JEA
Northside Generating Station
St. Johns River Power Park

Title V Operation Permit
Revision and Renewal Application

July 2008

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JEA
NGS/SJRPP/ST Title V Renewal

B&V Project 160333
July 1, 2008

Attn: Trina L. Vielhauer
Bureau of Air Regulation
FDEP-Division of Air Resource Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Northside Generating Station/St. Johns River Power Park Title V Permit Revision and Renewal (0310045-016-AV)

Project No.: 0310045-020-AV
0310045-021-AC

Dear Ms. Vielhauer:

On behalf of JEA, Black & Veatch is pleased to submit one original and four (4) copies of the Title V Operation Permit Revision and Renewal for the Northside Generating Station/St. Johns River Power Park.

This application also requests a concurrent revision to specific condition I.19 of the above referenced Title V Operation Permit and specific condition 41 of the construction permit PSD-FL-265, to require that the Northside Emission Units EU-29 and EU-31 be allowed to be tested on coal and/or pet coke. This revision was originally requested in a May 20, 2008 letter from JEA to FDEP (see attached in Appendix Q).

Should you have any questions, please feel free to contact me at (913) 458-9837 or Bert Gianazza, JEA at 904-665-6247.

Very truly yours,

BLACK & VEATCH

Ajay N. Kasarabada P.E.
Air Quality Engineer

ank
Enclosure[s]

cc: Bruce Kofler, JEA
Bert Gianazza, JEA
Jay Worley, JEA
Angela Morrison Uhland, HGS

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JEA.

NGS/SJRPP/ST

Title V Operation Permit Revision and Renewal Application

B&V Project Number 160333

July 2008

Black & Veatch Corporation
11401 Lamar
Overland Park, Kansas 66211
Tel: (913) 458-2000 www.bv.com

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1.0 Introduction

This Title V Operation Permit revision and renewal application is for the Northside Generating Station (NGS), St Johns River Power Park (SJRPP) and Separation Technologies LLC, (ST) located in Jacksonville, Florida. As required by Florida Administrative Code regulations, JEA has prepared the Title V Operating Permit Renewal Application on the forms provided by the Florida Department of Environmental Protection (FDEP). Supplementary attachments are included to support the information contained in the application forms.

In accordance with Rule 62-213.405, F.A.C, this application also requests a concurrent revision to specific condition I.19 of the current Title V Operation Permit (0310045-016-AV) and specific condition 41 of the construction permit PSD-FL-265, to require that the NGS Emission Units EU-29 and EU-31 be allowed to be tested on coal and/or pet coke.

2.0 Information Provided in This Application

The focus of this document is on those emission units/emission points and applicable requirements that have been modified or added since the facility's latest Title V operating permit revision was issued. To recap past permitting history within the last five years, the last renewal of the operation permit (0310045-011-AV) was issued on December 29, 2003, and the latest revision to the operation permit (0310045-016-AV) was issued in July 2006. The facility is currently operating under the revised Title V Operation Permit Number 0310045-016-AV. This revised operation permit has incorporated most of the permitted changes at the NGS/SJRPP/ST facilities since the issuance of the first operating permit renewal in December 2003.

This renewal application incorporates by reference all the applicable core, facility-wide and emission unit specific requirements in the revised Operation Permit 0310045-016-AV and requests the inclusion of the permit conditions listed in the latest construction permit 0310045-017-AC which permitted the construction of selective catalytic reduction systems for SJRPP's Boilers Nos. 1 and 2, respectively. Additionally, the insignificant activities list has been updated. The following is a summary of requested updates.

1. Incorporation of Construction Permit 0310045-016-AC that permitted the installation of the selective catalytic reduction (SCR) systems for SJRPP's Boiler Nos. 1 and 2.

2. Update the Insignificant Activities List by including:

    - the NGS emergency storage of solid fuel outside the coal domes

- Two cooling towers that provide cooling for the AQCS systems at NGS
- Addition of limestone feed system for the SJRPP SCRs.

3. Incorporation of latest Acid Rain and CAIR forms for NGS and SJRPP.
4. Inclusion of the concurrent construction permit revision that requires that EU 31 and EU 29 units be tested for VE emissions on coal/pet coke

3.0 Requested Changes/Clarifications to Current Title V Permit (031-0045-016-AV)

1. NGS Unit Boiler No. 3 (EU-003) – Subsection A

   JEA is requesting that the permitting note that was removed by FDEP for this emission unit be reinstated in the renewed Title V permit, as follows:

   "The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90-100 percent of the emission unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.

   The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification."

2. SJRPP Boilers No. 1 and 2 (EU-016 and EU-017) – Subsection D

   - JEA is requesting that the permitting note that was removed by FDEP for these emission units be reinstated in the renewed Title V permit, as follows:

     "The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90-100 percent of the emission unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability."

     It is also requested that further clarification be added as follows:

"The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification."

- It is requested that coal coated with a latex binder be included in the description on page 3 under Section I, Subsection A of the current Title V permit (current page 3), as well Condition D.3.

3. NGS CFB Boilers No. 1 and 2 (EU-027 and EU-026) – Subsection H; NGS Material Handling Operations – Subsection I; and ST Operations- Subsection J

   JEA is requesting that all references to initial performance tests be deleted in the renewed permit since they are obsolete.

4. NGS Material Handling Operations (EUs -029, -031, -033, -034 and -035) – Subsection I

   JEA is requesting that Condition I.16 paragraphs (e)(4), (e)(5), and (e)(6) on page 91 be deleted since these conditions address the use of a continuous opacity monitor (COMS), which is not applicable for the materials handling operations.

FDEP Application Forms

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

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To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: JEA	
2. Site Name: Northside Generating Station/St. John's River Power Park	
3. Facility Identification Number: 0310045	
4. Facility Location... Street Address or Other Locator: 4377 Heckscher Drive City: Jacksonville County: Duval Zip Code: 32202	
5. Relocatable Facility? ☐ Yes ☐ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: N. Bert Gianazza – Environmental Services
2. Application Contact Mailing Address... Organization/Firm: JEA (T-8) Street Address: 21 West Church Street City: Jacksonville State: FL Zip Code: 32202
3. Application Contact Telephone Numbers... Telephone: (904) 665 - 6247 ext. Fax: (904) 665 - 7376
4. Application Contact E-mail Address: gianNB@jea.com

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 7/3/08	3. PSD Number (if applicable):
2. Project Number(s): 0310045-020-AV	4. Siting Number (if applicable):

0310045-021-AC

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.

[x] Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

[x] I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is for renewal of the facility Title V air operation permit. It is also requested that as part of the renewal process, FDEP incorporate:

- The recently issued construction permit 0310045-017-AC, which authorized the installation of Selective Catalytic Reduction (SCR) systems and ammonia injection systems on existing Boilers 1 and 2 at the St. Johns River Power Park into the renewed Title V air Title V Operation Permit;
- Approve, as an administrative amendment, the name change of Separation Technologies Inc. to Separation Technologies; and
- Revise the Title V Permit to incorporate the May 20, 2008 request to require that Emission Units EU 29 and EU31 be allowed to test on both coal and/or pet coke.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	**Description of Emissions Unit**	**Air Permit Type**	**Air Permit Processing Fee**
003	NGS – Boiler No. 3	NA	NA
006	NGS – Combustion Turbine No. 3	NA	NA
007	NGS – Combustion Turbine No. 4	NA	NA
008	NGS – Combustion Turbine No. 5	NA	NA
009	NGS – Combustion Turbine No. 6	NA	NA
016	SJRPP – Boiler No. 1	NA	NA
017	SJRPP – Boiler No. 2	NA	NA
023	SJRPP –Fuel and Limestone Handling and Storage Operations	NA	NA
022	SJRPP – Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations	NA	NA
024	SJRPP – Cooling Towers (2)	NA	NA
026	NGS – Circulating Fluidized Bed Boiler No. 2	NA	NA
027	NGS – Circulating Fluidized Bed Boiler No. 1	NA	NA
028	NGS – Materials Handling & Storage Operations	NA	NA
029	NGS – Crusher House/Building Baghouse Exhaust (DC1)	NA	NA
031	NGS – Fuel Silos Dust Collectors (DC2 and DC3)	NA	NA
033	NGS – Limestone Dryer/MillsBuilding	NA	NA
034	NGS – Limestone Prep Building Dust Collectors	NA	NA
035	NGS – Limestone Silos Bin Vent Filters	NA	NA
036	NGS – Fly Ash Transport Blower Discharge	NA	NA
037	NGS – Fly Ash Silos Bin Vents	NA	NA

038	NGS – Bed Ash Silos Bin Vents	NA	NA
042	NGS – AQCS Pebble Lime Silo Bin Vent	NA	NA
051	NGS – Fly Ash Slurry Mix System Vents	NA	NA
052	NGS – Bed Ash Slurry Mix System Vents	NA	NA
053	NGS – Bed Ash Surge Hopper Bin Vents	NA	NA
044	Separation Technologies, LLC (ST) – Separator A Filter – Receiver Vent	NA	NA
045	ST – Separator B Filter – Receiver Vent	NA	NA
046	ST – Separator Dust Collector Vent	NA	NA
047	ST– Clean-up Vacuum Vent	NA	NA
048	ST – Fly Ash Surge Bin Vent	NA	NA
049	ST – Mineral Additive Storage Bin Vent	NA	NA
50	ST – Gas-fired Dryer Stack	NA	NA

Application Processing Fee

Check one: ☐ Attached - Amount: $_______________ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :	
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:	
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -	
4. Owner/Authorized Representative E-mail Address:	
5. Owner/Authorized Representative Statement: *I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.* Signature Date	

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   James M. Chansler, P.E., D.P.A., Chief Operating Officer

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - [ ] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.
   - [ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - [x] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - [ ] The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: JEA
   Street Address: 21 West Church Street
   City: Jacksonville State: FL Zip Code: 32202

4. Application Responsible Official Telephone Numbers...
   Telephone: (904) 665 - 4433 ext. Fax: (904) 665-7990

5. Application Responsible Official E-mail Address: chanJM@jea.com

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

   James M. Chansler
   Signature

   6/25/08
   Date

APPLICATION INFORMATION

Professional Engineer Certification

1.	Professional Engineer Name: N. Bert Gianazza Registration Number: 38640
2.	Professional Engineer Mailing Address... Organization/Firm: JEA (T-8) Street Address: 21 West Church Street City: Jacksonville State: FL Zip Code: 32202
3.	Professional Engineer Telephone Numbers... Telephone: (904) 665-6247 ext. Fax: (904) 665-7376
4.	Professional Engineer E-mail Address: gianNB@jea.com
5.	Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☐, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here [x], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature   6/25/08
                                                Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

<table>
<tr><td colspan="2">1. Facility UTM Coordinates...
Zone 17 East (km) 446.70
North (km) 3365.10</td><td colspan="2">2. Facility Latitude/Longitude...
Latitude (DD/MM/SS) 30/25/51
Longitude (DD/MM/SS) 81/33/3</td></tr>
<tr><td>3. Governmental Facility Code:
4</td><td>4. Facility Status Code:
A</td><td>5. Facility Major Group SIC Code:
49</td><td>6. Facility SIC(s):
4911</td></tr>
<tr><td colspan="4">7. Facility Comment :</td></tr>
</table>

Facility Contact

1. Facility Contact Name: N. Bert Gianazza
2. Facility Contact Mailing Address... Organization/Firm: JEA (T-8) Street Address: 21 West Church Street City: Jacksonville State: FL Zip Code: 32202
3. Facility Contact Telephone Numbers: Telephone: (904) 665-6247 Fax: (904) 665-7376
4. Facility Contact E-mail Address:

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official E-mail Address:

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. [x] Title V Source	
4. [x] Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. [x] Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. [x] One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
CO	A	
NOX	A	Y (for NGS)
PM	A	Y (for NGS)
PM10	A	
SO2	A	Y (for NGS)
VOC	A	
PB	B	
H114	B	
SAM	B	
H107	A	
H106	A	
H095	A	
H104	A	
H113	A	
H133	A	
HAPS	A	

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
NOX	N	NGS Units 1, 2 and 3		3,600	PSD-FL-265
PM	N	NGS Units 1, 2 and 3		881	PSD-FL-265
SO2	N	NGS Units 1, 2 and 3		12,284	PSD-FL-265

7. Facility-Wide or Multi-Unit Emissions Cap Comment:
The emission limit is based on a consecutive 12-month period for NGS Units 1, 2 and 3.

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attachment A [ ] Previously Submitted, Date:__________
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attachment B [ ] Previously Submitted, Date:__________
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attachment C [ ] Previously Submitted, Date:__________

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: [ ] Attached, Document ID:__________ [x] Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): [ ] Attached, Document ID:__________
3. Rule Applicability Analysis: [ ] Attached, Document ID:__________
4. List of Exempt Emissions Units: [ ] Attached, Document ID:__________ [ ] Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification: [ ] Attached, Document ID:__________ [ ] Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.): [ ] Attached, Document ID:__________ [ ] Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.): [ ] Attached, Document ID:__________ [ ] Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): [ ] Attached, Document ID:__________ [ ] Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): [ ] Attached, Document ID:__________ [ ] Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): [ ] Attached, Document ID:__________ [ ] Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units: ☐ Attached, Document ID:__________ ☐ Not Applicable (no exempt units at facility)	

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only) ☒ Attached, Document ID: Attachment D ☐ Not Applicable (revision application)	
2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought) ☒ Attached, Document ID: Attach. E ☐ Not Applicable (revision application with no change in applicable requirements)	
3. Compliance Report and Plan: (Required for all initial/revision/renewal applications) ☒ Attached, Document ID: Attachment F Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.	
4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only) ☒ Attached, Document ID: Attachment G ☐ Equipment/Activities Onsite but Not Required to be Individually Listed ☐ Not Applicable	
5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only) ☒ Attached, Document ID: Attachment H ☐ Not Applicable	
6. Requested Changes to Current Title V Air Operation Permit: ☒ Attached, Document ID: See Application Support Document ☐ Not Applicable	

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   [x] Attached, Document ID: Attach. R [ ] Previously Submitted, Date:__________
   [ ] Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   [x] Attached, Document ID: Attach. R [ ] Previously Submitted, Date:__________
   [ ] Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   [ ] Attached, Document ID:__________ [ ] Previously Submitted, Date:__________
   [x] Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   [x] Attached, Document ID: Attach. R [ ] Previously Submitted, Date:__________
   [ ] Not Applicable (not a CAIR source)

3. Hg Budget Part (DEP Form No. 62-210.900(1)(c)):
   [ ] Attached, Document ID:__________ [ ] Previously Submitted, Date:__________
   [x] Not Applicable (not a Hg Budget unit)

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: NGS – Boiler No. 3

3. Emissions Unit Identification Number: 003

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		June 28, 1977	49

8. Federal Program Applicability: (Check all that apply)

   [x] Acid Rain Unit

   [x] CAIR Unit

   [ ] Hg Budget Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: 563.7 MW

11. Emissions Unit Comment:
NGS Boiler No. 3 may be used to evaporate on-site generated boiler non-hazardous cleaning chemicals.

EMISSIONS UNIT INFORMATION
Section [1] of [8]

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Pollutant emissions from this emissions unit are uncontrolled.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: 5,260 million Btu/hr		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year

6. Operating Capacity/Schedule Comment:

The nominal maximum heat input rates are:

5,260 MMBtu/hr when firing natural gas;
5,260 MMBtu/hr when firing landfill gas;
5,033 MMBtu/hr when firing New No. 6 fuel oil;
5,033 MMBtu/hr when firing "On-specification" used oil;
5,033 – 5,260 MMBtu/hr when firing a combination of fuel oil and natural gas
5,033 – 5,260 MMBtu/hr when firing a combination of fuel oil and natural/landfill gases

It is requested that the permitting note that was removed by FDEP for this emission unit be reinstated in the renewed Title V permit, as follows:

"The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90-100 percent of the emission unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability."

It is also requested that further clarification be added as follows:

"The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification."

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU003	2. Emission Point Type Code: 1
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: The combustion gases exhaust through a 300 foot stack.	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: V	6. Stack Height: 300 feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): No. 6 fuel oil used in NGS Boiler No. 3		
2. Source Classification Code (SCC): 10100401	3. SCC Units: 1,000 gallons burned	
4. Maximum Hourly Rate: 33.55 (approx.)	5. Maximum Annual Rate: 293,926 (approx.)	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1.8	8. Maximum % Ash:	9. Million Btu per SCC Unit: 150 (approx.)
10. Segment Comment (limit to 200 characters): No. 6 fuel oil heating value data taken from USEPA AP-42 Appendix A. The maximum sulfur content given in operation permit 0310045-016-AV applies if the SO_2 continuous emissions monitor system is temporarily inoperative.		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas used in NGS Boiler No. 3		
2. Source Classification Code (SCC): 10100601	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 5.01 (approx.)	5. Maximum Annual Rate: 43,883 (approx.)	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,050 (approx.)
10. Segment Comment (limit to 200 characters): The natural gas heating value was taken from USEPA AP-42 Appendix A.		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Landfill gas used in NGS Boiler No. 3		
2. Source Classification Code (SCC): 10100601	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): "On-specification" used oil		
2. Source Classification Code (SCC):	3. SCC Units: 1,000 gallons burned	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 1,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The use of "on-specification" used oil is limited by operation permit 0310045-016-AV to 1,000,000 gallons per calendar year.		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment _5_ of _5_

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Fuel oil and natural gas		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
NO_X			EL
PM			EL
PM_{10}			NS
SO_2			EL
VOC			NS
PB			NS
H014			NS
H047			NS
H095			NS
H104			NS
H133			NS
H148			NS
H169			NS
HAPS			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

<u>Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions</u>

1. Pollutant Emitted: NOX	2. Total Percent Efficiency of Control:
3. Potential Emissions: 1,578 lb/hour 3,600 tons/year	4. Synthetically Limited? [x] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Operation permit 0310045-016-AV and Rule 62-296.405(1)(d)1., F.A.C.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: [ ] 5 years [ ] 10 years

10. Calculation of Emissions:

The NO_x Emissions limit of 0.30 lb/MMBtu is set by operation permit 0310045-016-AV.
The heat input rate to EU003 is 5,260 MMBtu/hr.
Hourly NO_x emissions rate = (0.30 lb/MMBtu)(5,260 MMBtu/hr) = 1,578 lb/hr

Construction Permit PSD-FL-265 limits combined NOx emissions from Units 1, 2 and 3 to 3,600 tons per consecutive 12-month period.

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject *to a numerical* emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.30 lb/MMBtu	4. Equivalent Allowable Emissions: 1,578 lb/hour tons/year
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): The NO_x emissions limit along with compliance determination requirements are included in operation permit 0310043-002-AV and are based on Rule 62-296.405(1)(d)1., F.A.C. and Rule 62-296.405(1)(e)4., F.A.C. The NO_x emissions limit is on a 30-day rolling average basis. Excess emissions resulting from malfunction are allowed pursuant to Rule 62-210.700(1), F.A.C. and excess emissions resulting from startup or shutdown are allowed pursuant to Rule 62-210.700(2), F.A.C.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour 3,600 tons/year
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): Construction Permit PSD-FL-265 limits combined NOx emissions from Units 1, 2 and 3 to 3,600 tons per consecutive 12-month period. Therefore, the maximum NOx emissions from Unit 3, absent operation of Units 1 and 2, is 3,600 tons per year. This NOx emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 30 lb/hour 881 tons/year	4. Synthetically Limited? [x] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Operation permit 0310045-016-AV, Rule 62-296.405(1)(b), F.A.C. and Rule 62-296.702(2)(a), F.A.C.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: [ ] 5 years [ ] 10 years

10. Calculation of Emissions:

The PM Emissions limit of 0.1 lb/MMBtu is set by operation permit 0310045-016-AV.
The heat input rate to EU003 is 5,260 MMBtu/hr.
Hourly PM emissions rate = (0.1 lb/MMBtu)(5,260 MMBtu/hr) = 526 lb/hr

Construction Permit PSD-FL-265 limits combined PM emissions from Units 1, 2 and 3 to 881 tons per consecutive 12-month period.

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.1 lb/MMBtu	4. Equivalent Allowable Emissions: 526 lb/hour tons/year
5. Method of Compliance: Using appropriate EPA Methods	
6. Allowable Emissions Comment (Description of Operating Method): The PM emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV and are based on Rule 62-296.405(1)(b), F.A.C. and Rule 62-296.702(2)(a), F.A.C. Excess emissions resulting from malfunction are allowed pursuant to Rule 62-210.700(1), F.A.C. and excess emissions resulting from startup or shutdown are allowed pursuant to Rule 62-210.700(2), F.A.C.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.3 lb/MMBtu during boiler cleaning (soot blowing) and load change	4. Equivalent Allowable Emissions: 526 lb/hour tons/year
5. Method of Compliance: Using appropriate EPA Methods	
6. Allowable Emissions Comment (Description of Operating Method): The PM emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV and are based on Rule 62-210.700(3), F.A.C. This emissions limit applies during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___3___ of ___3___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour 881 tons/year
5. Method of Compliance (limit to 60 characters): Determining particulate matter emissions from this emissions unit to show compliance with this limit is based on the formula provided in Construction Permit PSD-FL-265.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Construction Permit PSD-FL-265 limits combined PM emissions from Units 1, 2 and 3 to 881 tons per consecutive 12-month period. Therefore, the maximum PM emissions from Unit 3, absent operation of Units 1 and 2, is 881 tons per year.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 10,415 lb/hour 12,284 tons/year	4. Synthetically Limited? [x] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Operation permit 0310045-016-AV and Rule 62-296.405(1)(c)1.a., F.A.C.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: [ ] 5 years [ ] 10 years

10. Calculation of Emissions:

The SO_2 Emissions limits of 1.98 lb/MMBtu (firing oil) is set by operation permit 0310045-016-AV.
The heat input rate to EU003 is 5,033 MMBtu/hr.
Hourly SO_2 emissions rate = (1.98 lb/MMBtu)(5,033 MMBtu/hr) = 9,965 lb/hr

Construction Permit PSD-FL-265 limits combined SO_2 emissions from Units 1, 2 and 3 to 12,284 tons per consecutive 12-month period.

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.98 lb/MMBtu	4. Equivalent Allowable Emissions: 10,415 lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limits along with compliance determination requirements are included in operation permit 0310045-016-AV and based on rule 62-296.405(1)(c)1.a., F.A.C. Excess emissions resulting from malfunction are allowed pursuant to Rule 62-210.700(1), F.A.C. and excess emissions resulting from startup or shutdown are allowed pursuant to Rule 62-210.700(2), F.A.C.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour 12,284 tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limits are demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Construction Permit PSD-FL-265 limits combined SO_2 emissions from Units 1, 2 and 3 to 12,284 tons per consecutive 12-month period. Therefore, the maximum SO_2 emissions from Unit 3, absent operation of Units 1 and 2, is 12,284 tons per year. This SO_2 emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265.	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9.	
5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV and are based on Rule 62-296.405(1)(1), F.A.C. and Rule 62-296.702(2)(b), F.A.C. Excess emissions resulting from malfunction are allowed pursuant to Rule 62-210.700(1), F.A.C. and excess emissions resulting from startup or shutdown are allowed pursuant to Rule 62-210.700(2), F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment: The visible emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV and are based on Rule 62-210.700(3), F.A.C. This visible emissions limit applies during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: TECO Model Number: 42C	Serial Number: 0501710240
5. Installation Date: March 20, 2005	6. Performance Specification Test Date: April-May 2005
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: TECO Model Number: 43C	Serial Number: 0462408776
5. Installation Date: March 20, 2005	6. Performance Specification Test Date: April-May 2005
7. Continuous Monitor Comment:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3 of 3

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: CAI Model Number: ZRH01	Serial Number: A4B1700T
5. Installation Date: March 20, 2005	6. Performance Specification Test Date: April-May 2005
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. I [ ] Previously Submitted, Date ____

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: ____ [ ] Previously Submitted, Date ____

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ____
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ____
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records:
   [ ] Attached, Document ID: ____
   Test Date(s)/Pollutant(s) Tested: ____
   [x] Previously Submitted, Date: Attach. L
   Test Date(s)/Pollutant(s) Tested: ____
   [ ] To be Submitted, Date (if known): ____
   Test Date(s)/Pollutant(s) Tested: ____
   [ ] Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   [ ] Attached, Document ID: ____ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ____ ☒ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ____ ☒ Not Applicable	
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ____ ☒ Not Applicable	

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E	
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: Attach. M ☐ Not Applicable	
3. Alternative Methods of Operation: ☒ Attached, Document ID: Attach. N ☐ Not Applicable	
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ____ ☒ Not Applicable	

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: NGS: Combustion Turbines No. 3, 4, 5 and 6

3. Emissions Unit Identification Number: 006 through 009

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		CT No. 3: Feb 1975 CT No. 4: Jan 1975 CT No. 5: Feb 1974 CT No. 6: Dec 1974	49

8. Federal Program Applicability: (Check all that apply)

   [x] Acid Rain Unit

   [x] CAIR Unit

   [ ] Hg Budget Unit

9. Package Unit:
   Manufacturer: GE Model Number: MS 7000

10. Generator Nameplate Rating: 56.2 MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Emissions Unit Control Equipment/Method: Control __ of __

1. Control Equipment/Method Description:
2. Control Device or Method Code:

Pollutant emissions from this emissions unit are uncontrolled.

