime for compliance; provided, however, the permittee does not wave any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, otherthan those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
- 11. This permit is transferable only upon Department approval in accordance with Rules 624.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit constitutes:
 - a. Determination of Best Available Control Technology (not applicable);
 - Determination of Prevention of Significant Deterioration (not applicable); and
 - c. Compliance with New Source Performance Standards (not applicable).
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The person responsible for performing the sampling or measurements;
 - (c) The dates analyses were performed;
 - (d) The person responsible for performing the analyses;
 - (e) The analytical techniques or methods used;
 - (f) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

- 1. <u>Plant Operation Problems</u>: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. <u>Excess Emissions Prohibited</u>: 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. [Rule 62-210.700(4), F.A.C.]
- 4. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 5. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 6. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

- 7. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
- 8. Emissions Computation and Reporting
 - a. Applicability. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]
 - b. Computation of Emissions. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
 - (1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

Common Conditions

- (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- (2) Continuous Emissions Monitoring System (CEMS).
 - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
 - 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
 - (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - 1) A calibrated flow meter that records data on a continuous basis, if available; or
 - 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate asset forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) Mass Balance Calculations.
 - (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
 - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using sitespecific data that another content within the range is more accurate.
 - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
 - a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this

Common Conditions

rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

- If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
- 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
- b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

- c. Annual Operating Report for Air Pollutant Emitting Facility
 - (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - a. All Title V sources.
 - b. All synthetic non-Title V sources.
 - c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - d. All facilities for which an annual operating report is required by rule or permit.
 - (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

SECTION 4. APPENDIX C

Common Conditions

- (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.
- (4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.
- (5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

Livingston, Sylvia

From: Livingston, Sylvia

Sent: Wednesday, February 10, 2010 2:27 PM

To: 'chanjm@jea.com'

Cc: 'gianNB@jea.com'; Felton-Smith, Rita; 'robinson@coj.net'; Halpin, Mike;

'forney.kathleen@epa.gov'; 'oquendo.ana@epa.gov'; 'abrams.heather@epa.gov'; Gibson,

Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)

Subject: JEA - Northside Generating Sation; 0310045-026-AC

Attachments: 0310045-026-AC_Signatures.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 documents:

http://ARM-PERMIT2K.dep.state_fl.us/adh/prod/pdf_permit_zip_files/0310045.026.AC.F_pdf.zip

Owner/Company Name: JEA

Facility Name: NORTHSIDE/SJRPP **Project Number:** 0310045-026-AC

Permit Status: FINAL

Permit Activity: CONSTRUCTION

Facility County: DUVAL Processor: Jeff Koerner

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/emission/apds/default.asp.

Project documents that 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.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
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

From:

Gianazza, N. Bert [GianNB@jea.com]

Sent:

Wednesday, February 10, 2010 4:09 PM

To:

Livingston, Sylvia

Cc:

Chansler, James M. - Chief Operating Officer; Holbrooks, Kevin E. - Director, Compliance;

Mann, Athena T. - Vice President, Environmental Services

Subject:

RE: JEA - Northside Generating Sation; 0310045-026-AC

Sylvia,

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

Thanks, Bert

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

Sent: Wednesday, February 10, 2010 2:27 PM **To:** Chansler, James M. - Chief Operating Officer

Cc: Gianazza, N. Bert; Felton-Smith, Rita; 'robinson@coj.net'; Halpin, Mike; 'forney.kathleen@epa.gov'; 'oquendo.ana@epa.gov'; 'abrams.heather@epa.gov'; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)

Subject: JEA - Northside Generating Sation; 0310045-026-AC

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Owner/Company Name: JEA

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Project documents that 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

Livingston, Sylvia

From: Robinson, Richard [ROBINSON@coj.net] Sent: Wednesday, February 10, 2010 3:09 PM

Livingston, Sylvia To:

RE: JEA - Northside Generating Sation; 0310045-026-AC Subject:

Hi Sylvia,

I was able to access the subject documents through the e-mail link below.

Thanks,

Richard

Richard L. Robinson, P.E.

Environmental Engineering Manager Environmental Quality Division City of Jacksonville, Florida 407 North Laura Street, Third Floor Jacksonville, FL 32202

Phone: (904) 255-7201 Fax: (904) 588-0518 E-Mail: robinson@coj.net

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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: Wednesday, February 10, 2010 2:27 PM

To: 'chanjm@jea.com'

Cc: 'gianNB@jea.com'; Felton-Smith, Rita; Robinson, Richard; Halpin, Mike; 'forney.kathleen@epa.gov'; 'oquendo.ana@epa.gov'; 'abrams.heather@epa.gov'; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR)

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