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: 901 million Btu/hr (LHV)		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment: Please refer to Attachment P for the NGS CT Heat Input Nominal Values. The following permitting note in the Title V permit 0310045-016-AV will continue to be applicable. "Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability." Each CT shall not exceed 399 hours per year operation while using foggers. (Ref: Title V Title V Operation Permit 0310045-016-AV)		

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU006 through EU009	2. Emission Point Type Code: 1
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Each turbine is served by a single exhaust stack.	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: V	6. Stack Height:	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): No. 6 fuel oil used in each combustion turbine		
2. Source Classification Code (SCC): 20100101	3. SCC Units: 1,000 gallons burned	
4. Maximum Hourly Rate: 6.43 (approx.)	5. Maximum Annual Rate: 56,377 (approx.)	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 140 (approx.)
10. Segment Comment (limit to 200 characters): No. 6 fuel oil heating value data taken from USEPA AP-42 Appendix A. The maximum sulfur content is as given in operation permit 0310045-016-AV. Actual fuel use rates are a function of the fuel oil heating value and the CT operating conditions.		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
NO_X			NS
PM			NS
PM_{10}			NS
SO_2			WP
H095			NS
H113			NS
HAPS			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9.	
5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV and are based on Rule 62-296.320(4)(b)1., F.A.C. and AO16-173886	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ______

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. I [ ] Previously Submitted, Date ______

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: ______ [ ] Previously Submitted, Date ______

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ______
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ______
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records:
   [ ] Attached, Document ID: ______
   Test Date(s)/Pollutant(s) Tested: ______

   [x] Previously Submitted, Date: Attach. L
   Test Date(s)/Pollutant(s) Tested: ______

   [ ] To be Submitted, Date (if known): ______
   Test Date(s)/Pollutant(s) Tested: ______

   [ ] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   [ ] Attached, Document ID: ______ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ________ ☒ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ________ ☒ Not Applicable	
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ________ ☒ Not Applicable	

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E	
2. Compliance Assurance Monitoring: ☐ Attached, Document ID:________ ☒ Not Applicable	
3. Alternative Methods of Operation: ☒ Attached, Document ID: Attach. N ☐ Not Applicable	
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ________ ☒ Not Applicable	

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   SJRPP Boiler No. 1 and Boiler No. 2

3. Emissions Unit Identification Number: SJRPP Boiler No. 1: 016
   SJRPP Boiler No. 2: 017

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date: Boiler 1: Dec. 1986 Boiler 2: Mar. 1988	7. Emissions Unit Major Group SIC Code: 49

8. Federal Program Applicability: (Check all that apply)

   [x] Acid Rain Unit

   [x] CAIR Unit

   [ ] Hg Budget Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: 679.6 MW

11. Emissions Unit Comment:
The dates listed above under Item No. 6 are dates of commercial operation. With the vacatur of CAMR regulations, the Hg Budget Unit requirements are not applicable to each boiler.

Emissions Unit Control Equipment/Method: Control 1 of 4

1. Control Equipment/Method Description: Low NO_x Burners and overfire air	
2. Control Device or Method Code: 205, 024	

Emissions Unit Control Equipment/Method: Control 2 of 4

1. Control Equipment/Method Description: Electrostatic Precipitator	
2. Control Device or Method Code: 010	

Emissions Unit Control Equipment/Method: Control 3 of 4

1. Control Equipment/Method Description: Wet flue gas desulfurization (WFGD)	
2. Control Device or Method Code: 141	

Emissions Unit Control Equipment/Method: Control 4 of 4

1. Control Equipment/Method Description: Selective Catalytic Reduction (SCR) and ammonia injection system for each boiler	
2. Control Device or Method Code: 139	

The control devices listed above are for each boiler.

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: 6,144 million Btu/hr		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment:		

Maximum heat input rate for each boiler. It is requested that FDEP reinstate the permitting note as follows:

> "Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability."

It is also requested that further clarification be added as follows:

> "The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input for this unit. The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certification."

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

<table>
<tr><td colspan="2">1. Identification of Point on Plot Plan or Flow Diagram: EU016 and EU017</td><td colspan="2">2. Emission Point Type Code: 1</td></tr>
<tr><td colspan="4">3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:

Each boiler exhausts through its own stack (640 feet above grade)</td></tr>
<tr><td colspan="4">4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:</td></tr>
<tr><td>5. Discharge Type Code:
V</td><td colspan="2">6. Stack Height:
640 feet</td><td>7. Exit Diameter:
22.3 feet</td></tr>
<tr><td>8. Exit Temperature:
156 °F</td><td colspan="2">9. Actual Volumetric Flow Rate:
1,800,000 acfm</td><td>10. Water Vapor:
%</td></tr>
<tr><td colspan="2">11. Maximum Dry Standard Flow Rate:
dscfm</td><td colspan="2">12. Nonstack Emission Point Height:
feet</td></tr>
<tr><td colspan="2">13. Emission Point UTM Coordinates...
Zone: East (km):
North (km):</td><td colspan="2">14. Emission Point Latitude/Longitude...
Latitude (DD/MM/SS)
Longitude (DD/MM/SS)</td></tr>
<tr><td colspan="4">15. Emission Point Comment:</td></tr>
</table>

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Coal, including coal treated with a latex binder used in SJRPP Boiler No. 1 and No. 2			
2. Source Classification Code (SCC): 10100202		3. SCC Units: Tons Burned	
4. Maximum Hourly Rate: 245.7 (approx.)	5. Maximum Annual Rate: 2,152,857.4 (approx.)		6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 4	8. Maximum % Ash: 18		9. Million Btu per SCC Unit: 25 (approx.)
10. Segment Comment (limit to 200 characters): Maximum rates are for each unit. The maximum ash content was taken from operation permit 0310045-016-AV. The fuel use rates in fields 4 and 5 are based on a heat content of 25 MMBtu/ton of coal and will vary with heat content.			

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Co-firing of up to 30 percent petroleum coke with coal.			
2. Source Classification Code (SCC): 10100202		3. SCC Units: Tons Burned	
4. Maximum Hourly Rate: 238	5. Maximum Annual Rate: 2,084,486.4		6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 4	8. Maximum % Ash: 18		9. Million Btu per SCC Unit: 25 (approx.)
10. Segment Comment (limit to 200 characters): Based on 30% petroleum coke (calendar-day average) and 70% coal by weight at 6,144 MMBtu/hr maximum heat input (34.39% petroleum coke and 65.61% coal on a heat input basis; 12,910 Btu/lb). Sulfur content based on 1.2% sulfur coal and 6% sulfur petroleum coke. Maximum amount of petroleum coke burned shall not exceed 150,000 pounds per hour. Maximum rates are for each unit. Note: SCC for petroleum coke is 10100801.			

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters):
   No. 2 distillate fuel oil used in each boiler

2. Source Classification Code (SCC): 10100501	3. SCC Units: 1,000 gallons burned	
4. Maximum Hourly Rate: 43.9	5. Maximum Annual Rate: Not Applicable	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.76	8. Maximum % Ash: 0.01	9. Million Btu per SCC Unit: 140 (approx.)

10. Segment Comment (limit to 200 characters):
No. 2 distillate fuel oil is fired during startup and low load operation only. Therefore, specifying a maximum No. 2 distillate oil use on an annual basis is not practical. The maximum sulfur content and maximum ash content are taken from operation permit 0310045-016-AV.

Segment Description and Rate: Segment 4 of 4

3. Segment Description (Process/Fuel Type) (limit to 500 characters):
   "On-specification" used oil used in each boiler

4. Source Classification Code (SCC): 10100401	3. SCC Units: 1,000 gallons burned	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 1,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:

10. Segment Comment (limit to 200 characters): The use of "on-specification" used oil is limited by operation permit 0310045-016-AV to 1,000,000 gallons per calendar year for both the boilers combined.

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			NS
NO_X	205, 139	024	EL
PM	010		EL
PM_{10}	010		EL
SO_2	141		EL
VOC			NS
PB	010		NS
SAM	141		EL
NH3			EL
H001			NS
H017			NS
H020			NS
H054			NS
H106	141		NS
H107	141		NS
H109			NS
H113	010		NS
H118			NS
H162	010		NS
HAPS			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOX	2. Total Percent Efficiency of Control:
3. Potential Emissions: 3686.4 lb/hour 16,146 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Operation permit 0310045-016-AV and 40 CFR 60 Subpart Da	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The NO_x Emissions limit of 0.60 lb/MMBtu when firing coal or a coal/pet coke blend is set by operation permit 0310045-016-AV.
The heat input rate to each boiler is 6,144 MMBtu/hr.
Hourly NO_x emissions rate = (0.60 lb/MMBtu)(6,144 MMBtu/hr) = 3,686.4 lb/hr
Annual NO_x emissions rate = (0.60 lb/MMBtu)(6,144 MMBtu/hr)(8,760 hr/yr)(ton/2,000 lb) =
= 16,146 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:
SJRPP elected to install the SCR systems on each boiler to provide full flexibility in implementing the federal cap and trade program for nitrogen oxides under the Clean Air Interstate Rule (CAIR). Because CAIR affords a regulated facility the flexibility to evaluate market conditions to determine whether it will install controls, operate existing controls, or purchase allowances generated by other plants, the DEP does not require the installation of the SCR nor its operation, as highlighted in the recent Construction Permit 0310045-017-AC.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.60 lb/MMBtu on a 30-day rolling average when firing coal or a coal/pet coke blend	4. Equivalent Allowable Emissions: 3,686.4 lb/hour 16,146 tons/year
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): The NO_x emissions limit is required by 40 CFR 60, Subpart Da. The NO_x emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The NO_x emissions limit applies when firing coal or a blend of coal and petroleum coke. The NO_x emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or malfunction. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.30 lb/MMBtu on a 30-day rolling average when firing fuel oil only	4. Equivalent Allowable Emissions: 1,843.2 lb/hour
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): The NO_x emissions limit is required by 40 CFR 60, Subpart Da. The NO_x emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The NO_x emissions limit applies when firing fuel oil. The NO_x emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or malfunction. Equivalent pound per hour emissions are given for informational purposes only and do not constitute a limit.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: $PS_{NOX} = (130X + 260Y)/100$ Where PS_{NOX} = NO_x emissions standard in ng/J X = % total heat input derived from fuel oil Y = % of total heat input derived from coal or a blend of coal/pet coke	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): The NO_x emissions limit is required by 40 CFR 60, Subpart Da. The NO_x emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The NO_x emissions limit applies when fuel oil and coal (or a blend of coal and petroleum coke) are combusted simultaneously. The NO_x emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or malfunction.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NH3	2. Total Percent Efficiency of Control:
3. Potential Emissions:	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 5 ppmv Reference: Construction permit 0310045-017-AC	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment: Ammonia Slip is regulated. Ammonia slip measured at the stack, downstream of all emission control systems shall not exceed 5 parts per million by volume (ppmv). Annual testing of ammonia shall be conducted and corrective measures taken if measured values exceed 2 ppmv. [Design; and Rule 62-4.070(3), F.A.C.- Construction Permit 0310045-017-AC]	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 5 ppmv ammonia slip	4. Equivalent Allowable Emissions:
5. Method of Compliance: Annual testing using EPA conditional test method (CTM027), EPA Method 320, or other methods approved by the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99+%
3. Potential Emissions: 184.32 lb/hour 807 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Construction permit 0310045-017-AC; 40 CFR 60 Subpart Da	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The PM Emissions limit of 0.03 lb/MMBtu is set by operation permit 0310045-016-AV.
The heat input rate to each boiler is 6,144 MMBtu/hr.
Hourly PM emissions rate = (0.03 lb/MMBtu)(6,144 MMBtu/hr) = 184 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:
The SCR minor source air construction permit (0310045-017-AC) considered that the projected actual annual emissions due to the SCR project would not exceed the PM/PM_{10} annual emissions of 336 tons/year.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.03 lb/MMBtu	4. Equivalent Allowable Emissions: 184.32 lb/hour 807 tons/year
5. Method of Compliance: EPA Method 5B; 40 CFR 52.21(b)21(v) and b(33).	
6. Allowable Emissions Comment (Description of Operating Method): The SCR minor source air construction permit (0310045-017-AC) considered that the projected actual annual emissions due to the SCR project would not exceed the PM/PM_{10} annual emissions of 336 tons/year.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

<u>Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions</u>

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7,373 lb/hour 20,452 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.20 lb/MMBtu (two hour average basis) and 0.76 lb/MMBtu (30-day rolling average basis) Reference: Operation permit 0310045-016-AV and 40 CFR 60 Subpart Da	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The SO_2 Emissions limits of 1.20 lb/MMBtu (2- hour average) and 0.76 lb/MMBtu (30-day rolling average) are set by operation permit 0310045-016-AV.
The heat input rate to each boiler is 6,144 MMBtu/hr.
Hourly SO_2 emissions rate (2-hour average) = (1.20 lb/MMBtu)(6,144 MMBtu/hr) = 7,373 lb/hr
Hourly SO_2 emissions rate (30-day average) = (0.76 lb/MMBtu)(6,144 MMBtu/hr) = 4,669 lb/hr
Annual SO_2 emissions rate = (0.76 lb/MMBtu)(6,144 MMBtu/hr)(8,760 hr/yr)(ton/2,000 lb) = 20,452 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 10

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.20 lb/MMBtu (2-hour average)	4. Equivalent Allowable Emissions: 7,373 lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit is demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when firing coal. The SO_2 emissions limit is on a 2-hour average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented. Equivalent pound per hour emissions are given for informational purposes only and do not constitute a limit.	

Allowable Emissions Allowable Emissions 2 of 10

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.76 lb/MMBtu (30-day rolling average)	4. Equivalent Allowable Emissions: 4,669 lb/hour 20,452 tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when firing coal. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 3 of 10

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 70% reduction of potential combustion concentrations if emissions are less than 0.60 lb/MMBtu	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emission reduction standard is required by 40 CFR 60, Subpart Da. The SO_2 emissions reduction standard along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when firing coal. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.	

Allowable Emissions Allowable Emissions 4 of 10

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0% reduction of potential combustion concentrations if emissions are less than 0.20 lb/MMBtu	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emission reduction standard is required by 40 CFR 60, Subpart Da. The SO_2 emissions reduction standard along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when firing coal. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 5 of 10

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.676 lb/MMBtu (30-day rolling average)	4. Equivalent Allowable Emissions: 4,153 lb/hour 18,192 tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when co-firing petroleum coke and coal. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

Allowable Emissions Allowable Emissions ___6___ of ___10___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.53 lb/MMBtu (30-day rolling average)	4. Equivalent Allowable Emissions: 3,256 lb/hour 14,263 tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when coals with a sulfur content less than or equal to 2.00%, by weight, are co-fired with petroleum coke. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions ___7___ of ___10___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: SO_2 (lb/MMBtu) = (0.2 x C/100) + 0.4 Where C = percent of coal fired on a heat input basis (30-day rolling average)	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when coals with a sulfur content between 2.00% and 3.63%, by weight, are co-fired with petroleum coke. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.	

Allowable Emissions Allowable Emissions ___8___ of ___10___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: SO_2 (lb/MMBtu) = (0.1653 x C x S – 0.4 x C + 40) x 1/100 Where C = percent of coal fired on a heat input basis S = weight percent sulfur in coal (30-day rolling average)	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements is included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when coals with a sulfur content greater than 3.63%, by weight, are co-fired with petroleum coke. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __9__ of __10__

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.20 lb/MMBtu	4. Equivalent Allowable Emissions: 1,229 lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when firing liquid fuel only. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented. Equivalent pound per hour emissions are given for informational purposes only and do not constitute a limit.	

Allowable Emissions Allowable Emissions __10__ of __10__

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Prorated formulas specified in 40 CFR 60.43a(h)	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The SO_2 emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV. The SO_2 emissions limit applies when fuel oil and coal (or a blend of coal and petroleum coke) are combusted simultaneously. The SO_2 emissions limit is on a 30-day rolling average basis and applies at all times except during periods of startup, shutdown or when both emergency conditions exist and the procedures under 40 CFR 60.46a(d) are implemented.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

<u>Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions</u>

1. Pollutant Emitted: SAM	2. Total Percent Efficiency of Control: 30+%
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Operation permit 0310045-017-AC	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment: The SCR minor source air construction permit (0310045-017-AC) considered that the actual annual emissions due to the SCR project would not exceed the SAM annual emissions (1,317 + 6 = 1323 tons/year).	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27% Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: Compliance with the visible emissions limit is demonstrated using a continuous opacity monitoring system (COMS).	
5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit is based on a 6-minute block average and applies at all times except periods of startup, shutdown and malfunction. The visible emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV and are based on 40 CFR 60 Subpart Da requirements.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE99	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: COMS	
5. Visible Emissions Comment: Excess emissions resulting from startup, shutdown, and malfunction for no more than 2-hours in any 24-hour period. Rule 62-210.700(1).	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 4

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: LAND Model Number: 4500MKII++	Serial Number-SJRPP Boiler No. 1: 0295772 Serial Number-SJRPP Boiler No. 2: 0295748
5. Installation Date: September 21, 2002	6. Performance Specification Test Date: October 23, 2002
7. Continuous Monitor Comment: The use of a continuous opacity monitor is required by 40 CFR 60, Subpart Da and operation permit 0310045-016-AV.	

Continuous Monitoring System: Continuous Monitor 2 of 4

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: TECO Model Number: 42i	Serial Number – SJRPP Boiler No. 1: 0633419616 Serial Number – SJRPP Boiler No. 2: 0704520696
5. Installation Date: Boiler No. 1: March 2007 Boiler No. 2: May 2007	6. Performance Specification Test Date: Boiler No. 1: March 2007 Boiler No. 2: June 2007
7. Continuous Monitor Comment:	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Continuous Monitoring System: Continuous Monitor 3 of 4

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: TECO Model Number: 43i	Serial Number – SJRPP Boiler No. 1: 0610416572 Serial Number – SJRPP Boiler No. 2: 0631019327
5. Installation Date: Boiler No. 1: March 2007 Boiler No. 2: May 2007	6. Performance Specification Test Date: Boiler No. 1: March 2007 Boiler No. 2: June 2007
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor 4 of 4

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	[x] Rule [ ] Other
4. Monitor Information... Manufacturer: TECO Model Number: 410i	Serial Number – SJRPP Boiler No. 1: 0633419623 Serial Number – SJRPP Boiler No. 2: 0618617300
5. Installation Date: Boiler No. 1: March 2007 Boiler No. 2: May 2007	6. Performance Specification Test Date: Boiler No. 1: March 2007 Boiler No. 2: June 2007
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ______
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. I [ ] Previously Submitted, Date ______
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. O [ ] Previously Submitted, Date ______
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ______ [ ] Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ______ [ ] Not Applicable
6.	Compliance Demonstration Reports/Records: [ ] Attached, Document ID: ______ Test Date(s)/Pollutant(s) Tested: ______ [x] Previously Submitted, Date: Attach. L Test Date(s)/Pollutant(s) Tested: ______ [ ] To be Submitted, Date (if known): ______ Test Date(s)/Pollutant(s) Tested: ______ [ ] Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: [ ] Attached, Document ID: ______ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ______ ☒ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ______ ☒ Not Applicable	
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ______ ☒ Not Applicable	

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E	
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: Attach. M ☐ Not Applicable	
3. Alternative Methods of Operation: ☒ Attached, Document ID: Attach. N ☐ Not Applicable	
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ______ ☒ Not Applicable	

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [4] of [8]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   EU:023 - SJRPP: Fuel and Limestone Handling and Storage Operations
   EU:022 – SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations

3. Emissions Unit Identification Number: 023 and 022, respectively

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			49	[ ] Yes [ ] No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating:

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: Particulate matter emissions from these emissions units are controlled, on an as needed basis, by the use of fabric filter systems, wet suppression, water spray, coverings, and full or partial enclosure, covers and wind screens where appropriate. SJRPP will maintain and continue to use the air quality control systems established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions. See Attachment Q.
2. Control Device or Method Code(s): 018, 061, 062

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: million Btu/hr		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment: The The material usage rates are a function of the material properties and operating conditions of the SJRPP boilers.		

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU023 and EU022	2. Emission Point Type Code: 3, 4

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:

The emission units/points are depicted in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations (PSD-FL-010G). See Attachment Q.

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)

15. Emission Point Comment:
{Permitting Note for EU-023: The emissions units are regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) New Source Review: PSD-FL-010, and as amended (A) thru (E), Best Available Control Technology (BACT) Determination, dated 07/07/1981; PPSA: PA 81-13, and as amended; and, 0310045-015-AC/PSD-FL-010(G).}

{Permitting Note(s) for EU-022: The emissions units/points are regulated under Rule 62-212.400, PSD NSR Review, which includes BACT [dated 05/07/81; PSD-FL-010, and as amended ((A) thru (E))]; PA 81-13, and as amended); and, 0310045-012-AC/PSD-FL-010(G).}

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): SJRPP: Fuel and Limestone Handling and Storage Operations (EU023)
The coal receiving, storage and transfer systems at the coal and petroleum coke storage yard support the operation of the two power boilers. Fugitive particulate matter emissions will be generated from limestone handling and storage systems. The emissions units/points are as depicted in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations [PSD-FL-010, and as amended (was originally Tables 2 and 6)]. Particulate matter emissions and visible emissions are controlled using fabric filter systems, water sprays, wetting agents, and full enclosures or partial enclosures, covers and wind screens, where appropriate and required by permit. Visible emissions limits will be used for compliance purposes.

EU:022 – SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations
Fugitive particulate matter emissions will be generated from bottom ash, fly ash and gypsum materials handling and storage operations. The emissions units/points are as depicted in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations [PSD-FL-010, and as amended (was originally Tables 2 and 6)].

2. Source Classification Code (SCC): 30501099	3. SCC Units: Tons handled

4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:

10. Segment Comment:

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment: See Attachment Q	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Visible emissions limits will be used for compliance purposes.	
6. Allowable Emissions Comment (Description of Operating Method): See Attachment Q	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: See Attachment Q	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: Visible emissions shall be used for compliance purposes and not exceed the opacity limits established in Revised Table 6 – Part B, SJRPP: Materials Handling and Storage Operations. Reference: [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G] and Title V Permit 0310045-016-AV. See Attachment Q	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ______
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [ ] Attached, Document ID: ______ [ ] Previously Submitted, Date ______
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. O [ ] Previously Submitted, Date ______
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ______ [ ] Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ______ [ ] Not Applicable
6.	Compliance Demonstration Reports/Records: [ ] Attached, Document ID: ______ Test Date(s)/Pollutant(s) Tested: ______ [x] Previously Submitted, Date: Attach. L Test Date(s)/Pollutant(s) Tested: ______ [ ] To be Submitted, Date (if known): ______ Test Date(s)/Pollutant(s) Tested: ______ [ ] Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: [ ] Attached, Document ID: ______ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ________ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ________ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ________ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E
2. Compliance Assurance Monitoring: ☐ Attached, Document ID:________ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID:________ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ________ ☒ Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [5] of [8]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
   EU:024 - SJRPP: Cooling Towers (2)

3. Emissions Unit Identification Number: 024

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A			49	[ ] Yes [ ] No

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating:

11. Emissions Unit Comment:
This emission unit consists of two natural draft cooling towers equipped with drift eliminators for control of particulate emissions.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: Fugitive particulate matter emissions from the cooling towers will be controlled with drift eliminators.
2. Control Device or Method Code(s): 015

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: million Btu/hr		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment:		

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU024	2. Emission Point Type Code: 4

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Fugitive particulate matter emissions from each cooling towers
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code: F	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)

15. Emission Point Comment:

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): Natural Draft Cooling Towers		
2. Source Classification Code (SCC): 38500102	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**015**		**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 67 lb/hour 293.46 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:
The PM emission rate for each of the cooling towers is 67 lbs/hr as given in operation permit 0310045-016-AV.
Annual emissions = (67 lb/hr)(8,760 hr/yr)/(2,000 lb/ton) = 293.46 tons/year

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Visible emissions limits will be used for compliance purposes. No mass testing requirements are imposed on these emission units due to their physical layout.	
6. Allowable Emissions Comment (Description of Operating Method): The PM emissions standards along with compliance determination requirements are included in operation permit 0310045-016-AV.	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
6. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ____________

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: ____________ [ ] Previously Submitted, Date ____________

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. O [ ] Previously Submitted, Date ____________

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ____________
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ____________
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records:
   [ ] Attached, Document ID: ____________
   Test Date(s)/Pollutant(s) Tested: ____________

   [ ] Previously Submitted, Date: ____________
   Test Date(s)/Pollutant(s) Tested: ____________

   [ ] To be Submitted, Date (if known): ____________
   Test Date(s)/Pollutant(s) Tested: ____________

   [ ] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   [ ] Attached, Document ID: ____________ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ________ ☐ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ________ ☐ Not Applicable	
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ________ ☐ Not Applicable	

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E	
2. Compliance Assurance Monitoring: ☐ Attached, Document ID:________ ☐ Not Applicable	
3. Alternative Methods of Operation: ☐ Attached, Document ID:________ ☐ Not Applicable	
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ________ ☒ Not Applicable	

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [6] of [8]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
NGS: Circulating Fluidized Bed Boiler No. 2
NGS: Circulating Fluidized Bed Boiler No. 1

3. Emissions Unit Identification Number:

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:
A		Boiler 2: Feb 2002 Boiler 1: May 2002	49

8. Federal Program Applicability: (Check all that apply)

   [x] Acid Rain Unit [x] CAIR Unit [ ] Hg Budget Unit

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: 297.5 MW each

11. Emissions Unit Comment:
With the vacatur of the CAMR regulations, the Hg Budget Unit regulations are not applicable.

Emissions Unit Control Equipment/Method: Control 1 of 4

1. Control Equipment/Method Description: Dry Limestone Injection into each boiler	
2. Control Device or Method Code: 041	

Emissions Unit Control Equipment/Method: Control 2 of 4

1. Control Equipment/Method Description: Spray dryer absorber	
2. Control Device or Method Code: 013	

Emissions Unit Control Equipment/Method: Control 3 of 4

1. Control Equipment/Method Description: Selective non-catalytic reduction (SNCR) system	
2. Control Device or Method Code: 107	

Emissions Unit Control Equipment/Method: Control 4 of 4

1. Control Equipment/Method Description: Fabric Filter	
2. Control Device or Method Code: 018	

B. EMISSIONS UNIT CAPACITY INFORMATION
(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: 2,764 million Btu/hr for each boiler		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year

6. Operating Capacity/Schedule Comment:

These rates are included only for purposes of determining capacity during compliance stack tests. Continuous compliance with these rates is not required; and, capacity during compliance testing shall be determined based on fuel flow data and the as-fired heat content of the fuel.

No change to the permitting note in the Title V Operation Permit 0310045-016-AV is requested.

"{Permitting Note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability. The permittee and the Department agree that the CEMS used for the federal Acid Rain Program (40 CFR Part 75) conservatively overestimates heat input ratings. The monitoring data for heat input is, therefore, not appropriate for purposes of compliance, including annual compliance certifications.}"

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU026 and EU027	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NGS – Circulating Fluidized Bed Boiler No. 2 (EU026) shares a common stack with NGS – Circulating Fluidized Bed Boiler No. 1 (EU027). The common stack contains two separate flues, one for each CFB boiler.		
5. Discharge Type Code: V	6. Stack Height: 495 feet	7. Exit Diameter: 15 feet
8. Exit Temperature: 144 °F	9. Actual Volumetric Flow Rate: 700,300 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): 446.670 North (km): 3,365.070	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: Each boiler exhausts through its own flue but through a common stack. The dual-flued common stack is 495 feet tall.		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 6

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Coal and coal treated with a latex binder used in NGS CFB Boiler No. 1 and No. 2		
2. Source Classification Code (SCC): 10100218	3. SCC Units: Tons Burned	
4. Maximum Hourly Rate: 138 (approx.)	5. Maximum Annual Rate: 1,211,000 (approx.)	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 8	8. Maximum % Ash:	9. Million Btu per SCC Unit: 20 (approx.)
12. Segment Comment (limit to 200 characters): Maximum rates are for each unit.		

Segment Description and Rate: Segment 2 of 6

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Petroleum Coke used in NGS CFB Boiler No. 1 and No. 2		
2. Source Classification Code (SCC): 10100299	3. SCC Units: Tons Burned	
4. Maximum Hourly Rate: 102	5. Maximum Annual Rate: 893,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 8	8. Maximum % Ash:	9. Million Btu per SCC Unit: 27.1 (approx.)
10. Segment Comment (limit to 200 characters):		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 6

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Coal and petroleum coke blend used in NGS CFB Boiler No. 1 and No. 2		
2. Source Classification Code (SCC): 10100299	3. SCC Units: tons burned	
4. Maximum Hourly Rate: 138	5. Maximum Annual Rate: 1,211,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 8	8. Maximum % Ash: 0.01	9. Million Btu per SCC Unit: 20 (approx.)
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 4 of 6

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas including landfill gas used in NGS CFB Boiler No. 1 and No. 2		
2. Source Classification Code (SCC): 10100299	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 0.31	5. Maximum Annual Rate: 1,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2 gr/100 scf	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,000
10. Segment Comment (limit to 200 characters):		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 5 of 6

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Distillate fuel oil used in NGS CFB Boilers No. 1 and 2		
2. Source Classification Code (SCC): 10100299	3. SCC Units: Thousand gallons Burned	
4. Maximum Hourly Rate: 2.26 (approx.)	5. Maximum Annual Rate: 1,211,000 (approx.)	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 140 (approx.)
13. Segment Comment (limit to 200 characters): Maximum rates are for each unit.		

Segment Description and Rate: Segment 6 of 6

1. Segment Description (Process/Fuel Type) (limit to 500 characters): A blend of coal treated with a latex binder and other permitted fuels used inNGS CFB Boilers No. 1 and 2		
2. Source Classification Code (SCC): 10100299	3. SCC Units: Tons Burned	
4. Maximum Hourly Rate: 138	5. Maximum Annual Rate: 1,211,000	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 8	8. Maximum % Ash:	9. Million Btu per SCC Unit: 20 (approx.)
10. Segment Comment (limit to 200 characters):		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO			EL
NO_X	107		EL
PM	018		EL
PM_{10}	018		EL
SO_2	041	013	EL
VOC			EL
H114	013	018	EL
PB	018		EL
SAM	041	013	EL
H107	013		EL
H106	013		NS
HAPS			NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 350 lb/hour (24-hr block avg) 1,533 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Construction Permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

CO emissions limit of 350 lb/hour on a 24-hour average (excluding startup and shutdown) is set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.

CO emissions limit of 1,533 tons/year is set by construction permit PSD-FL-265.

11. Potential, Fugitive, and Actual Emissions Comment:

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 350 lb/hr (24-hr block avg.)	4. Equivalent Allowable Emissions: 350 lb/hour 1,533 tons/year
5. Method of Compliance: Compliance with the CO emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): This CO emissions limit is based on a 24-hour block average, excluding periods of startup, shutdown and malfunction. The 24-hour block average is calculated from midnight to midnight. The CO emissions limit along with compliance determination requirements is included in construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1,533 tons/year	4. Equivalent Allowable Emissions: 1,533 tons/year
5. Method of Compliance: Compliance with the annual CO emissions limit will be demonstrated by summing the hourly CO emission rate data from the CEMS.	
6. Allowable Emissions Comment (Description of Operating Method): The CO emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: NOX	2. Total Percent Efficiency of Control:
3. Potential Emissions: 249 lb/hr (30-day rolling average) 1,090 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference: Construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The NO_x Emissions limit of 0.09 lb/MMBtu is set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.
The heat input rate to EU026 is 2,764 MMBtu/hr.
Hourly NO_x emissions rate = (0.09 lb/MMBtu)(2,764 MMBtu/hr) = 249 lb/hr
Annual NO_x emissions rate = (0.09 lb/MMBtu)(2,764 MMBtu/hr)(8,760 hr/yr)(ton/2,000 lb) =
= 1,090 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.09 lb/MMBtu	4. Equivalent Allowable Emissions: 249 lb/hour 1,090 tons/year
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): This NO_x emissions limit is based on a 30-day rolling average, excluding periods of startup, shutdown and malfunction. The NO_x emissions limit along with compliance determination requirements are included in construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.6 lb/MMBtu	4. Equivalent Allowable Emissions: 1,658 lb/hour 7,264 tons/year
5. Method of Compliance: Compliance with the NO_x emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Description of Operating Method): This NO_x emissions limit is based on a 30-day rolling average, excluding periods of startup, shutdown and malfunction. This NO_x emissions limit is from NSPS Subpart Da. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

<u>Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions</u>

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 30 lb/hour (3-hr average) 133 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.011 lb/MMBtu (3-hour average) Reference: Construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The PM Emissions limit of 0.011 lb/MMBtu is set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.
The heat input rate to each boiler is 2,764 MMBtu/hr.
Hourly PM emissions rate = (0.011 lb/MMBtu)(2,764 MMBtu/hr) = 30 lb/hr
Annual PM emissions rate = (0.011 lb/MMBtu)(2,764 MMBtu/hr)(8,760 hr/yr)(ton/2,000 lb)
= 133 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.011 lb/MMBtu (3-hr average)	4. Equivalent Allowable Emissions: 30 lb/hour 133 tons/year
5. Method of Compliance: Annual compliance tests using EPA Methods 5, 5B, 8, 17, or 29 while firing petroleum coke. If petroleum coke has been fired for less than 100 hours during the previous quarter or less than 400 hours during the previous federal fiscal year, the testing may be performed while firing coal.	
6. Allowable Emissions Comment (Description of Operating Method): This PM emissions limit is based on a 3-hour average. The PM emissions limit along with compliance determination requirements is included in construction permit PSD-FL-265 *and* Title V Operation Permit 0310045-016-TV. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: 30 lb/hour (3-hr average) 133 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.011 lb/MMBtu (3-hour average) Reference: Construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The PM_{10} Emissions limit of 0.011 lb/MMBtu is set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.
The heat input rate to each boiler is 2,764 MMBtu/hr.
Hourly PM_{10} emissions rate = (0.011 lb/MMBtu)(2,764 MMBtu/hr) = 30 lb/hr
Annual PM_{10} emissions rate = (0.011 lb/MMBtu)(2,764 MMBtu/hr)(8,760 hr/yr)(ton/2,000 lb)
= 133 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.011 lb/MMBtu (3-hr average)	4. Equivalent Allowable Emissions: 30 lb/hour 133 tons/year

5. Method of Compliance:
Annual compliance tests using EPA Methods 201 or 201A while firing petroleum coke. If petroleum coke has been fired for less than 100 hours during the previous quarter or less than 400 hours during the previous federal fiscal year, the testing may be performed while firing coal.

6. Allowable Emissions Comment (Description of Operating Method):

This PM_{10} emissions limit is based on a 3-hour average. The PM_{10} emissions limit along with compliance determination requirements is included in construction permit PSD-FL-265 *and* Title V Operation Permit 0310045-016-TV. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 553 lb/hr (24-hr block average) 1,816 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.20 lb/MMBtu (24-hour block average) and 0.15 lb/MMBtu (30-day rolling average) Reference: Construction permit PSD-FL-265, Title V Operation Permit 03310045-016-AV	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The SO_2 Emissions limits of 0.20 lb/MMBtu (24-hour block average) and 0.15 lb/MMBtu (30-day rolling average) are set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV.
The heat input rate to EU026 is 2,764 MMBtu/hr.
Hourly SO_2 emissions rate (24-hour average) = (0.20 lb/MMBtu)(2,764 MMBtu/hr) = 553 lb/hr
Hourly SO_2 emissions rate (30-day average) = (0.15 lb/MMBtu)(2,764 MMBtu/hr) = 415 lb/hr
Annual SO_2 emissions rate = (0.15 lb/MMBtu)(2,764 MMBtu/hr)(8,760 hr/yr)(ton/2,000 lb) = 1,816 ton/yr

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.20 lb/MMBtu (24-hour block average)	4. Equivalent Allowable Emissions: 553 lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit is demonstrated using CEMs.	
7. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This SO_2 emissions limit is based on a 24-hour block average, excluding periods of startup, shutdown and malfunction. The 24-hour block average is calculated from midnight to midnight. The SO_2 emissions limits along with compliance determination requirements are included in construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV. Equivalent pound per hour emissions are given for informational purposes only and do not constitute limits.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.15 lb/MMBtu (30-day rolling average)	4. Equivalent Allowable Emissions: 415 lb/hour 1,816 tons/year
5. Method of Compliance (limit to 60 characters): Compliance with the SO_2 emission limit will be demonstrated using CEMs.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This SO_2 limit is based on a 30-day rolling average, excluding periods of startup, shutdown and malfunction. The SO_2 emissions limits along with compliance determination requirements are included in construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-TV. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.6 lb/MMBtu (30-day rolling average)	4. Equivalent Allowable Emissions: 1,658 lb/hour 7,264 tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The This SO_2 limit is based on a 30-day rolling average, excluding periods of startup, shutdown and malfunction. This SO_2 emissions limit is from NSPS Subpart Da. Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 14 lb/hour (3-hr average) 61.5 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 14 lb/hour 93-hour average) and 61.5 tons per year Reference: Construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-AV.	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: The VOC emissions limit of 14 lb/hour is set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-AV. The VOC emissions limit of 61.5 tons/year is set by construction permit PSD-FL-265 and Title V Operation Permit 0310045-016-AV.	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 14 lb/hr (3-hour average) 61.5 tons/year	4. Equivalent Allowable Emissions: 14 lb/hour 61.5 tons/year
5. Method of Compliance (limit to 60 characters): Compliance testing once every five years while firing petroleum coke or coal. Compliance with CO limits based on CEMS data can be used as a surrogate. Compliance with short-term limit is adequate to demonstrate compliance with annual limit.	
8. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: H114	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.03 lb/hour (6-hour average) 0.13 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.03 lb/hour Reference: Construction permit PSD-FL-265, Title V Operation Permit 03310045-016-AV	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The mercury emissions limit of 0.03 lb/hour is set by construction permit PSD-FL-265.
Annual mercury emissions rate = (0.03 lb/hr)(8,760 hr/yr)(ton/2,000 lb) = 0.13 tons/year

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject *to a numerical* emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.03 lb/hr, 6-hour average	4. Equivalent Allowable Emissions: 0.03 lb/hour 0.13ons/year
5. Method of Compliance (limit to 60 characters): Since initial compliance tests have been completed no more testing is required.	
9. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Equivalent pound per hour emissions are given for informational purposes only and do not constitute limits.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: PB	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.07 lb/hour 93-hour average) 0.31 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.07 lb/hour (3-hour average) Reference: Construction permit PSD-FL-265 and Title V Operation Permit 03310045-016-AV	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The lead emissions limit of 0.07 lb/hour is set by construction permit PSD-FL-265.
Annual lead emissions rate = (0.07 lb/hr)(8,760 hr/yr)(ton/2,000 lb) = 0.31 tons/year

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.07 lb/hour (3-hour average)	4. Equivalent Allowable Emissions: 0.07 lb/hour 0.31 tons/year
5. Method of Compliance (limit to 60 characters): Since initial compliance tests have been completed no more testing is required.	
10. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Equivalent pound per hour emissions are given for informational purposes only and do not constitute limits.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: SAM	2. Total Percent Efficiency of Control:
3. Potential Emissions: 1.1 lb/hour (3-hour average) 4.82 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 1.1 lb/hour (3-hour average) Reference: Operation permit 0310045-017-AC	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: The sulfuric acid mist emissions limit of 1.1 lb/hour is set by construction permit PSD-FL-265. Annual sulfuric acid mist emissions rate = (1.1 lb/hr)(8,760 hr/yr)(ton/2,000 lb) = 4.82 tons/year	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.1 lb/hour (3-hour average)	4. Equivalent Allowable Emissions: 1.1 lb/hour 4.82 tons/year
5. Method of Compliance (limit to 60 characters): Since initial compliance tests have been completed no more testing is required. Continuous compliance is demonstrated by complying with the SO_2 limits based on CEMS data as a surrogate.	
11. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Equivalent pound per hour emissions are given for informational purposes only and do not constitute limits.	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: H107	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.43 lb/hr (3-hour average) 1.88 tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.43 lb/hour (3-hour average) Reference: Construction permit PSD-FL-265, Title V Operation Permit 03310045-016-AV	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

The hydrogen fluoride emissions limit of 0.43 lb/hr is set by construction permit PSD-FL-265.
Annual hydrogen fluoride emissions rate = (0.43 lb/hr)(8,760 hr/yr)(ton/2,000 lb)
= 1.88 tons/year

11. Potential, Fugitive, and Actual Emissions Comment:
Equivalent pound per hour and ton per year emissions are given for informational purposes only and do not constitute limits.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.43 lb/hour (3-hour average)	4. Equivalent Allowable Emissions: 0.43 lb/hour 1.88 tons/year
5. Method of Compliance (limit to 60 characters): Since initial compliance tests have been completed no more testing is required.	
12. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Equivalent pound per hour emissions are given for informational purposes only and do not constitute limits.	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed:	
4. Method of Compliance: Compliance with the visible emissions limit is demonstrated using a continuous opacity monitoring system (COMS).	
5. Visible Emissions Comment (limit to 200 characters): The visible emissions limit is based on a 6-minute block average and applies at all times except periods of startup, shutdown and malfunction. The visible emissions limit along with compliance determination requirements are included in operation permit 0310045-016-AV.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: COMS	
5. Visible Emissions Comment: The visible emissions limit is based on a 6-minute block average and is based on excluding periods of startup, shutdown and malfunction. This visible emissions limit is from NSPS Subpart Da.	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor __1__ of __5__

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: KVB/MIP Model Number: LM3086EPA3	NGS CFB Boiler No. 1: Serial Number: 730216 NGS CFB Boiler No. 2: Serial Number: 730217
5. Installation Date:	6. Performance Specification Test Date: June 10, 2002
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor __2__ of __5__

1. Parameter Code: EM	2. Pollutant(s): CO
3. CMS Requirement:	[ ] Rule [X] Other
4. Monitor Information: Manufacturer: TECO Model Number: 48C	NGS CFB Boiler No. 1: Serial Number: 70175-365 NGS CFB Boiler No. 2: Serial Number: 70174-365
5. Installation Date:	6. Performance Specification Test Date: June 10, 2002
7. Continuous Monitor Comment (limit to 200 characters): Use of CEMs required by construction permit PSD-FL-265.	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___3__ of ___5__

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TECO Model Number: 42C	NGS CFB Boiler No. 1: Serial Number: 42C-69020-362 NGS CFB Boiler No. 2: Serial Number: 42C-69028-362
5. Installation Date:	6. Performance Specification Test Date: June 10, 2002

Continuous Monitoring System: Continuous Monitor ___4__ of ___5__

1. Parameter Code: EM	2. Pollutant(s): SO2
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TECO Model Number: 43C	NGS CFB Boiler No. 1: Serial Number: 43C-69843-364 NGS CFB Boiler No. 2: Serial Number: 43C-69844-364
5. Installation Date:	6. Performance Specification Test Date: June 10, 2002
7. Continuous Monitor Comment (limit to 200 characters):	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___5__ of ___5__

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: CAI Model Number: ZRH	NGS CFB Boiler No. 1: Serial Number: AOXO606T NGS CFB Boiler No. 2: Serial Number: AOXO603T
5. Installation Date:	6. Performance Specification Test Date: June 10, 2002
7. Continuous Monitor Comment (limit to 200 characters):	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ____
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. I [ ] Previously Submitted, Date ____
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. O [ ] Previously Submitted, Date ____
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ____ [ ] Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ____ [ ] Not Applicable
6. Compliance Demonstration Reports/Records: [ ] Attached, Document ID: ____ Test Date(s)/Pollutant(s) Tested: ____ [x] Previously Submitted, Date: Attach. L Test Date(s)/Pollutant(s) Tested: ____ [ ] To be Submitted, Date (if known): ____ Test Date(s)/Pollutant(s) Tested: ____ [ ] Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: [ ] Attached, Document ID: ____ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ________ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ________ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ________ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: Attach. M ☐ Not Applicable
3. Alternative Methods of Operation: ☒ Attached, Document ID: Attach. N ☐ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ________ ☒ Not Applicable

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [7] of [8]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

[x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
NGS Materials Processing Operations

-028	NGS: Materials Handling and Storage Operations
-029	NGS: Crusher House Building Baghouse Exhaust
-031	NGS: Fuel Silos Dust Collectors
-033	NGS: Limestone Dryers/Mills Building
-034	NGS: Limestone Prep Building Dust Collectors
-035	NGS: Limestone Silos Bin Vent Filters
-036	NGS: Fly Ash Transport Blower Discharge
-037	NGS: Fly Ash Silos Bin Vents
-038	NGS: Bed Ash Silos Bin Vents
-042	NGS: AQCS Pebble Lime Silo
-051	NGS: Fly Ash Slurry Mix System Vents
-052	NGS: Bed Ash Slurry Mix System Vents
-053	NGS: Bed Ash Surge Hopper Bin Vents

3. Emissions Unit Identification Number: See Item No. 2 above

A. GENERAL EMISSIONS UNIT INFORMATION (Continued)

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? ☐ Yes ☐ No
9. Package Unit: Manufacturer:		Model Number:		
10. Generator Nameplate Rating:				

11. Emissions Unit Comment:

The material handling and storage operations process ash, limestone, coal, coal coated with latex, and petroleum coke to support the operation of CFB Boilers Nos. 1 and 2. Each materials handling and storage operation at NGS 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. Except for the Belt Conveyor 1, all conveyors are enclosed.

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description: Each materials handling and storage operation at NGS 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. Except for the Belt Conveyor 1, all conveyors are enclosed.
2. Control Device or Method Code(s): 054, 061, 062 as needed

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: (For NGS Boilers Nos. 1 and 2 combined) Coal/coal coated with latex binder/Pet Coke: 2.42 million tons per year Limestone: 1.45 million tons per year		
2. Maximum Production Rate:		
3. Maximum Heat Input Rate: Three Limestone Dryers combined: 57.9 million Btu/hr		
4. Maximum Incineration Rate: pounds/hr tons/day		
5. Requested Maximum Operating Schedule:	24 hours/day 52 weeks/year	7 days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment: The material usage rates are a function of the material properties and operating conditions of the NGS Boilers Nos. 1 and 2. The heat input rate listed above are included only for purposes of determining capacity during compliance stack tests. Continuous compliance with these rates is not required; capacity during compliance testing shall be determined based on fuel flow data and the as-fired heat content of the fuel.		

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: See Attach. A		2. Emission Point Type Code: 3, 4
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: See Attachment Q.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): NGS: Materials Processing Operations

The material handling and storage operations process ash, limestone, coal, coal coated with latex, and petroleum coke to support the operation of CFB Boilers Nos. 1 and 2. Each materials handling and storage operation at NGS 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. Except for the Belt Conveyor 1, all conveyors are enclosed.

The emissions units either process or transfer materials used in the operations of NGS's CFBs Boilers Nos. 1 and 2. The transfer buildings (TBs) are numbered sequentially as they occur in the process with TB 1 being the TB nearest the vessel unloading operations and TB 5 being the TB immediately upstream of the fuel storage buildings and the limestone storage pile. TBs 1 thru 5 are associated with the transfer of raw coal, pet coke and limestone, while TB 6 is associated with the transfer of raw coal and pet coke and the Plant TB is associated with the transfer of crushed coal and pet coke. Limestone loadout via telescopic chute is included with TB 5.

2. Source Classification Code (SCC): 30501099	3. SCC Units: Tons handled

4. Maximum Hourly Rate:	5. Maximum Annual Rate: See Item No. 10	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:

10. Segment Comment:

Maximum Annual Rates:

Coal/coal coated with latex binder/Pet Coke: 2.42 million tons per year

Limestone: 1.45 million tons per year

Three limestone dryers shall not exceed a total heat input of 57.9 MMBtu/hr, for all three units combined.

These rates are included <u>only</u> for purposes of determining capacity during compliance stack tests. Continuous compliance with these rates is not required; capacity during compliance testing shall be determined based on fuel flow data and the as-fired heat content of the fuel.

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
Material Handling Processes (EU 034, 035)			
PM			**EL**
Limestone Dryers (EU033)			
PM	**018**		**EL**
SO2			**WP**
CO			**NS**
NOx			**NS**
PM10	**018**		**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM (For EU-033 through 035)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.01 gr/dscf Reference: Title V Operation Permit 0310045-016-AV	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.01 grains/dscf	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Initial compliance only, which has been demonstrated. Since initial compliance tests have been completed no more testing is required.	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: SO2 (For EU-033)	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.05% by weight sulfur in distillate oil	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance: Initial compliance only, which has been demonstrated. Vendor or other fuel sampling and analysis data (using applicable ASTM methods)	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions __ of __

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: See Attachment Q	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: USEPA Test Methods. See Attachment Q	

5. Visible Emissions Comment:

a. The following materials handling sources shall be equipped with fabric filter controls and visible emissions shall not exceed 5 percent opacity:
- (1) Crusher house building baghouse exhaust (EU-029)
- (2) Fuel silos dust collectors (EU-031)
- (3) Limestone dryers - each (3) (EU-033)
- (4) Limestone prep building dust collectors (EU-034)
- (5) Limestone silos bin vent filters (EU-035)
- (6) Fly ash transport blower discharge (EU-036)
- (7) Fly ash silos bin vents (EU-037)
- (8) Bed ash silos bin vents (EU-038)
- (9) AQCS pebble lime silo (EU-042)
- (10) Fly ash slurry mix system vents (EU-051)
- (11) Bed ash slurry mix system vents (EU-052)
- (12) Bed ash surge hopper bin vents (EU-053)

b. The following materials handling sources shall use wet suppression, water spray, coverings, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 5 percent opacity:
- (1) Transfer towers (EU-028c, EU-028g, EU-028i, EU-028o, EU-028q and EU-028v)
- (2) Coal, coal coated with latex and petroleum coke storage building (EU-028h)
- (3) Transfer Building 5 and limestone loadout chute (EU-028d)
- (4) Belt Conveyor No. 1 (EU-028)

c. The following materials handling sources shall use wet suppression, water spray, partial enclosures, and/or conditioned materials to control particulate emissions as needed, and visible emissions shall not exceed 10 percent opacity:
- (1) NGS dock vessel unloading operations - vessel hold (EU-028a)
- (2) NGS dock vessel unloading operations - vessel unloader and spillage conveyor (EU-028a)
- (3) Limestone storage pile (EU-028p)
- (4) Limestone reclaim hopper (EU-028p)

d. The limestone dryer/mill building shall have no visible emissions (other than from a baghouse vent).

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. B [ ] Previously Submitted, Date ______
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [ ] Attached, Document ID: ______ [ ] Previously Submitted, Date ______
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. O [ ] Previously Submitted, Date ______
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. J [ ] Previously Submitted, Date ______ [ ] Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) [x] Attached, Document ID: Attach. K [ ] Previously Submitted, Date ______ [ ] Not Applicable
6.	Compliance Demonstration Reports/Records: [ ] Attached, Document ID: ______ Test Date(s)/Pollutant(s) Tested: ______ [x] Previously Submitted, Date: Attach. L Test Date(s)/Pollutant(s) Tested: ______ [ ] To be Submitted, Date (if known): ______ Test Date(s)/Pollutant(s) Tested: ______ [ ] Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: [ ] Attached, Document ID: ______ [x] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ________ ☒ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ________ ☒ Not Applicable	
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ________ ☒ Not Applicable	

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E	
2. Compliance Assurance Monitoring: ☐ Attached, Document ID:________ ☐ Not Applicable	
3. Alternative Methods of Operation: ☐ Attached, Document ID:________ ☐ Not Applicable	
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ________ ☒ Not Applicable	

Additional Requirements Comment

EMISSIONS UNIT INFORMATION
Section [8] of [8]

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

[x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:

Separation Technologies, LLC (ST)

ST: Materials Processing Operations

-044	Separator A Filter - Receiver Vent
-045	Separator B Filter - Receiver Vent
-046	Separator Dust Collector Vent
-047	Clean-up Vacuum Vent
-048	Fly Ash Surge Bin Vent
-049	Mineral Additive Storage Bin Vent
-050	Gas-Fired Dryer Stack

3. Emissions Unit Identification Number: See Item No. 2 above

A. GENERAL EMISSIONS UNIT INFORMATION (Continued)

4. Emissions Unit Status Code: A	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? ☐ Yes ☐ No
9. Package Unit: Manufacturer:			Model Number:	
10. Generator Nameplate Rating: MW				

11. Emissions Unit Comment: (Reference: Title V Operation Permit 0310045-016-AV)
ST (Separation Technologies) has constructed, owns and operates a new fly ash processing system on a portion of leased property at the JEA's SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the SJRPP fly ash leaving a saleable product. As a result, environmental benefits will include a 255,000 ton reduction in the fly ash currently sent to landfill by the JEA's SJRPP each year and an overall reduction in the ammonia releases with the recovery and subsequent recycle of ammonia removed from the fly ash.

The new fly ash processing system will include the addition of two fly ash receiving bins, a carbon separation unit, a clean-up vacuum, a fly ash surge bin, a mineral additive storage bin, and a gas-fired dryer. The particulate emissions generated from handling of the fly ash are collected from each source using pulse jet fabric filters. ST's triboelectric carbon separation technology partitions fly ash into mineral-rich and carbon-rich fractions. The mineral-rich fly ash can then be sold as a usable product. The carbon-rich fly ash is returned to the JEA's SJRPP fly ash storage silos for eventual disposal at the onsite landfill.

The two-step beneficiation process consists of (1) removal of the residual carbon from the fly ash using ST's patented electrostatic separation technology, and (2) removal of residual ammonia from the fly ash using ST's new ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA's SJRPP also contains trace amounts of ammonia that makes it unsuitable as a cement replacement. To solve this problem, ST installed an ammonia removal process. The recovered ammonia is subsequently returned to the JEA's SJRPP for recycle.

{Permitting Note(s): The emissions units are permitted under Rule 212.400, F.A.C., Prevention of Significant Deterioration [PSD; 0310001-002-AC/PSD-FL-010(D)]; Rule 62-297.711, F.A.C., Reasonable Available Control Technology - Materials Handling, Sizing, Screening, Crushing and Grinding Operations; and, Rule 62-296.712, F.A.C., Reasonable Available Control Technology – Miscellaneous Manufacturing Process Operations.}

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

-044	Separator A Filter - Receiver Vent
-045	Separator B Filter - Receiver Vent
-046	Separator Dust Collector Vent
-047	Clean-up Vacuum Vent
-048	Fly Ash Surge Bin Vent
-049	Mineral Additive Storage Bin Vent
-050	Gas-Fired Dryer Stack

The particulate emissions generated from handling of the fly ash are collected from each source listed above using pulse jet fabric filters.

-050 Gas-Fired Dryer Stack

The gas-fired dryer is equipped with a low NOx burner.

2. Control Device or Method Code(s): 018, and 025 for EU050.

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: 300,000 tons per year	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: Gas-fired dryer – 12 MMBtu/hour (EU050)	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: 24 hours/day 52 weeks/year	7 days/week 8,760 hours/year
6. Operating Capacity/Schedule Comment: The The equipment design of the fly ash processing operation is based on a maximum fly ash delivery rate from JEA's SJRPP of 300,000 tons per year.	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: See Attach. A

2. Emission Point Type Code: 1

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:

-044	Separator A Filter - Receiver Vent - Horizontal Discharge Vent
-045	Separator B Filter - Receiver Vent - Horizontal Discharge Vent
-046	Separator Dust Collector Vent – Horizontal Discharge Vent
-047	Clean-up Vacuum Vent – Horizontal Discharge Vent
-048	Fly Ash Surge Bin Vent – Horizontal Discharge Vent
-049	Mineral Additive Storage Bin Vent - – Horizontal Discharge Vent
-050	Gas-Fired Dryer Stack – Vertical Discharge Stack

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code:

6. Stack Height: feet

7. Exit Diameter: feet

8. Exit Temperature: °F

9. Actual Volumetric Flow Rate: acfm

10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm

12. Nonstack Emission Point Height: feet

13. Emission Point UTM Coordinates...
Zone: East (km):
North (km):

14. Emission Point Latitude/Longitude...
Latitude (DD/MM/SS)
Longitude (DD/MM/SS)

15. Emission Point Comment:

Emission Units	EU044	EU045	EU046	EU047	EU048	EU049	EU050
Discharge Type Code	H	H	H	H	H	H	V
Stack Height (ft)	47.83	47.83	31.08	5	75.04	74.67	88.5
Exit Diameter (ft)	14	14	12 x 10	4	8.16	32	32
Exit Temperature (F)	100	100	100	100	100	100	220
Actual Volumetric Flow Rate (acfm)	1,796	1,480	4,226	423	4,121	423	28,240
Maximum Dry Standard Flow Rate (dscfm)	1,700	1,400	4,000	400	3,900	400	22,000

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): NGS: Materials Processing Operations

ST (Separation Technologies) owns and operates a new fly ash processing system on a portion of leased property at the JEA's SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the SJRPP fly ash leaving a saleable product. As a result, environmental benefits will include a 255,000 ton reduction in the fly ash currently sent to landfill by the JEA's SJRPP each year and an overall reduction in the ammonia releases with the recovery and subsequent recycle of ammonia removed from the fly ash.

The new fly ash processing system will include the addition of two fly ash receiving bins, a carbon separation unit, a clean-up vacuum, a fly ash surge bin, a mineral additive storage bin, and a gas-fired dryer. The particulate emissions generated from handling of the fly ash are collected from each source using pulse jet fabric filters. ST's triboelectric carbon separation technology partitions fly ash into mineral-rich and carbon-rich fractions. The mineral-rich fly ash can then be sold as a usable product. The carbon-rich fly ash is returned to the JEA's SJRPP fly ash storage silos for eventual disposal at the onsite landfill.

The two-step beneficiation process consists of (1) removal of the residual carbon from the fly ash using ST's patented electrostatic separation technology, and (2) removal of residual ammonia from the fly ash using ST's new ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA's SJRPP also contains trace amounts of ammonia that makes it unsuitable as a cement replacement. To solve this problem, ST installed an ammonia removal process. The recovered ammonia is subsequently returned to the JEA's SJRPP for recycle.

2. Source Classification Code (SCC): 30502503	3. SCC Units: Tons handled

4. Maximum Hourly Rate:	5. Maximum Annual Rate: 300,000 tons per year	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:

10. Segment Comment:

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM			**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99+
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: 0.015 gr/dscf (EU-044 through EU-049) 1.6 lb/hr (EU-050) Reference: Title V Operation Permit 0310045-016-AV	7. Emissions Method Code: 0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
11. Potential, Fugitive, and Actual Emissions Comment:	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 0.015 grains/dscf (for EU 044 – 049)	4. Equivalent Allowable Emissions: lb/hour tons/year

5. Method of Compliance: Initial compliance with the applicable particulate emission limits of EU-044 through EU-049 shall be demonstrated by performing a visible emissions test using EPA Method 9, or other methods determined to be suitable by the Department (ref. Rules 62-296.711(3) and 62-296.712(3), F.A.C.). Visible emissions less than or equal to 5 percent opacity shall be considered in compliance. Annual compliance certification shall be achieved on emission units 44 through 49 using EPA Method 9 tests to measure opacity.

6. Allowable Emissions Comment (Description of Operating Method):

The allowable emission limit is for Emission Units 044 through 049.

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: 1.60 lb/hr (for EU 050)	4. Equivalent Allowable Emissions: lb/hour tons/year

5. Method of Compliance:

Annual compliance certification shall be achieved using EPA Method 9. Visible emissions of less than or equal to 5 percent opacity shall be considered in compliance. The minimum sample volume shall be 30 dry standard cubic feet.

6. Allowable Emissions Comment (Description of Operating Method):
The allowable emission limit is for the gas fired dryer (EU050).

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [x] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: USEPA Test Method 9	
6. Visible Emissions Comment: After initial compliance has been demonstrated, annual compliance will be demonstrated EPA using Method 9.	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: ______ ☒ Previously Submitted, Date May 2004
2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: ______ ☐ Previously Submitted, Date ______
3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: ______ ☒ Previously Submitted, Date May 2004
4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: ______ ☒ Previously Submitted, Date May 2004 ☐ Not Applicable (construction application)
5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: ______ ☒ Previously Submitted, Date May 2004 ☐ Not Applicable
6. Compliance Demonstration Reports/Records: ☐ Attached, Document ID: ______ Test Date(s)/Pollutant(s) Tested: ______ ☒ Previously Submitted, Date: May 7, 2007 Test Date(s)/Pollutant(s) Tested: Visible Emissions ☐ To be Submitted, Date (if known): ______ Test Date(s)/Pollutant(s) Tested: ______ ☐ Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7. Other Information Required by Rule or Statute: ☐ Attached, Document ID: ______ ☒ Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: ______ ☒ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: ______ ☒ Not Applicable	
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: ______ ☒ Not Applicable	

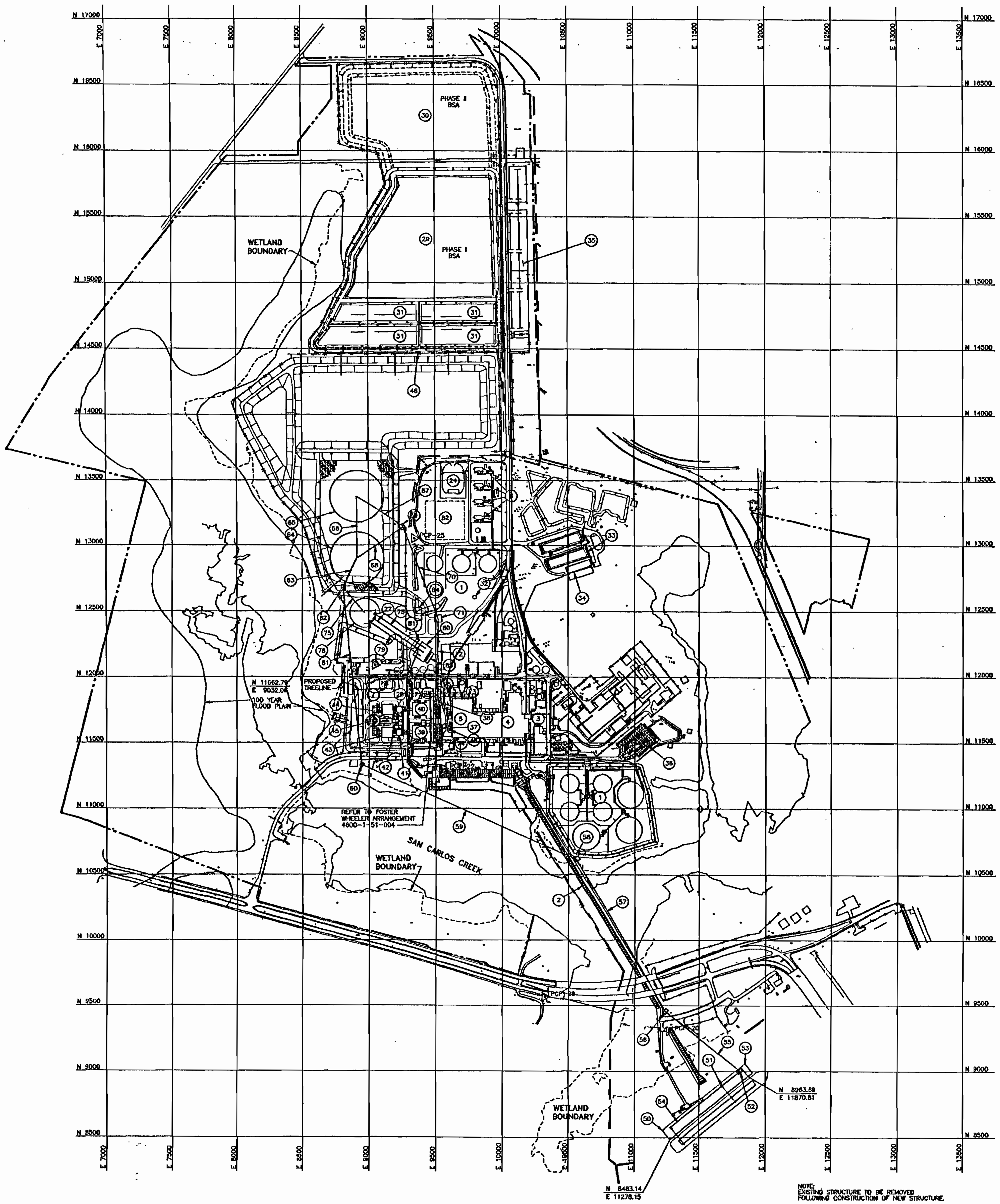
Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Attach. E	
2. Compliance Assurance Monitoring: ☒ Attached, Document ID: Attach. M ☐ Not Applicable	
3. Alternative Methods of Operation: ☐ Attached, Document ID: ______ ☐ Not Applicable	
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: ______ ☒ Not Applicable	

Additional Requirements Comment

Attachment A

Facility Plot Plan and Layout Drawings



NOTE:
EXISTING STRUCTURE TO BE REMOVED FOLLOWING CONSTRUCTION OF NEW STRUCTURE.

GENERAL NOTES

1. PLANT GRID COORDINATE N 13000, E 7500 = STATE PLANE COORDINATE N 2212771.15, E 479331.20.

LEGEND

EXISTING FENCE
EXISTING RAILROAD
EXISTING UTILITY POLE
PROPERTY LINE
MONUMENT

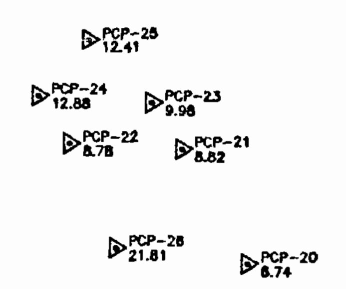
FACILITY LEGEND

NORTH	EAST	REMARKS		FACILITY LEGEND
		NOT APPLICABLE	1.	FUEL OIL TANK FARM
		NOT APPLICABLE	2.	EXISTING INTAKE STRUCTURE
		NOT APPLICABLE	3.	EXISTING UNIT 1
		NOT APPLICABLE	4.	EXISTING UNIT 2
		NOT APPLICABLE	5.	EXISTING UNIT 3
		NOT APPLICABLE	6.	EXISTING GAS TURBINE
		NOT APPLICABLE	7.	EXISTING GAS METERING STATION
13362.00	9538.00	SOUTHWEST CORNER	24.	138 : 27 KV SUBSTATION
12067.36	9462.11	CENTERLINE	25.	BED ASH SILO 1
12050.79	9404.51	CENTERLINE	26.	BED ASH SILO 2
12044.29	9344.93	CENTERLINE	27.	FLY ASH SILO 2
12044.19	9210.00	CENTERLINE	28.	FLY ASH SILO 1
		LATER	29.	BY-PRODUCT STORAGE AREA – CELL I
		LATER	30.	BY-PRODUCT STORAGE AREA – CELL II (FUTURE)
		LATER	31.	BY-PRODUCT CONTACT STORMWATER AND LEACHATE STORAGE POND
12605.93	9794.12	CENTERLINE	32.	REUSE WATER TANK
–	–	NOT APPLICABLE	33.	SETTLING PONDS – CWTS
–	–	NOT APPLICABLE	34.	CHEMICAL WASTE TREATMENT SYSTEM
–	–	NOT APPLICABLE	35.	CONSTRUCTION PARKING LOT
–	–	NOT APPLICABLE	36.	PERMANENT PARKING LOT
		NOT APPLICABLE	37.	UNIT 1 INPLANT FUEL SILOS
		NOT APPLICABLE	38.	UNIT 2 INPLANT FUEL SILOS
		NOT APPLICABLE	39.	UNIT 1 BOILER
		NOT APPLICABLE	40.	UNIT 2 BOILER
		NOT APPLICABLE	41.	UNIT 1 SCRUBBER
		NOT APPLICABLE	42.	UNIT 2 SCRUBBER
		NOT APPLICABLE	43.	UNIT 1 BAGHOUSE
		NOT APPLICABLE	44.	UNIT 2 BAGHOUSE
		NOT APPLICABLE	45.	CHIMNEY
SEE DWG S5341	SEE DWG S5341	NOT APPLICABLE	46.	BY-PRODUCT STORAGE AREA ELECTRICAL BUILDING
–	–	NOT APPLICABLE	47.	FIRE WATER BOOSTER PUMP BUILDING
8483.14	11278.15	SOUTHEAST CORNER	50.	NORTHSIDE DOCK
–	–	NOT APPLICABLE	51.	TRAVELING SHIP UNLOADER
9002.41	11811.20	WP 2B	52.	TRANSFER BUILDING 1
8963.69	11870.81	SOUTHEAST CORNER	53.	FUEL OIL UNLOADING STATION
–	–	NOT APPLICABLE	54.	CONVEYOR BC-1
–	–	NOT APPLICABLE	55.	CONVEYOR BC-2
9455.00	11240.95	WP 3B	56.	TRANSFER BUILDING 2
–	–	NOT APPLICABLE	57.	CONVEYOR BC-3
10615.73	10558.69	WP 4B	58.	TRANSFER BUILDING 3
–	–	NOT APPLICABLE	59.	CONVEYOR BC-4
11327.69	8946.00	WP 5B	60.	TRANSFER BUILDING 4
–	–	NOT APPLICABLE	61.	CONVEYOR BC-5
12676.08	8811.37	WP 6B	62.	TRANSFER BUILDING 5
–	–	NOT APPLICABLE	63.	CONVEYOR BC-6
12900.00	8913.00	WP 9B	64.	STORAGE DOME "A"
13375.00	8913.00	WP 8B	65.	STORAGE DOME "B"
–	–	NOT APPLICABLE	66.	CONVEYOR BC-7
–	–	NOT APPLICABLE	67.	CONVEYOR BC-8
–	–	NOT APPLICABLE	68.	CONVEYOR BC-9
13146.00	9253.00	WP 10/11B	69.	TRANSFER BUILDING 6
–	–	NOT APPLICABLE	70.	CONVEYOR BC-10 & BC-11
12442.51	9518.06	WP 12/13B	71.	CRUSHER BUILDING
–	–	NOT APPLICABLE	72.	CONVEYOR BC-12 & BC-13
11685.04	9518.06	WP 14/15B	73.	PLANT TRANSFER BUILDING
–	–	NOT APPLICABLE	74.	CONVEYOR BC-14 & BC-15
–	–	NOT APPLICABLE	75.	CONVEYOR L-1
12483.89	8871.26	WP L1A	76.	LIMESTONE STPORAGE PILE
–	–	NOT APPLICABLE	77.	CONVEYOR L-2
–	–	NOT APPLICABLE	78.	CONVEYOR L-4
–	–	NOT APPLICABLE	79.	CONVEYOR L-3
12182.73	9407.41	WP L2A	80.	LIMESTONE PREPARATION BUILDING
–	–		81.	MATERIAL HANDLING CONTROL & ELECTRICAL EQUIPMENT BUILDING
–	–		82.	POSSIBLE LOCATION FOR FUTURE STORAGE BUILDING
SEE DWG S1195	SEE DWG S1195		83.	ASH BLOWER/ELECTRICAL EQUIPMENT BUILDING
12424.01	9395.31	SOUTHEAST CORNER	84.	FUEL HANDLING MAINTENANCE BUILDING

MONUMENT LOCATION TABLE

POINT NUMBER	NORTHING	EASTING	ELEVATION
PCP-20	9306.27	11273.11	6.74
PCP-21	11216.51	10178.37	8.82
PCP-22	11294.69	9565.37	8.78
PCP-23	11980.85	9681.82	9.98
PCP-24	12087.81	9044.95	12.88
PCP-25	13051.32	9341.66	12.41
PCP-26	9564.69	10322.62	21.81

MONUMENT LOCATION MAP



CONTROL NUMBER: 201839

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
10	08-15-2002	CONFORMS WITH CONSTRUCTION RECORDS	DAT	RLW	JDL	JDL	LWS
9	11-01-2001	GENERAL REVISIONS	WAH	RLW	MJS	RLW	LWS
8	02-09-2001	GENERAL REVISIONS	WAH	RLW	DEM	RLW	LWS
7	08-18-2000	GENERAL REVISIONS	SLS	EWL	MJS	RLW	LWS
6	07-28-2000	GENERAL REVISIONS	GLS	EWL	MJS	RLW	LWS
5	05-26-2000	GENERAL REVISIONS	WAH	EWL	MJS	RLW	LWS
4	03-10-2000	GENERAL REVISIONS	WAH	EWL	MJS	RLW	LWS
3	09-29-99	GENERAL REVISIONS	WAH	EWL	MJS	RLW	LWS
2	07-15-99	APPROVED FOR CONSTRUCTION	WAH	EWL	MJS	RLW	LWS
1	07-01-99	GENERAL REVISIONS	WAH	EWL		RLW	LWS
0	05-28-99	INITIAL ISSUE	WG	EWL		RLW	LWS

PLANT NORTH — TRUE NORTH 14.3472°

SCALE: 1"=300'
300' 150' 0 300' 600'

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA.
SIGNED RICHARD L. WARD
DATE 07/15/99 REG NO. 33584

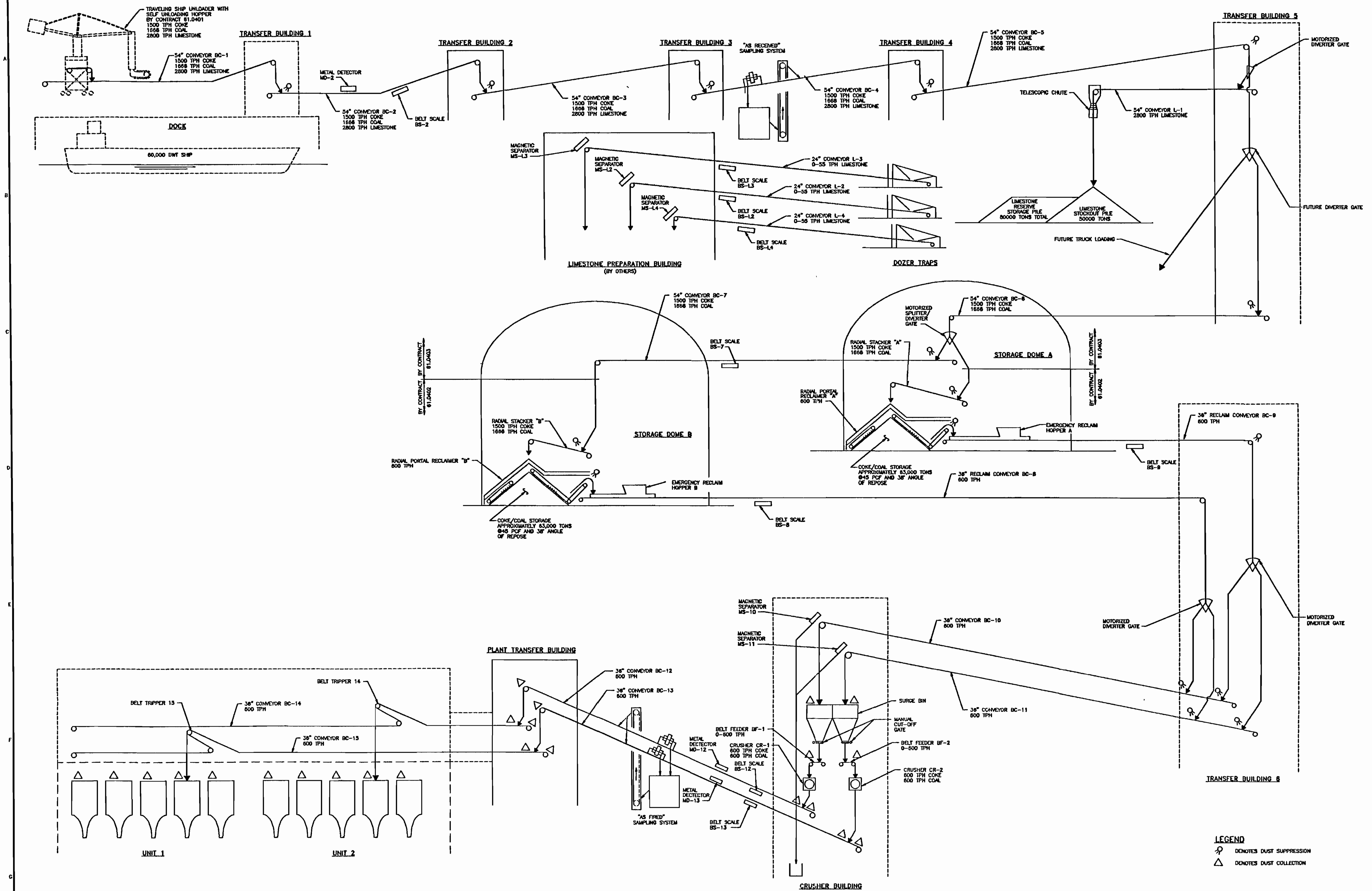
BLACK & VEATCH — JEA Building Community
ENGINEER EWL DRAWN WG
CHECKED MJS DATE 07-15-99

JEA EQUIPMENT NUMBER: N00-MA
JEA DRAWING NUMBER

JEA
NORTHSIDE UNITS 1 & 2 REPOWERING PROJECT
SITE ARRANGEMENT

PROJECT 62713-CMA DRAWING NUMBER -S1000 REV 10
CODE
AREA

TEL18617 A1ASL017 08/13/02 E1 1=300 10:17:19 ACAD 15.05



CONTROL NUMBER: 201629

NO	DATE	REVISIONS AND RECORD OF ISSUE	DRN	DES	CHK	PDE	APP
4	08-15-2002	CONFORMED TO CONSTRUCTION RECORDS	DWL	JWD	LJDL		LWS
3	11-12-1999	GENERAL REVISIONS	MAH	JWO	DEM	RLW	LWS
2	09-29-1999	APPROVED FOR CONSTRUCTION	MAH	JWO	DEM	RLW	LWS
1	07-01-1999	GENERAL REVISIONS	MAH	JWO		RLW	LWS
0	05-28-1999	INITIAL ISSUE	JWS	JWO		RLW	LWS

I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA.

SIGNED RICHARD L. WARD
DATE 9/29/99 REG NO. 33384

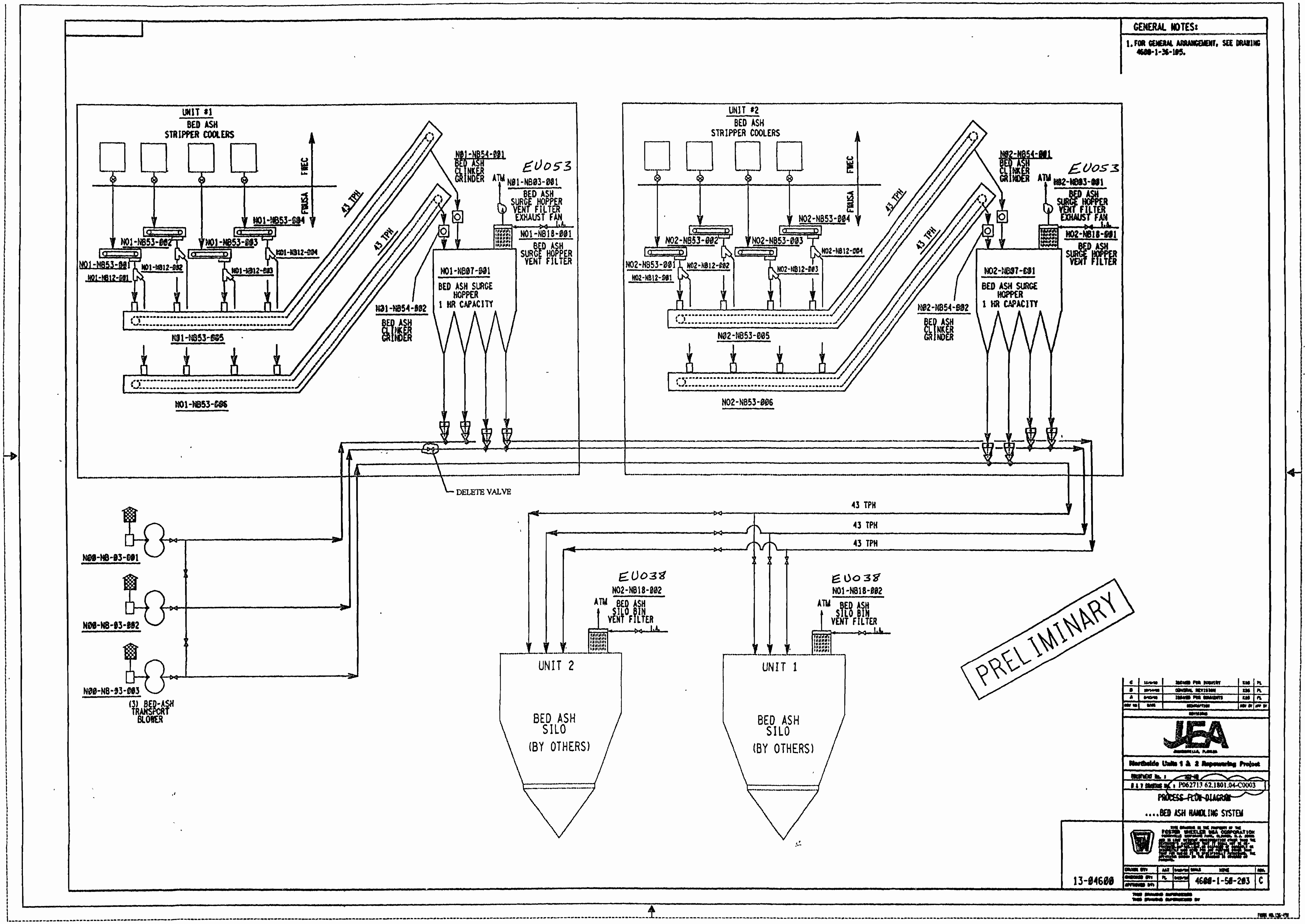
BLACK & VEATCH — JEA

ENGINEER JWD DRAWN JWS
CHECKED DCM DATE 05-28-99

JEA EQUIPMENT NUMBER: N00-FH

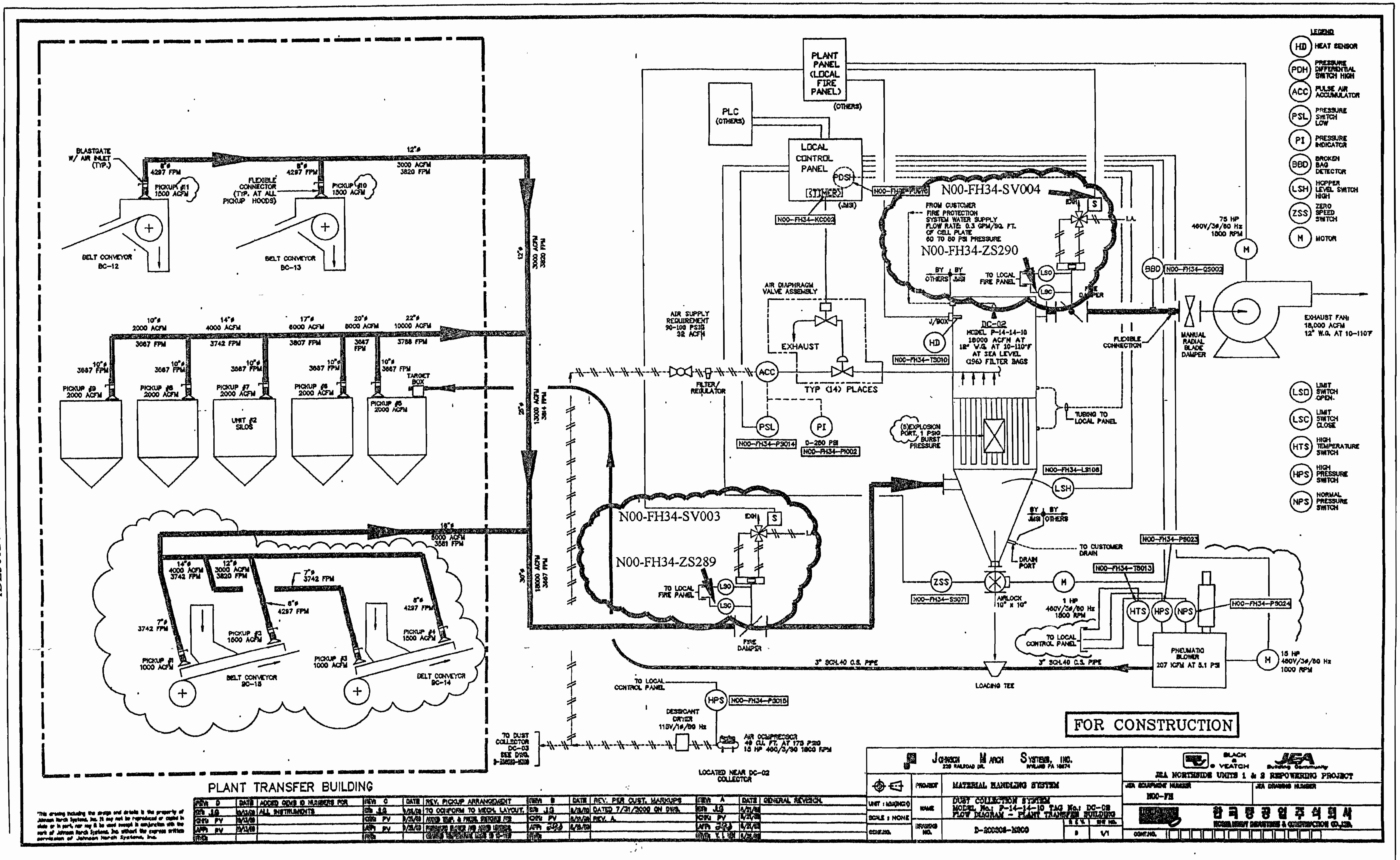
JEA
NORTHSIDE UNITS 1 & 2 REPOWERING PROJECT
FUEL HANDLING-FLOW DIAGRAM

PROJECT 62713-CFH DRAWING NUMBER -S2010 REV 4


GENERAL NOTES:
1. FOR GENERAL ARRANGEMENT, SEE DRAWING 4600-1-36-105.
UNIT #1
BED ASH STRIPPER COOLERS
FWEC
FWUSA
43 TPH
43 TPH
N01-NB54-001
BED ASH CLINKER GRINDER
EU053
ATM
N01-NB03-001
BED ASH SURGE HOPPER VENT FILTER EXHAUST FAN
N01-NB18-001
BED ASH SURGE HOPPER VENT FILTER
N01-NB53-004
N01-NB53-002
N01-NB53-003
N01-NB12-004
N01-NB53-001
N01-NB12-002
N01-NB12-001
N01-NB12-003
N01-NB07-001
BED ASH SURGE HOPPER
1 HR CAPACITY
N01-NB54-002
BED ASH CLINKER GRINDER
N01-NB53-005
N01-NB53-006
UNIT #2
BED ASH STRIPPER COOLERS
FWEC
FWUSA
43 TPH
43 TPH
N02-NB54-001
BED ASH CLINKER GRINDER
EU053
ATM
N02-NB03-001
BED ASH SURGE HOPPER VENT FILTER EXHAUST FAN
N02-NB18-001
BED ASH SURGE HOPPER VENT FILTER
N02-NB53-004
N02-NB53-002
N02-NB53-003
N02-NB12-004
N02-NB53-001
N02-NB12-002
N02-NB12-001
N02-NB12-003
N02-NB07-001
BED ASH SURGE HOPPER
1 HR CAPACITY
N02-NB54-002
BED ASH CLINKER GRINDER
N02-NB53-005
N02-NB53-006
DELETE VALVE
N00-NB-03-001
N00-NB-03-002
N00-NB-03-003
(3) BED-ASH TRANSPORT BLOWER
43 TPH
43 TPH
43 TPH
EU038
N02-NB18-002
ATM
BED ASH SILO BIN VENT FILTER
EU038
N01-NB18-002
ATM
BED ASH SILO BIN VENT FILTER
UNIT 2
BED ASH SILO
(BY OTHERS)
UNIT 1
BED ASH SILO
(BY OTHERS)
PRELIMINARY
JEA
Northside Units 1 & 2 Repowering Project
P062713.62.1801.04-C0003
PROCESS FLOW DIAGRAM
....BED ASH HANDLING SYSTEM
FOSTER WHEELER USA CORPORATION
13-04600
4600-1-50-203
C

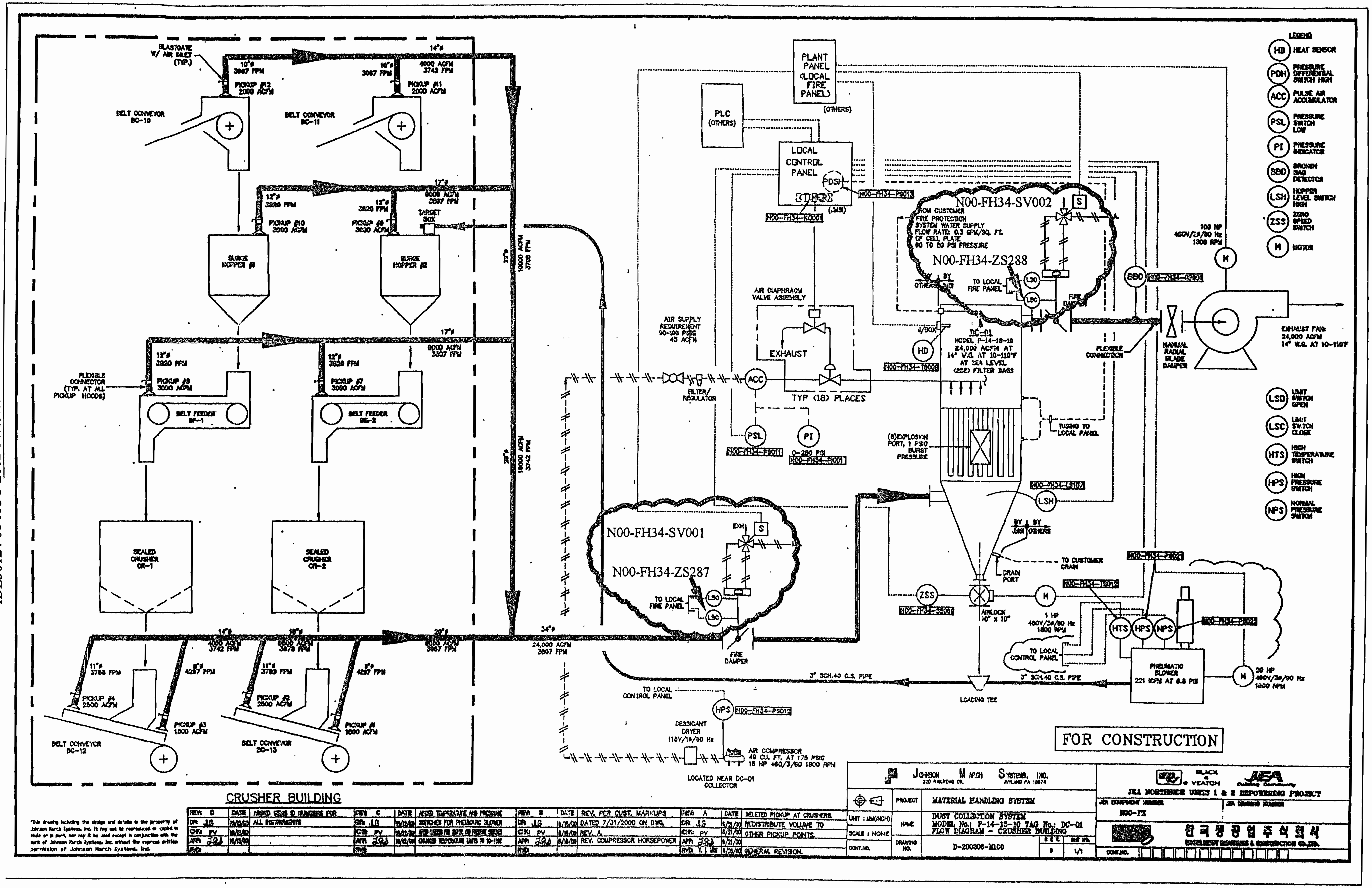
EU031

IDL30124 06-AUG-2002 14:02:28



P062713.61.0403.05-C1696 St:RD 12/21/00 MS-00281

EU029



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P062713.61.0403.05-C1688 St.RD 12/21/00 MS-00281

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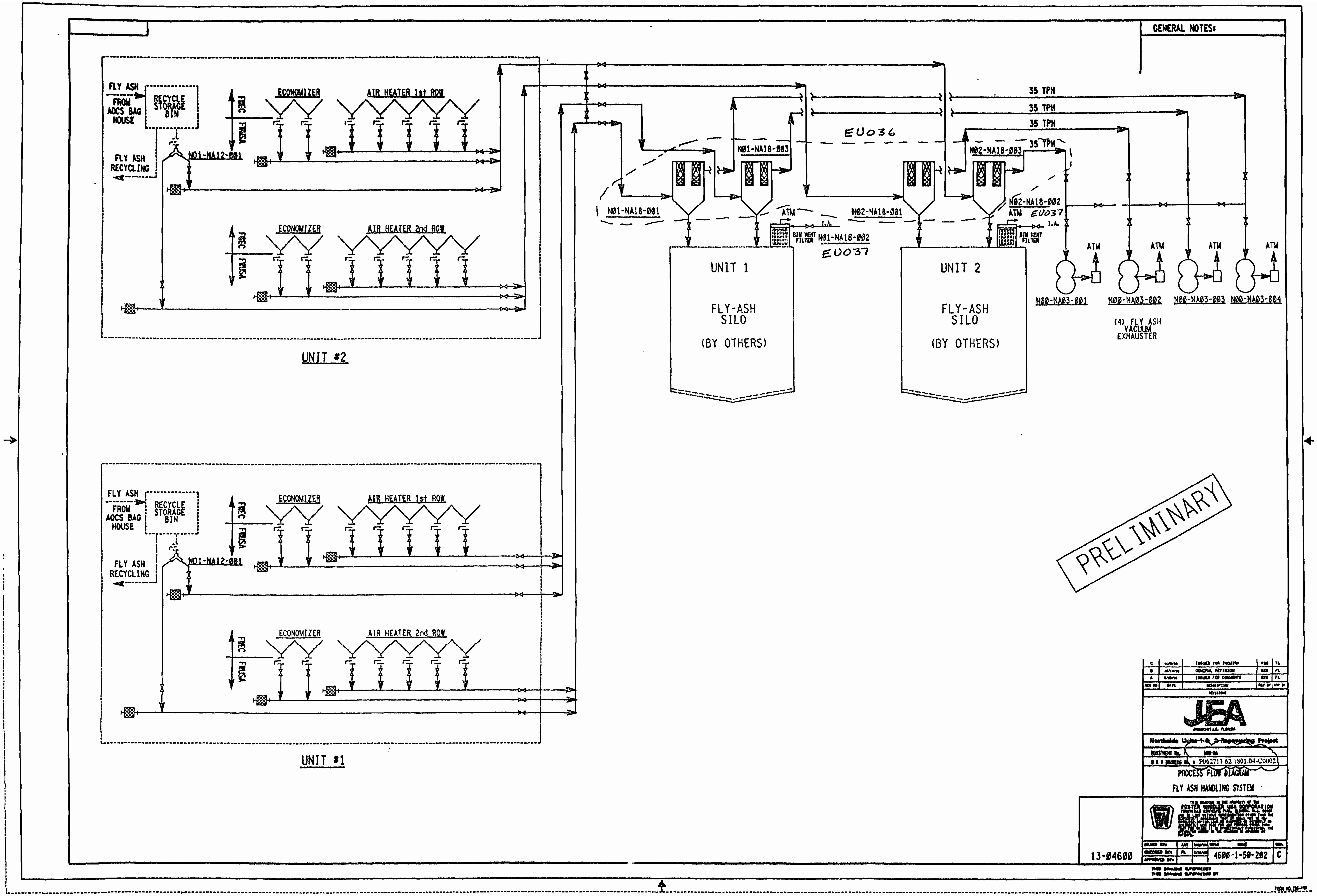

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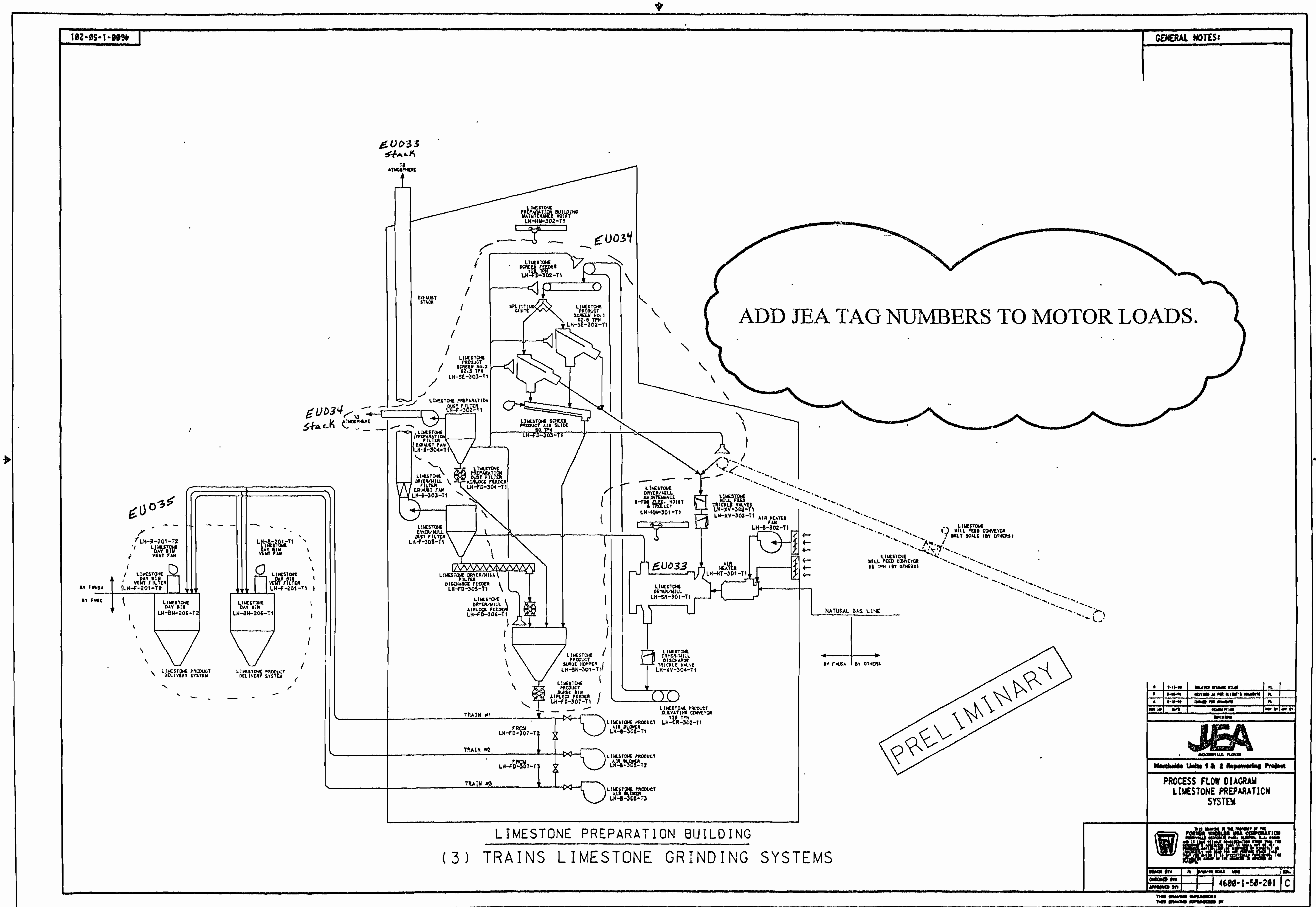
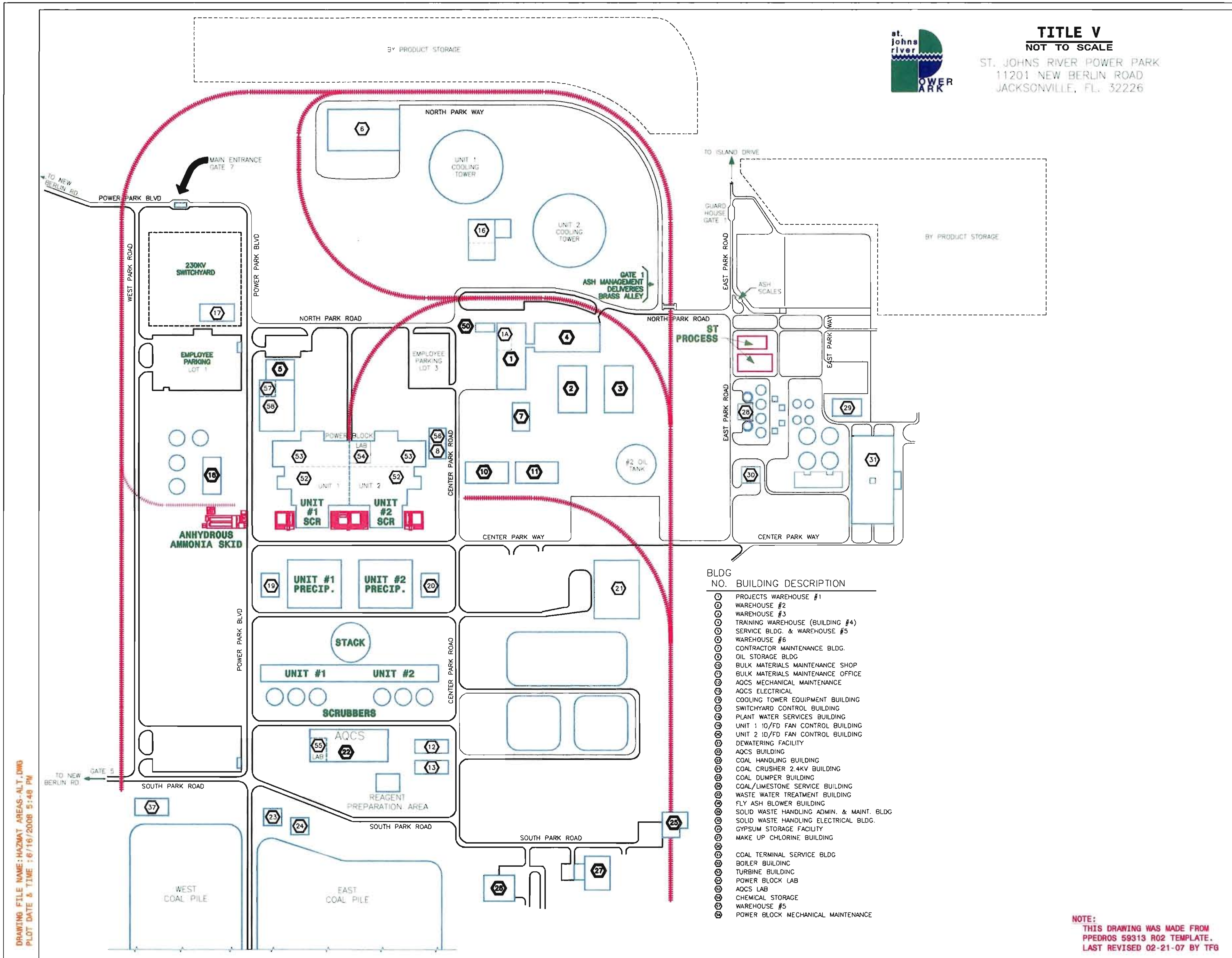
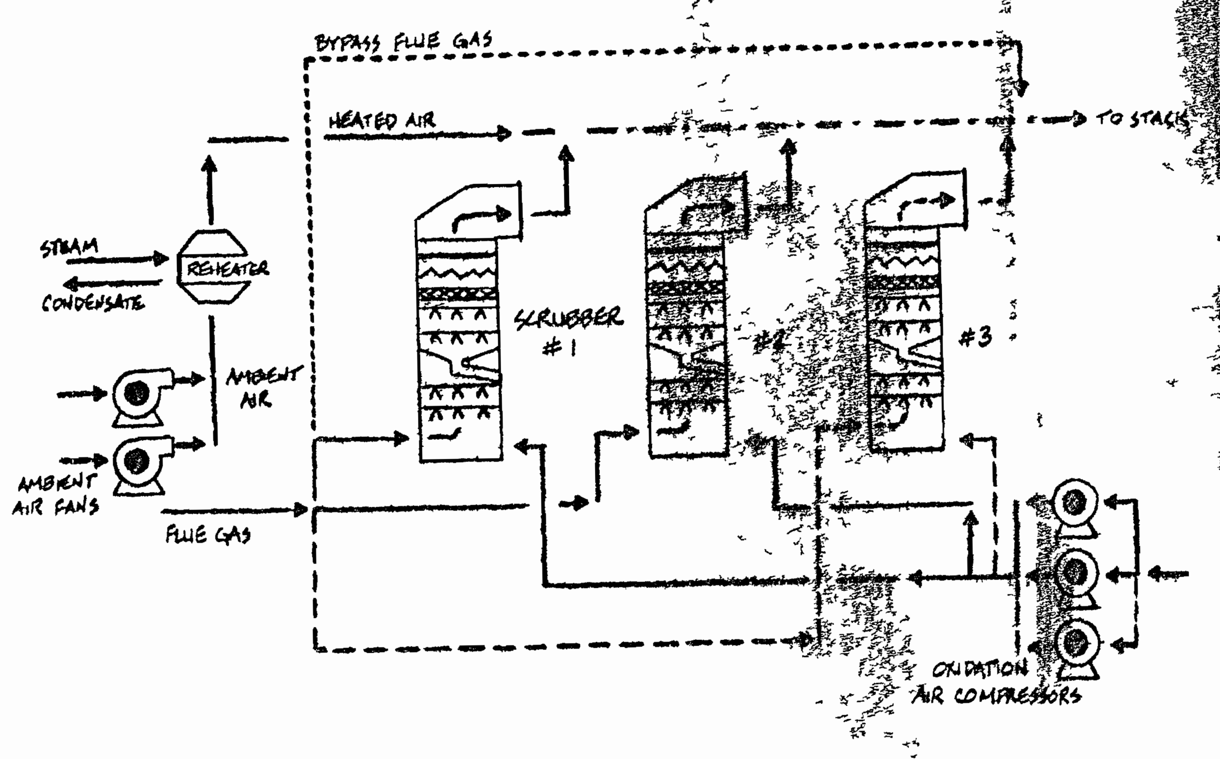


4600-1-50-201
GENERAL NOTES:
EU033 Stack
TO ATMOSPHERE
EXHAUST STACK
EU034
EU034 Stack
EU035
EU033
ADD JEA TAG NUMBERS TO MOTOR LOADS.
LIMESTONE PREPARATION BUILDING MAINTENANCE HOIST LH-HM-302-T1
LIMESTONE SCREEN FEEDER 125 TPH LH-FD-302-T1
SPLITTING CHUTE
LIMESTONE PRODUCT SCREEN No.1 62.5 TPH LH-SE-302-T1
LIMESTONE PRODUCT SCREEN No.2 62.5 TPH LH-SE-303-T1
LIMESTONE PREPARATION DUST FILTER LH-F-302-T1
LIMESTONE SCREEN PRODUCT AIR SLIDE 50 TPH LH-FD-303-T1
LIMESTONE PREPARATION FILTER EXHAUST FAN LH-B-304-T1
LIMESTONE PREPARATION DUST FILTER AIRLOCK FEEDER LH-FD-304-T1
LIMESTONE DRYER/MILL FILTER EXHAUST FAN LH-B-303-T1
LIMESTONE DRYER/MILL DUST FILTER LH-F-303-T1
LIMESTONE DRYER/MILL FILTER DISCHARGE FEEDER LH-FD-305-T1
LIMESTONE DRYER/MILL AIRLOCK FEEDER LH-FD-306-T1
LIMESTONE PRODUCT SURGE HOPPER LH-BN-301-T1
LIMESTONE PRODUCT SURGE BIN AIRLOCK FEEDER LH-FD-307-T1
LIMESTONE DRYER/MILL MAINTENANCE 5-TON ELEC. HOIST & TROLLEY LH-HM-301-T1
LIMESTONE MILL FEED TRICKLE VALVES LH-XV-302-T1 LH-XV-303-T1
AIR HEATER FAN LH-B-302-T1
AIR HEATER LH-HT-301-T1
LIMESTONE DRYER/MILL LH-SR-301-T1
LIMESTONE DRYER/MILL DISCHARGE TRICKLE VALVE LH-XV-304-T1
LIMESTONE PRODUCT ELEVATING CONVEYOR 125 TPH LH-CR-302-T1
LIMESTONE MILL FEED CONVEYOR BELT SCALE (BY OTHERS)
LIMESTONE MILL FEED CONVEYOR 65 TPH (BY OTHERS)
NATURAL GAS LINE
BY FWUSA
BY OTHERS
BY FWEC
LH-B-201-T2 LIMESTONE DAY BIN VENT FAN
LH-B-201-T1 LIMESTONE DAY BIN VENT FAN
LIMESTONE DAY BIN VENT FILTER LH-F-201-T2
LIMESTONE DAY BIN VENT FILTER LH-F-201-T1
LIMESTONE DAY BIN LH-BN-206-T2
LIMESTONE DAY BIN LH-BN-206-T1
LIMESTONE PRODUCT DELIVERY SYSTEM
TRAIN #1
TRAIN #2
TRAIN #3
FRCM LH-FD-307-T2
FRCM LH-FD-307-T3
LIMESTONE PRODUCT AIR BLOWER LH-B-305-T1
LIMESTONE PRODUCT AIR BLOWER LH-B-305-T2
LIMESTONE PRODUCT AIR BLOWER LH-B-305-T3
LIMESTONE PREPARATION BUILDING
(3) TRAINS LIMESTONE GRINDING SYSTEMS
PRELIMINARY
JEA
Northside Units 1 & 2 Repowering Project
PROCESS FLOW DIAGRAM
LIMESTONE PREPARATION SYSTEM
FOSTER WHEELER USA CORPORATION
4600-1-50-201
C

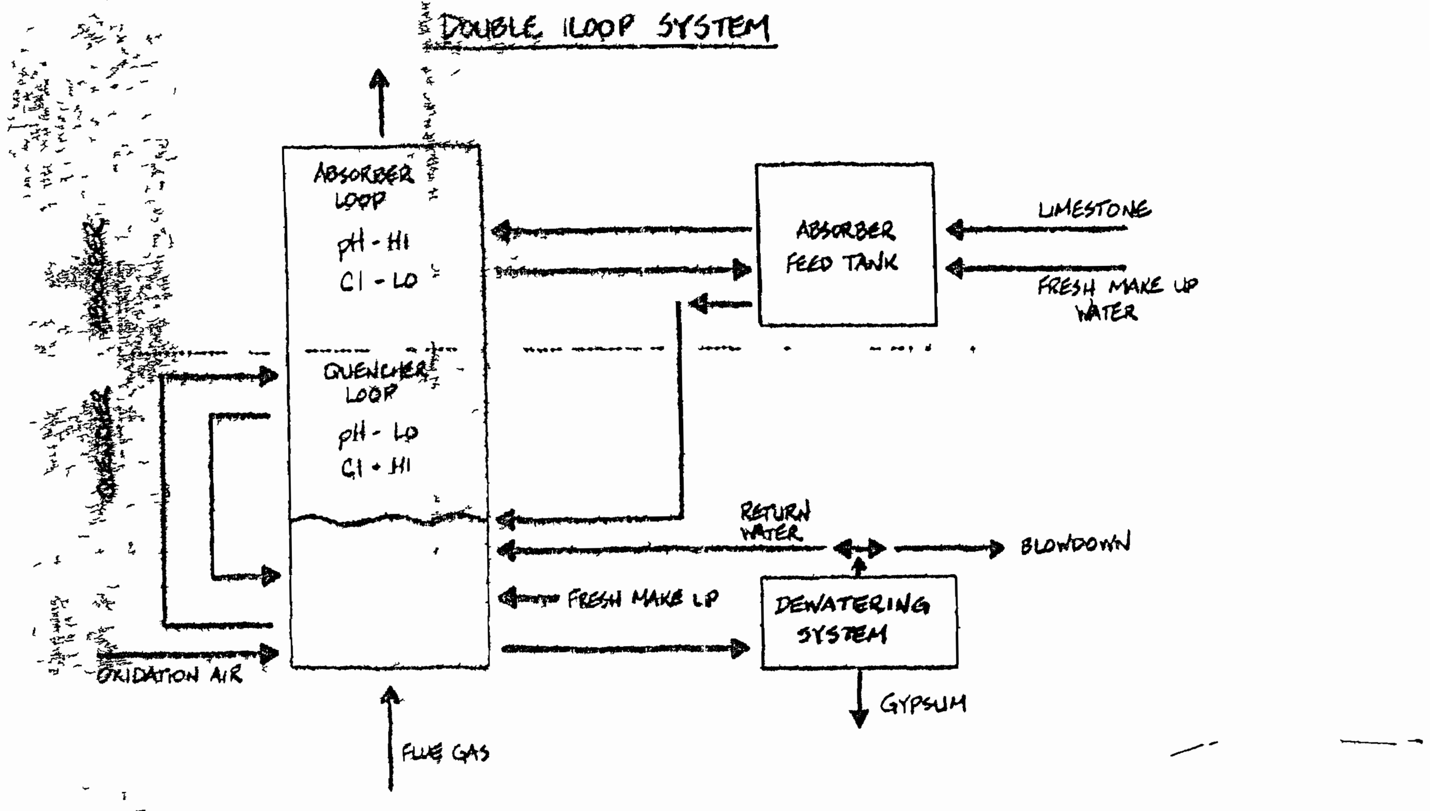


TITLE V
NOT TO SCALE
ST. JOHNS RIVER POWER PARK
11201 NEW BERLIN ROAD
JACKSONVILLE, FL. 32226
st. johns river POWER PARK
BY PRODUCT STORAGE
NORTH PARK WAY
UNIT 1 COOLING TOWER
UNIT 2 COOLING TOWER
MAIN ENTRANCE GATE 7
TO NEW BERLIN RD
POWER PARK BLVD
WEST PARK ROAD
230KV SWITCHYARD
NORTH PARK ROAD
GATE 1 ASH MANAGEMENT DELIVERIES BRASS ALLEY
TO ISLAND DRIVE
GUARD HOUSE GATE 1
EAST PARK ROAD
ASH SCALES
ST PROCESS
EMPLOYEE PARKING LOT 1
EMPLOYEE PARKING LOT 3
POWER BLOCK LAB
UNIT 1
UNIT 2
UNIT #1 SCR
UNIT #2 SCR
ANHYDROUS AMMONIA SKID
CENTER PARK ROAD
#2 OIL TANK
CENTER PARK WAY
UNIT #1 PRECIP.
UNIT #2 PRECIP.
STACK
UNIT #1
UNIT #2
SCRUBBERS
AQCS
LAB
REAGENT PREPARATION AREA
GATE 5
TO NEW BERLIN RD
SOUTH PARK ROAD
WEST COAL PILE
EAST COAL PILE
BLDG NO. BUILDING DESCRIPTION
PROJECTS WAREHOUSE #1
WAREHOUSE #2
WAREHOUSE #3
TRAINING WAREHOUSE (BUILDING #4)
SERVICE BLDG. & WAREHOUSE #5
WAREHOUSE #6
CONTRACTOR MAINTENANCE BLDG.
OIL STORAGE BLDG
BULK MATERIALS MAINTENANCE SHOP
BULK MATERIALS MAINTENANCE OFFICE
AQCS MECHANICAL MAINTENANCE
AQCS ELECTRICAL
COOLING TOWER EQUIPMENT BUILDING
SWITCHYARD CONTROL BUILDING
PLANT WATER SERVICES BUILDING
UNIT 1 ID/FD FAN CONTROL BUILDING
UNIT 2 ID/FD FAN CONTROL BUILDING
DEWATERING FACILITY
AQCS BUILDING
COAL HANDLING BUILDING
COAL CRUSHER 2.4KV BUILDING
COAL DUMPER BUILDING
COAL/LIMESTONE SERVICE BUILDING
WASTE WATER TREATMENT BUILDING
FLY ASH BLOWER BUILDING
SOLID WASTE HANDLING ADMIN. & MAINT. BLDG
SOLID WASTE HANDLING ELECTRICAL BLDG.
GYPSUM STORAGE FACILITY
MAKE UP CHLORINE BUILDING
COAL TERMINAL SERVICE BLDG
BOILER BUILDING
TURBINE BUILDING
POWER BLOCK LAB
AQCS LAB
CHEMICAL STORAGE
WAREHOUSE #5
POWER BLOCK MECHANICAL MAINTENANCE
NOTE: THIS DRAWING WAS MADE FROM PPEDROS 59313 R02 TEMPLATE. LAST REVISED 02-21-07 BY TFG
DRAWING FILE NAME: HAZMAT AREAS-ALT.DWG
PLOT DATE & TIME: 6/16/2008 5:48 PM

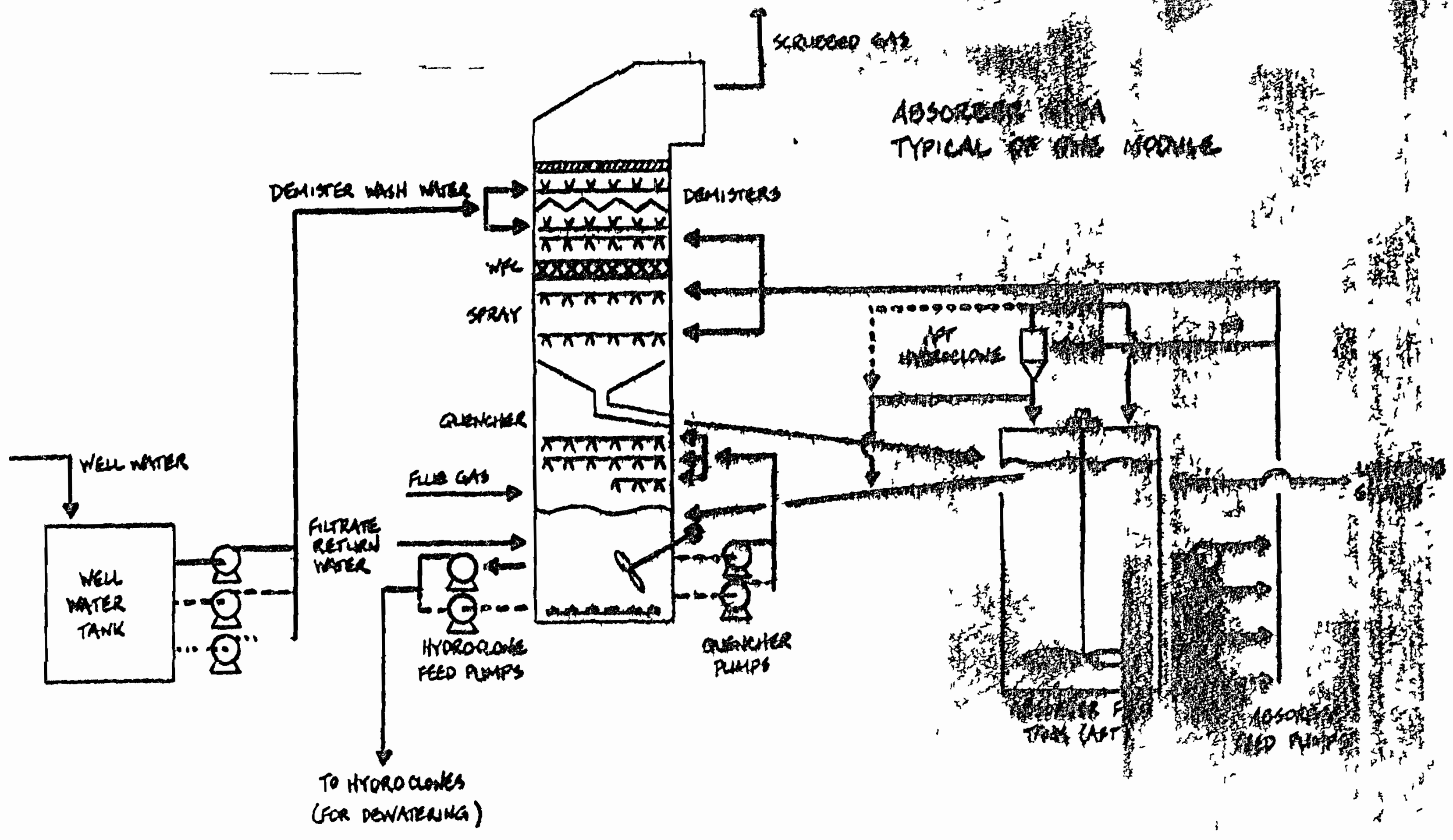
FLUE GAS SUBSYSTEM

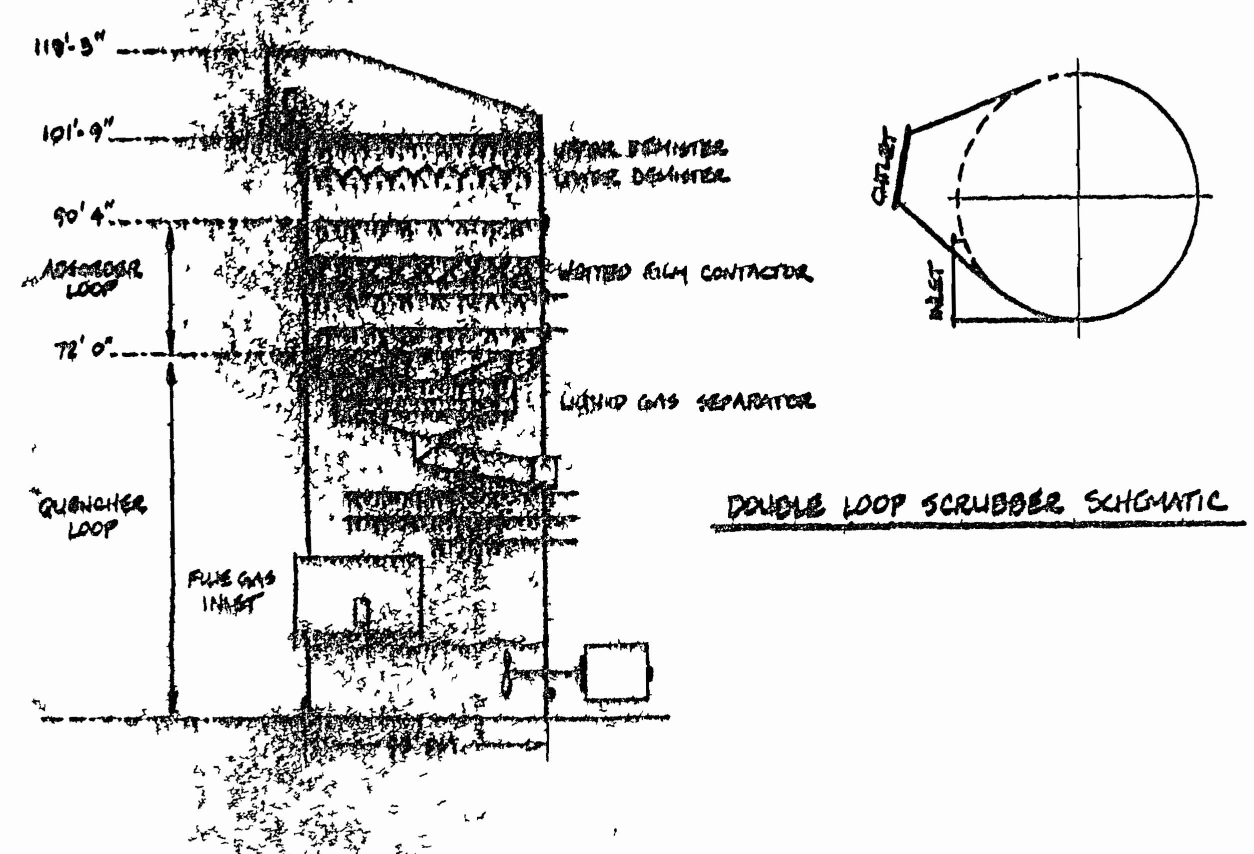


DOUBLE LOOP SYSTEM



ABSORBER MODULE TYPICAL OF THE MODULE

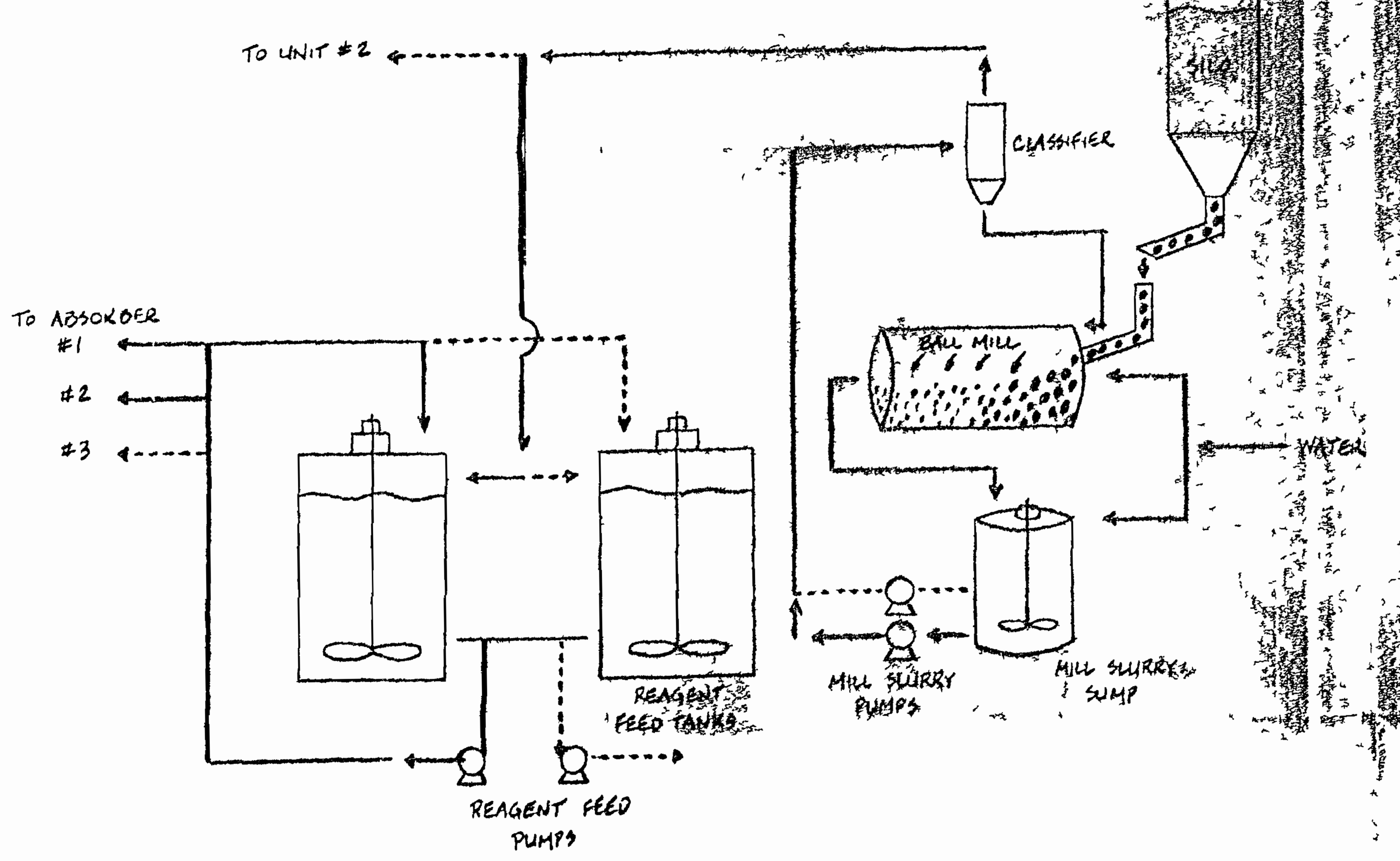




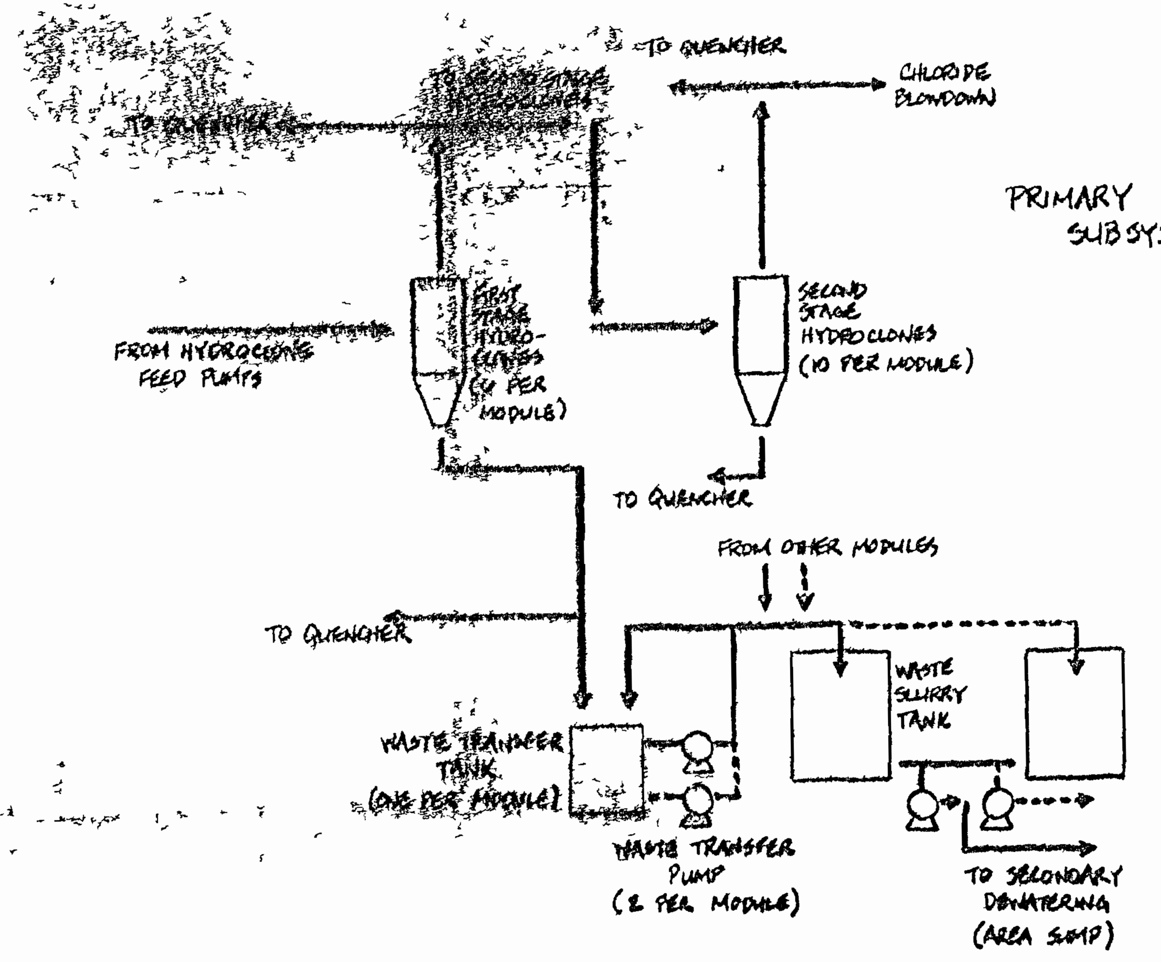
DOUBLE LOOP SCRUBBER SCHEMATIC

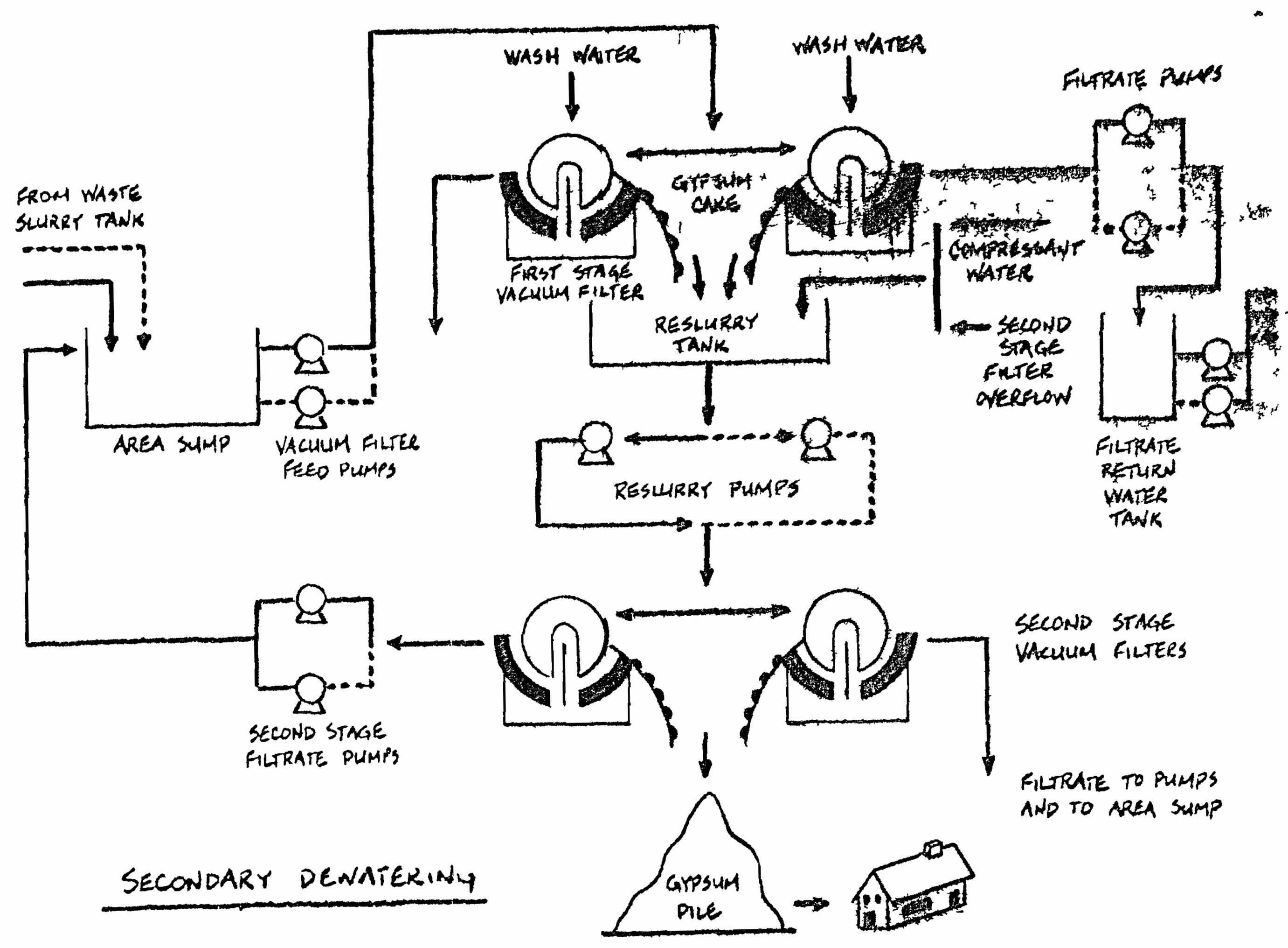
EV022

LIMESTONE PREPARATION

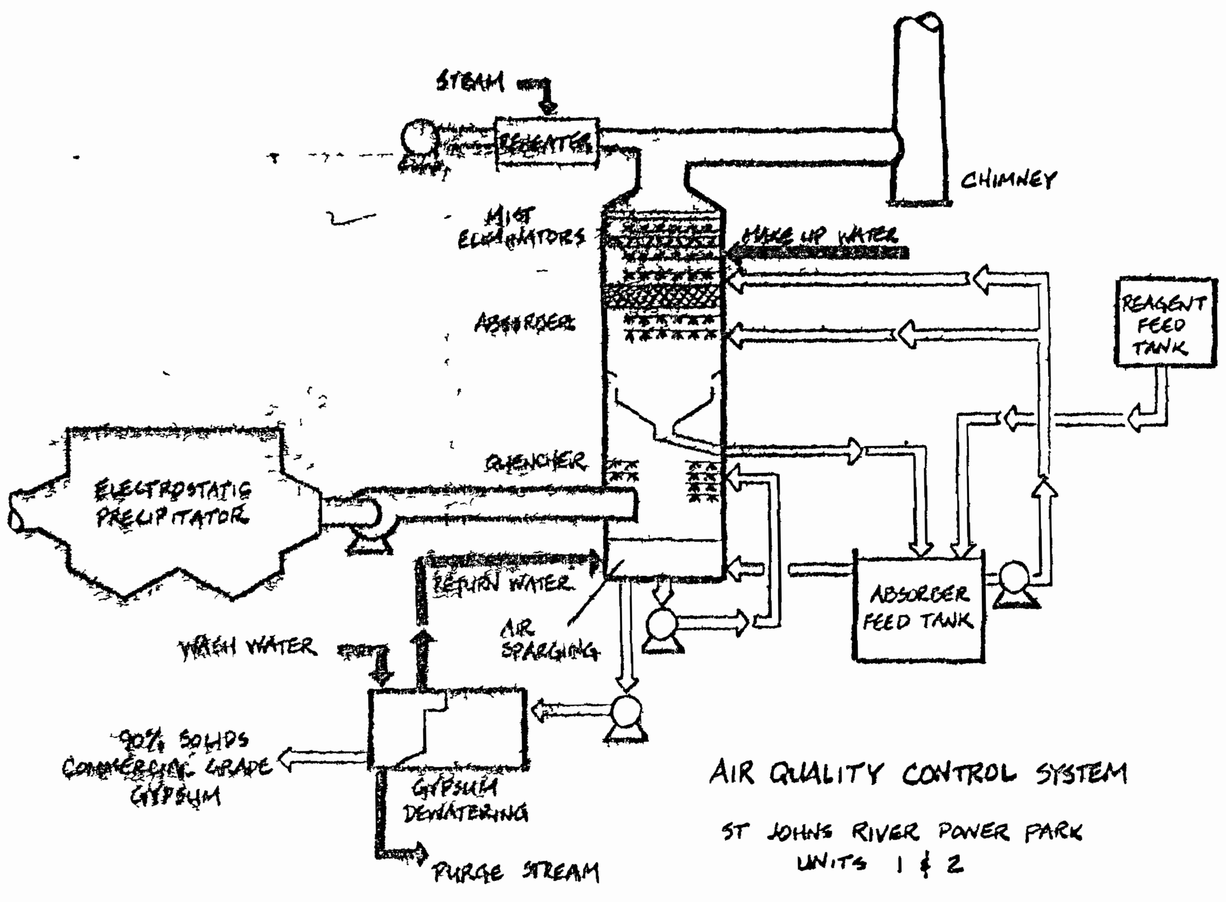


PRIMARY DEWATERING SUBSYSTEM





SECONDARY DEWATERING



AIR QUALITY CONTROL SYSTEM
ST JOHNS RIVER POWER PARK
UNITS 1 & 2

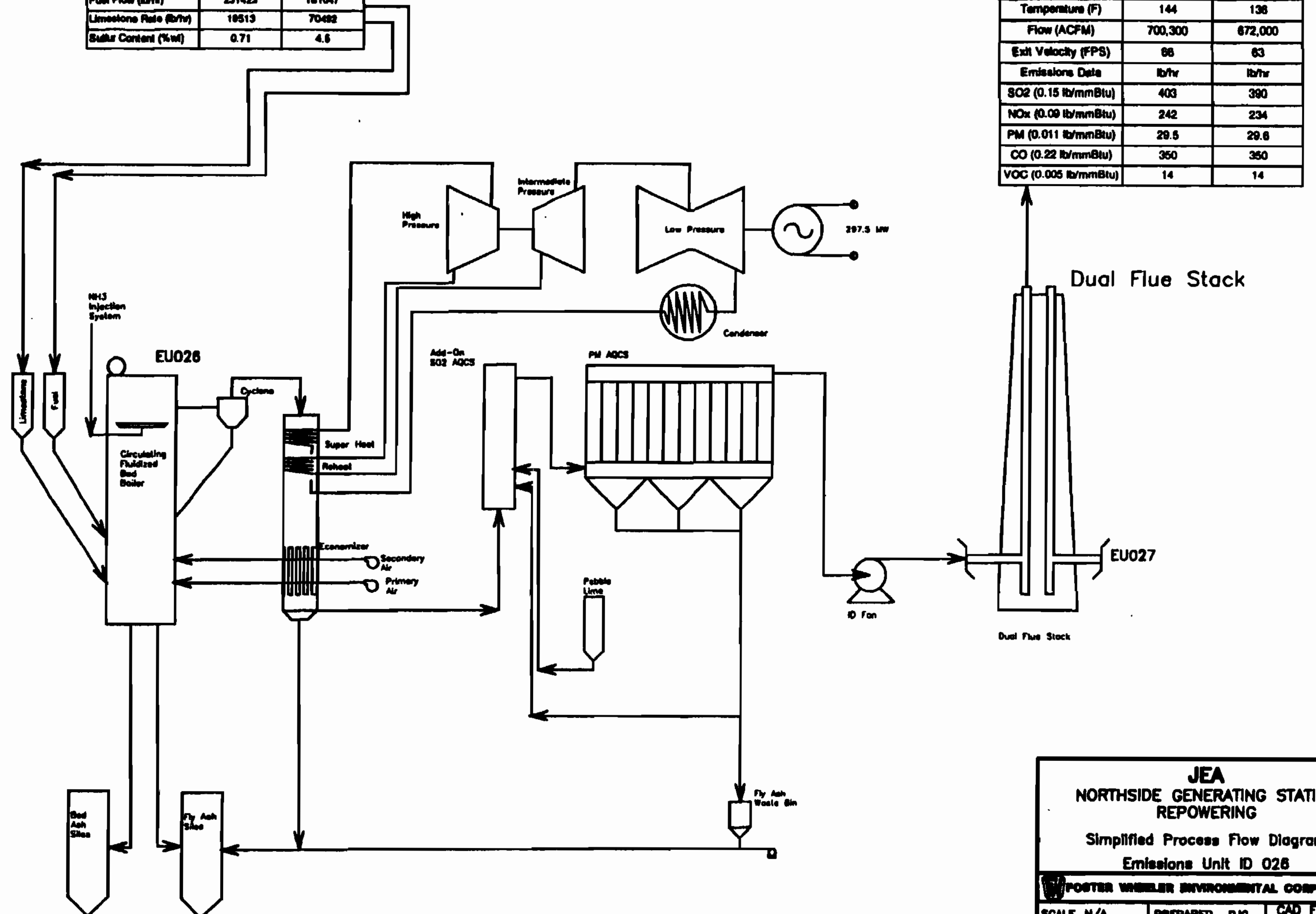
DOCUMENT ID #12

Attachment B

Process Flow Diagrams

Boiler Operations	Performance Fuel Specifications	
Parameter	Coal	Petroleum Coke
Boiler Load (%)	100	100
Heat Input (mmBtu/hr)	2684.51	2589.84
Heat Content (Btu/lb)	11600	14380
Fuel Flow (lb/hr)	231423	181047
Limestone Rate (lb/hr)	19513	70492
Sulfur Content (%wt)	0.71	4.5

Stack Parameters	Performance Fuel Specifications	
	Coal	Petroleum Coke
Height (ft)	495	495
Diameter (ft)	15	15
Temperature (F)	144	136
Flow (ACFM)	700,300	672,000
Exit Velocity (FPS)	66	63
Emissions Data	lb/hr	lb/hr
SO2 (0.15 lb/mmBtu)	403	390
NOx (0.09 lb/mmBtu)	242	234
PM (0.011 lb/mmBtu)	29.5	29.6
CO (0.22 lb/mmBtu)	350	350
VOC (0.005 lb/mmBtu)	14	14



JEA

NORTHSIDE GENERATING STATION REPOWERING

Simplified Process Flow Diagram

Emissions Unit ID 026

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED DJG	CAD FILE NO. EU026PF.DWG
DATE: 01/26/99	CHECKED MAE APPROVED DJF	FIGURE NO. F-6, EU026

Boiler Operations	Performance Fuel Specifications	
Parameter	Coal	Petroleum Coke
Boiler Load (%)	100	100
Heat Input (mmBtu/hr)	2684.51	2599.84
Heat Content (Btu/lb)	11600	14360
Fuel Flow (lb/hr)	231423	181047
Limestone Rate (lb/hr)	19513	70492
Sulfur Content (%wt)	0.71	4.6

Stack Parameters	Performance Fuel Specifications	
	Coal	Petroleum Coke
Height (ft)	495	495
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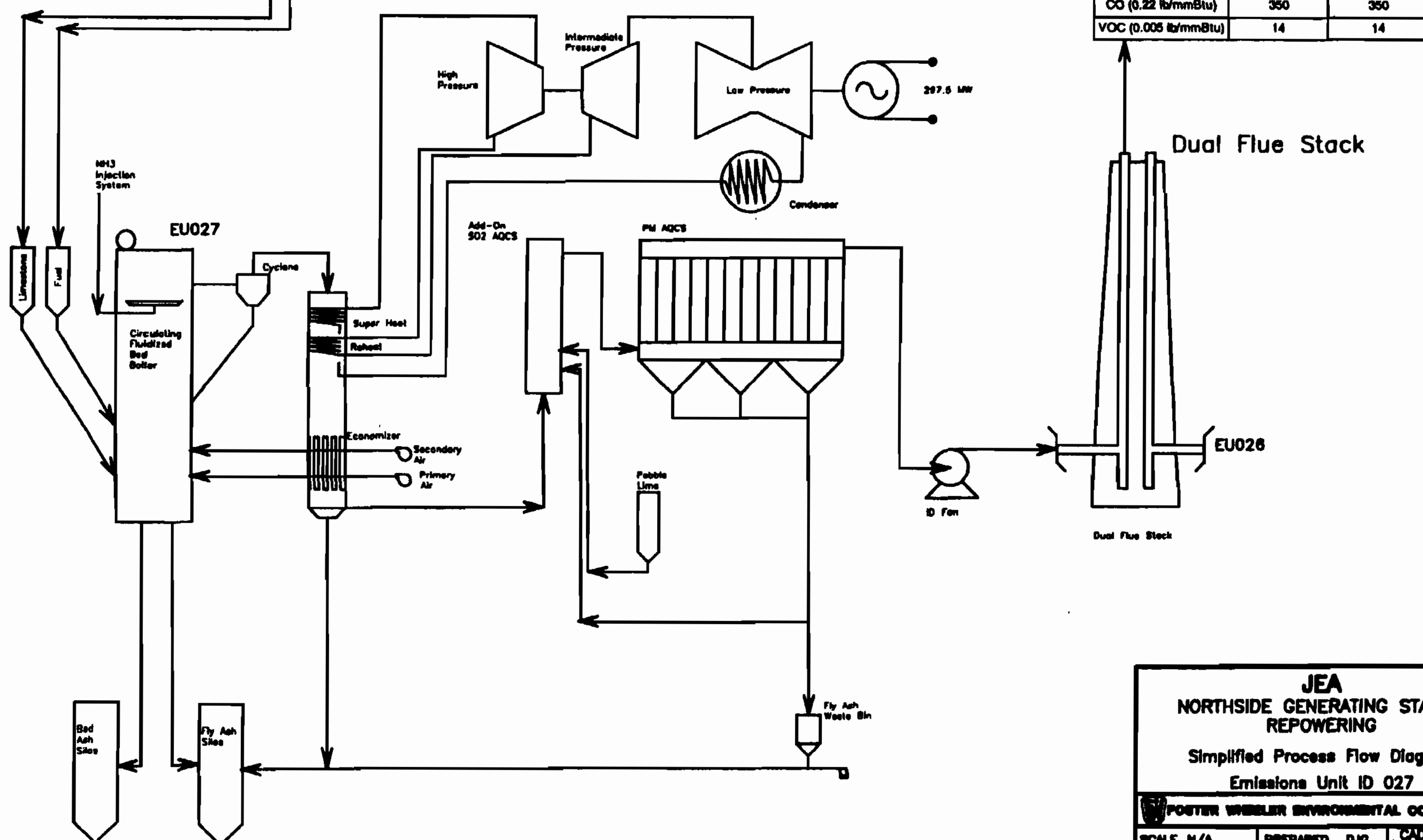
Temperature (F)	144	136
Flow (ACFM)	700,300	672,000
Exit Velocity (FPS)	66	63
Emissions Data	lb/hr	lb/hr
SO2 (0.15 lb/mmBtu)	403	390
NOx (0.09 lb/mmBtu)	242	234
PM (0.011 lb/mmBtu)	29.5	29.6
CO (0.22 lb/mmBtu)	350	350
VOC (0.005 lb/mmBtu)	14	14



JEA
NORTHSIDE GENERATING STATION REPOWERING

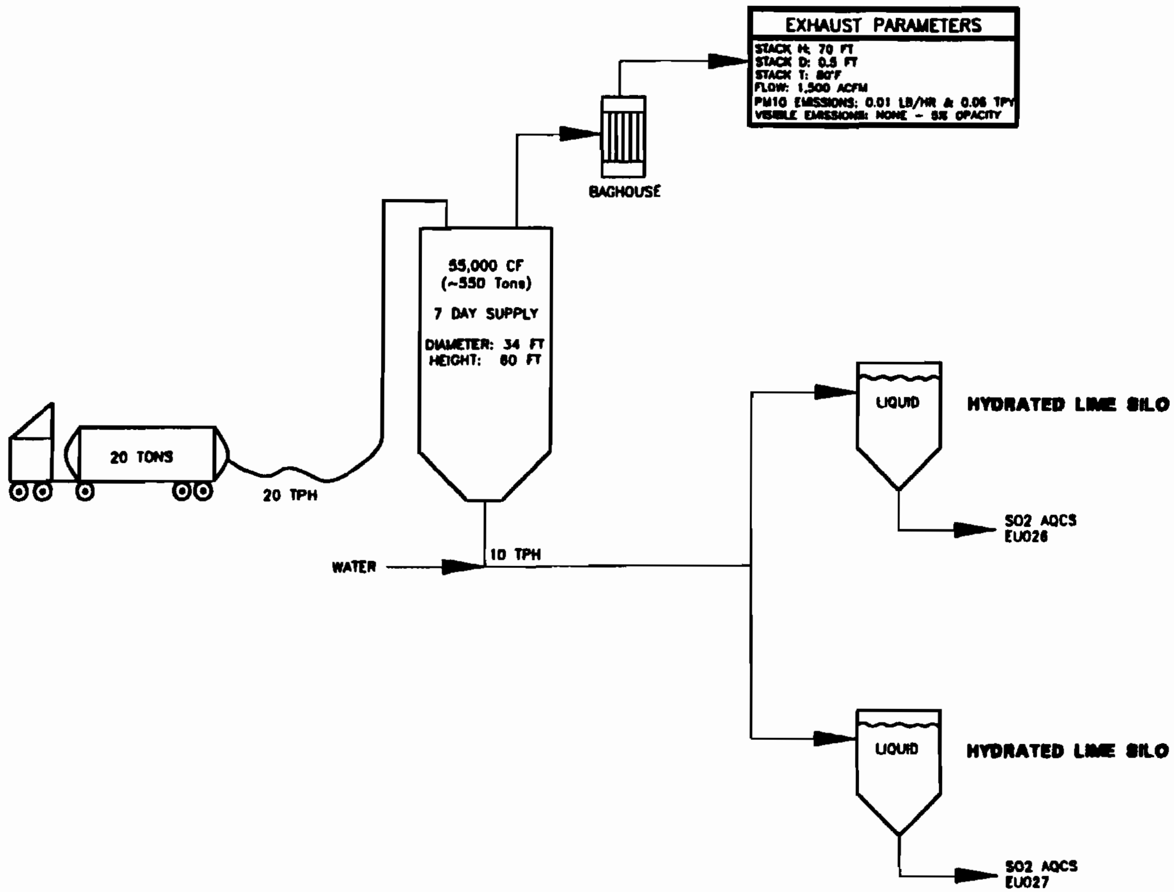
Simplified Process Flow Diagram

Emissions Unit ID 027

FOSTER WHEELER ENVIRONMENTAL CORPORATION

SCALE N/A	PREPARED	DJG	CAD FILE NO. EU027PF.DWG
DATE: 01/26/99	CHECKED	MAE	FIGURE NO. F-6 EU027
	APPROVED	DJF	

NORTHSIDE GENERATING STATION
PEBBLE LIME SILO
BASE CASE & ALTERNATE 1



JEA
NORTHSIDE GENERATING STATION
REPOWERING

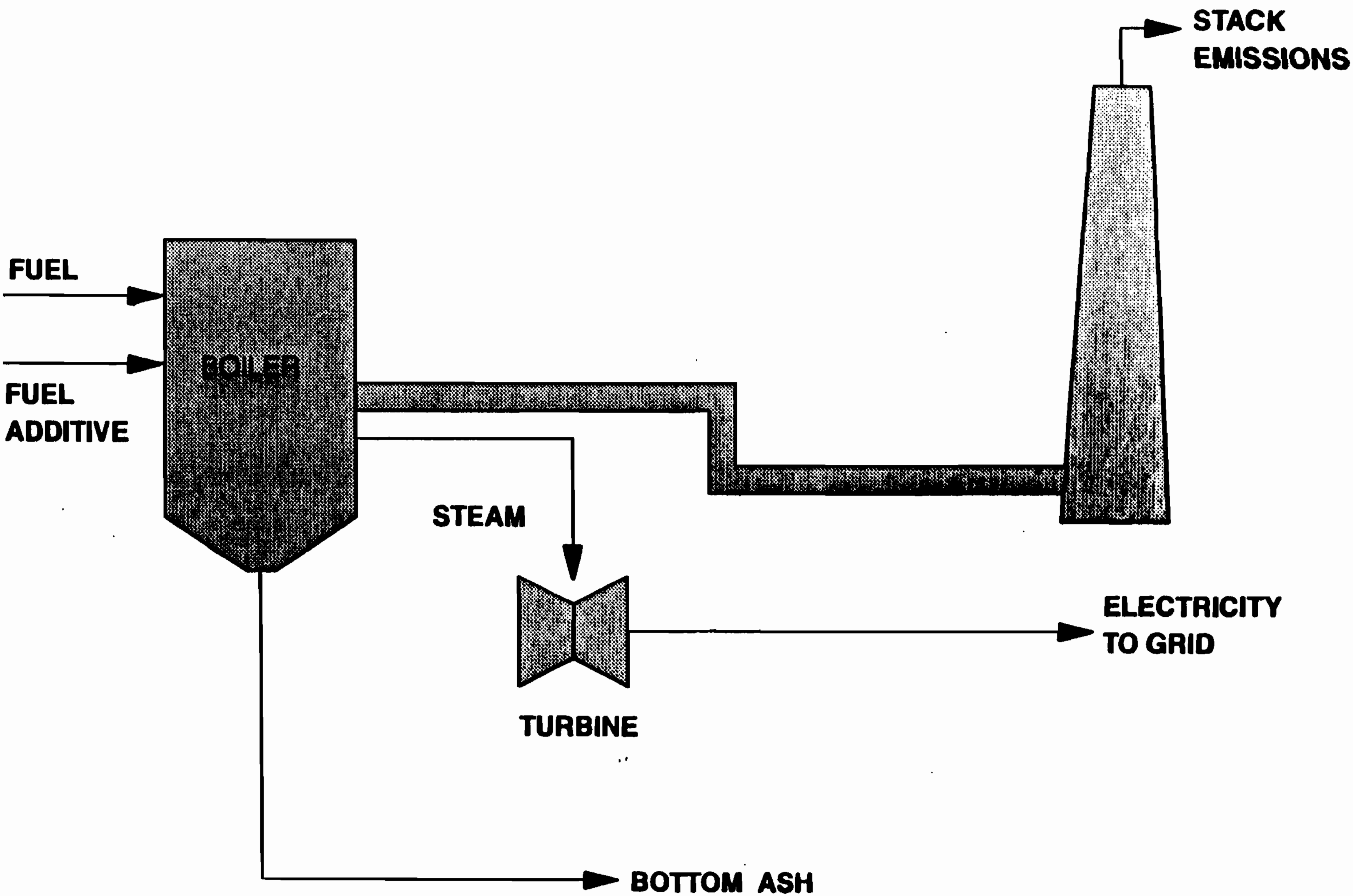
Simplified Process Flow Diagram

Emissions Unit ID 042

FOSTER WHEELER ENVIRONMENTAL CORPORATION

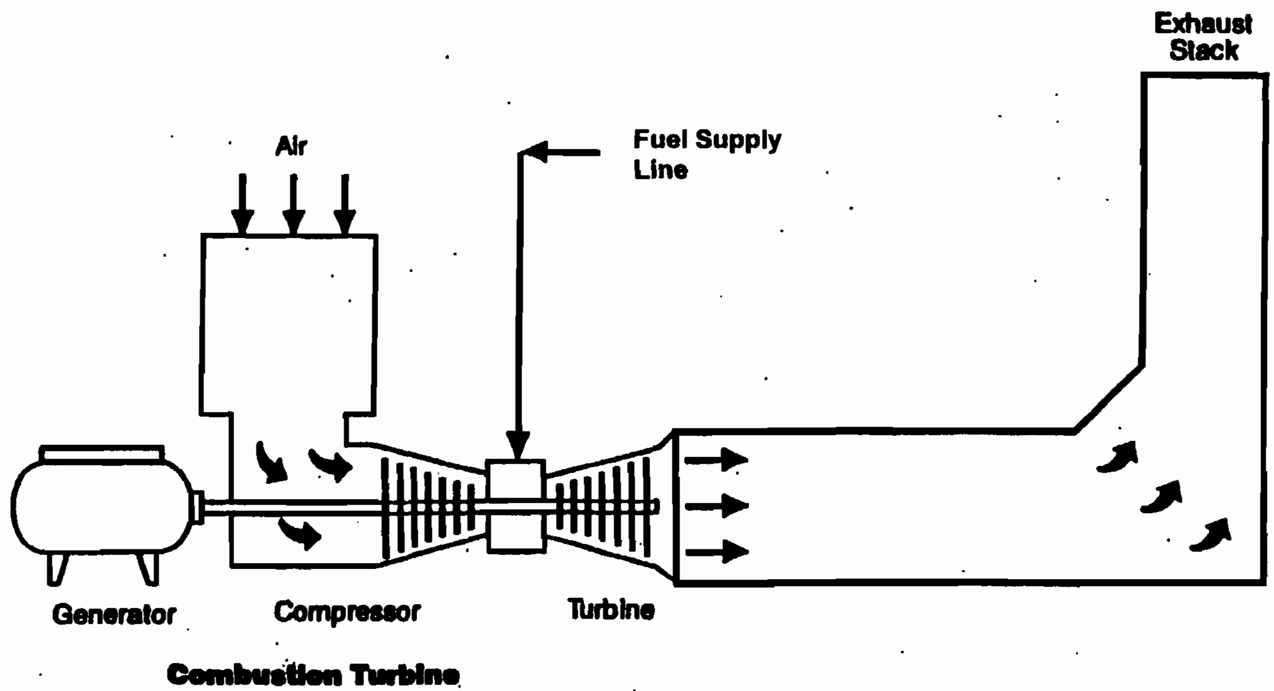
SCALE N/A	PREPARED DJG	CAD FILE NO. EU042PF.DWG
DATE: 01/26/99	CHECKED MAE	FIGURE NO.
	APPROVED DJF	F-8, EU042

Northside Generating Station Flow Diagram



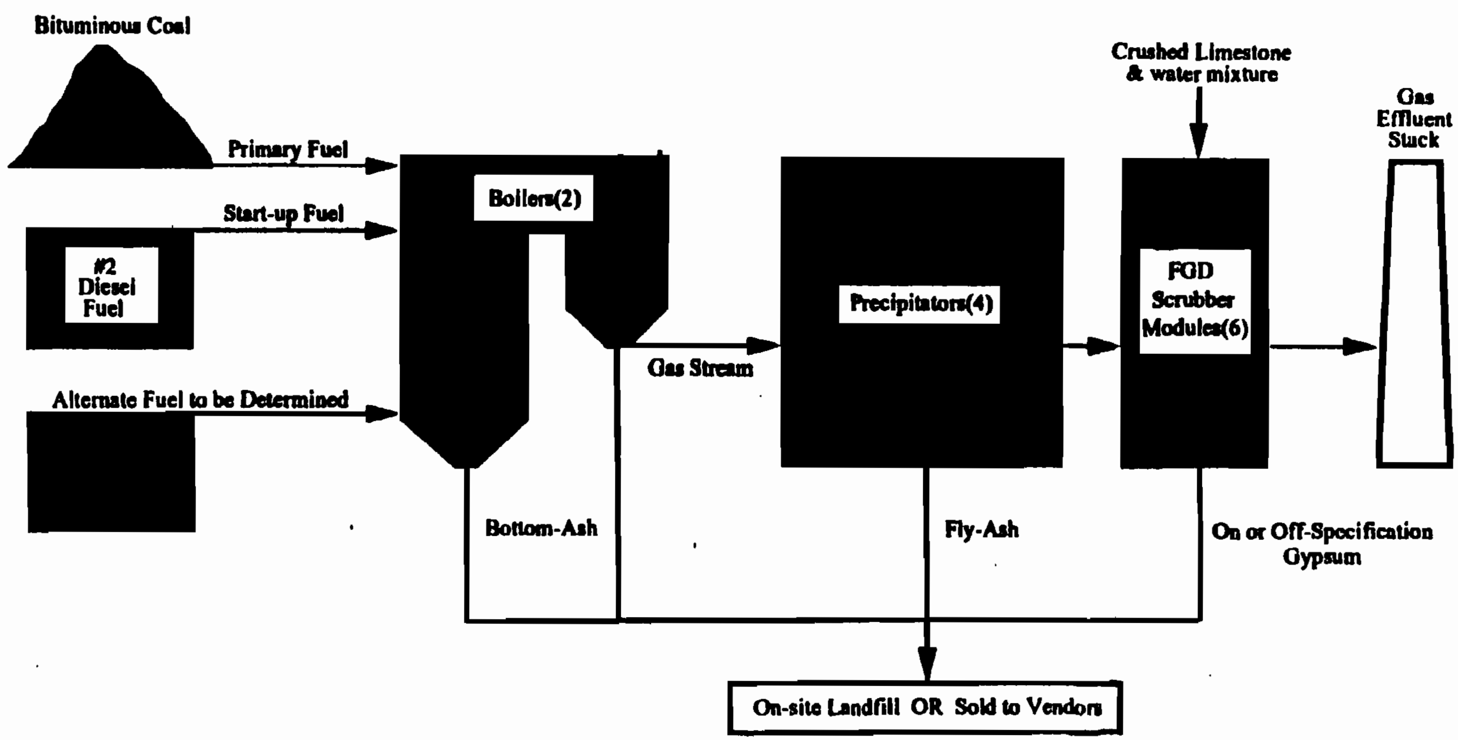
DOCUMENT ID #3

Simple Cycle-Combustion Turbine Process Flow Diagram



SIMPLE CYCLE COMBUSTION TURBINE

ST. JOHNS RIVER POWER PARK PROCESS FLOW DIAGRAM UNITS #1 & #2



Document ID #3

Attachment C

Precautions to Prevent Emissions of Unconfined Particulate Matter

Precautions to Prevent Emissions of Unconfined Particulate Matter

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. . Potential examples of particulate matter include:

- Fugitive dust from paved and unpaved roads;
- Sandblasting abrasive material from facility maintenance activities.

Several precautions were taken to prevent emissions of particulate matter in the original design of the facility. These include:

- Paving of roads, parking areas and equipment yards;
- Landscaping and planting of vegetation.

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with Rule 62-296.320(4)(c) F.A.C.:

- Maintenance of paved areas as needed;
- Regular mowing of grass and care of vegetation;
- Limiting access to plant property for unnecessary vehicles

Attachment D

List of Insignificant and Unregulated Activities

List of Insignificant Emissions Units and/or Activities

JEA
NGS/SJRPP/STI
Facility ID. No.: 0310045

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities:
I. Northside Generating Station (NGS).

A. Storage Tanks.

1. JEA Tank	Magnesium Oxide	9,600 gallons
2. JEA Tank	Petrolite	6,500 gallons
3. JEA Tank	Lube Oil - Unit 1	10,000 gallons
4. JEA Tank	Lube Oil - Unit 2	10,000 gallons
5. JEA Tank	Mineral Acid	11,500 gallons
6. JEA Tank	Mineral Acid	11,500 gallons
7. JEA Tank	Caustic - East	10,000 gallons
8. JEA Tank	Caustic - West	10,000 gallons
9. JEA Tank	Hypochlorite	12,000 gallons
10. JEA Tank	Hypochlorite	12,000 gallons
11. JEA Tank	Lube Oil	18,000 gallons
12. JEA Tank	Lube Oil	7,000 gallons

II. St. Johns River Power Park (SJRPP).

A Power Block Emergency Generator.
1. The emergency generator has historically fired less than 10,000 gallons per year of diesel fuel. The emergency generator draws its fuel from a single diesel fuel oil storage tank (the fuel oil has a maximum fuel sulfur content limit of 0.76%, by weight).

B Storage Tanks.

1. JEA Tank	Lube Oil	10,000 gallons
2. JEA Tank	Lube Oil	18,000 gallons
3. JEA Tank	Sulfuric Acid	6,000 gallons
4. JEA Tank	Sulfuric Acid	10,000 gallons
5. JEA Tank	Sulfuric Acid	6,000 gallons
6. JEA Tank	Sulfuric Acid	6,000 gallons
7. JEA Tank	Caustic	10,000 gallons
8. JEA Tank	Caustic	6,000 gallons
9. JEA Tank	Hydrazine	6,000 gallons
10. JEA Tank	Hypochlorite	6,000 gallons
11. JEA Tank	Anhydrous Ammonia	79,390 gallons
12. JEA Tank	Anhydrous Ammonia	79,390 gallons
13. JEA Tank	Hypochlorite	5,000 gallons
14. JEA Tank	Hypochlorite	5,000 gallons
15. JEA Tank	Hypochlorite	3,000 gallons

III. NGS Boiler No. 1, NGS CFB Boilers Nos. 1 and 2, and SJRPP Boilers Nos. 1 and 2.
1. Evaporation of on-site generated boiler non-hazardous cleaning chemicals (cirtosolv and ammonia). This activity occurs once every three to five years or longer.

IV. Solid Fuel Handling Facilities at the NGS and SJRPP.
1. Solid fuel handling alternate operating scenario with capability to transport, using trucks, solid fuels (coal and petroleum coke) between the respective solid fuel handling facilities at NGS and SJRPP in the event of equipment failure, fuel delivery disruption or disproportionate fuel inventory.

V. SJRPP Removal of Landfilled Ash.
1. Future anticipated activities at SJRPP include the removal of landfilled ash for use off-site. A front-end loader will be used to dig the ash up and load the material directly on licensed dump trucks, which will haul the ash off-site. The stockpiled ash is expected to be moist and dust free.

VI. NGS Limestone Feed System Fabric Filter Vents (6).
1. System is designed to collect limestone dust and return it to the limestone feed system. There are six emission points (baghouses). The process equipment is located between the limestone silos and the injection of limestone into the CFBs.

VII. SJRPP Emergency Diesel Fire Pump.
1. This equipment falls under the category of fire and safety equipment pursuant to Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions.

VIII. NGS By-Product Reclamation.
1. By-product reclamation at the by-product storage area (BSA). Fugitive particulate emissions will be minimized by using storage enclosures and dust suppression sprays/wetting agents.

IX. NGS Emergency Generator.
1. This emergency generator will be limited to 500 hours per year operation per the definition of "emergency generator" at Rule 62-210.200, F.A.C.; in addition, the generator can be operated only when the primary power source for that facility has been rendered inoperable by an emergency situation.

X. NGS Black-Start Emergency Generators (2).
1. These black-start emergency generators will be limited to 500 hours per year operation per the definition of "emergency generator" at Rule 62-210.200, F.A.C.; in addition, the generators can be operated only when the primary power source for that facility has been rendered inoperable by an emergency situation.

XI. NGS Emergency Storage of Solid Fuel outside the Coal Domes.
1. During emergency situations and unscheduled outages, JEA will store up to 20,000 tons of solid fuel in a bermed location (100 x 200ft) adjacent to the existing fuel storage dome for up to 3 weeks. Any runoff from this area will be collected within the berm and pumped by vacuum truck and placed in the on-site presedimentation basin thence to wastewater treatment facility. Water shall be applied, as necessary, to this area to control fugitive emissions. This temporary outside storage of solid fuel meets the reasonable precaution requirements for unconfined emissions of particulate matter and general visible emission requirements in accordance with Florida Administrative Code Rules 62-296.320(4)(c) and 62-296.320(4)(b) respectively.

XII. Two cooling towers for providing cooling for the air quality control systems at NGS.
1. The cooling towers are generically exempted in accordance with Rule 62-210.300(3)(b)(1), F.A.C.

XIII. SJRPP SCR Limestone System
1. The limestone system consists of limestone handling, conveying and storage and will be used for increasing the calcium content for some fuels to 5 percent in the ash and hence mitigate the potential contamination of arsenic.

List of Unregulated Emissions Units and/or Activities.

JEA
NGS/SJRPP/STI
Facility ID No.: 0310045

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

Brief Description of Emissions Units and/or Activities:

I. Northside Generating Station.

-aaa Storage Tanks.

1. JEA Tank	Bunker C Storage	4,578,000 gallons
2. JEA Tank #12	Diesel Storage	4,200,000 gallons
3. JEA Tank #13	Diesel Storage	4,200,000 gallons
4. JEA Tank #14	Diesel Storage	4,200,000 gallons
5. JEA Tank	Waste Oil Storage - Unit 1	750 gallons
6. JEA Tank	Waste Oil Storage - Unit 2	1,000 gallons
7. JEA Tank	Waste Oil Storage - Unit 3	575 gallons
8. JEA Tank	Bunker C Storage	4,578,000 gallons
9. JEA Tank	Bunker C Storage	4,578,000 gallons
10. JEA Tank	Bunker C Storage	11,256,000 gallons
11. JEA Tank	Bunker C Storage	11,256,000 gallons
12. JEA Tank	Bunker C Storage	11,256,000 gallons
13. JEA Tank	Bunker C Storage	4,578,000 gallons
14. JEA Tank #11	Diesel Storage	4,200,000 gallons

II. St. Johns River Power Park.

-bbb Storage Tanks.

1. JEA Tank: Emergency Diesel Fire Pump	Diesel Fuel Storage	1,123 gallons
2 JEA Tank	Diesel Fuel Storage	636,106 gallons
3 JEA Tank: Coal/Limestone Fuel Storage	Diesel Fuel Storage	10,069 gallons
4 JEA Tank: Ash Landfill Fuel Storage	Diesel Fuel Storage	10,069 gallons
5 JEA Tank: Power Block Emergency Generator Fuel Storage	Diesel Fuel Storage	4,015 gallons
6 JEA Tank	Gasoline Storage	10,069 gallons

List of Trivial Activities

Indoor sand blasting and abrasive grit blasting where temporary enclosures are used to contain particulates

Coal pile runoff ponds

Open stockpiling of material

Plant grounds maintenance

Routine maintenance/repair activities such as cleaning, welding, non-asbestos insulation removal, hand held tools/equip., meter repair/maintenance, on-line/off-line cleaning of equip.

Main steam pressure/relief valves; steam from boiler operations

Indoor fugitives such as vacuum cleaning, solvent storage, office supplies/equipment

Testing equipment such as CEMs, stack sampling calibration gases, oxygen detector

Internal combustion engines which drive compressors, generators, water pumps, or other auxiliary equipment

HVAC (heating, ventilation, and air conditioning systems)

Vent/exhaust systems for:

- Print room storage cabinets
- Transformer vaults/bldg.
- Maint./welding bldgs.
- Operating equipment vents
- Degasifier/dearators/decarbonators
- Air blowers/evacuators/air locks
- Feedwater heater vents

Transformers, switches, and switchgear processing (including cleaning and changing)

Use of nitrogen cap during boiler shut-down

Generator venting

Vent/exhaust from kitchen and breakrooms

Vents/stacks for sewer lines or enclosed areas req. for safety or by code

Electrically heated equipment used for heat treating, tracing, drying, soaking, case hardening or surface conditioning

Sewage treatment fac./equip. ranging in size from porta-john to sewage treatment plants

Steam releases

Storage and use of chemicals solely for water/waste water treatment

Neutralization basins/ponds, ash pits/ponds, TETF/ENU, percolation, equalization

Transfer sumps

Firefighting training facilities Turbine vapor extractor

Lawn maintenance equipment/activities

Application of fungicide, herbicide, pesticide

Air compressors and centrifuges used for compressing air

Handling and removal of clinkers, slag and bottom ash

Recovered materials recycling systems including: bulb crushers, aerosol can puncturing

Waste accumulation/consolidation

Compressed air system

Storage tanks less than 550 gallons

Storage of products in sealed containers

Nuclear gauges used for the purpose of process monitoring

Hydrogen and acid venting from battery rooms vacuum vents for gypsum dewatering bldg.

Flue gas desulfurization system absorber feed tank mist eliminator/spray header vent

Renovation/demolition of asbestos

Fires

Chemical spills, leaks & transfers

Oil spills, leaks & change out

Insulating activities

Asphalt or concrete sealing

High pressure water blasting

Excavation for construction activities

Chemical cleaning
- Boiler
- Turbine
- Heat exchanger
- Misc. plant machinery
- Solvent cleaning (parts & circuit boards)

Cleaning furnace bottoms or slag removal

Welding all types

Cutting all types
- Milling & machining

Sanding or grinding – all types

Emissions from portable equipment
- Welding machines (diesel or gas)
- Pumps (diesel or gas)

Sweeping

Pipe line repairs
- Fly ash
- Bottom ash
- Slurry or sludge transfer
- Fuel line
- Process water (cooling water, ash water or condensate)
- Refuse transport line
- Miscellaneous other process lines

Bag house repairs

Filter change out (oil & air)

Air conditioner repairs

Battery maintenance

Coal feeder maintenance

Refuse feeder maintenance

Other miscellaneous maintenance

Bottom ash removal (from boilers)

Fuel oil storage tank cleaning

Small parts washing using parts washer

A/C servicing by licensed contractor

Searching for condenser leaks using helium

Stack washing (water, soot)

Cleaning and dewatering of ash basins (heavy equipment/pumps)

Engine rebuilding

Lube oil changes

Receiving fuel oil (trucks & pipeline)

Aerosol can use (cleaners, etc.)

Boiler chemical cleaning (cirtosolv & ammonia)

Sootblowing

Liming the boilers (CaOH)

Turbine washing

Boiler gun cleaning (guns dipped into vats of solvent)

Vehicle servicing (oil changes, antifreeze changes, etc.)

Soldering of electrical components (silver, tine solder)

Portable equipment and tools, including electric and gasoline powered

Electro plating

Welding, grinding and cutting activities (metal fumes)

Machining metal parts (cutting oil, metal fumes)

Cleaning condensers (water vapor, "snoop")

Oil spills (#6, #2, turbine lube oil)

Oil-filled electrical equipment vents

Storage and use of boiler chemicals (phosphates, ammonia, hydrazine, magnesium oxide, sodium tripolyphosphate, soda ash, di- and tri-sodium phosphate)

Fume hood in laboratory

Laboratory equipment

Space heaters

Fire and safety equipment

Emergency generators

Mercury containing equipment such as manometers

Non-chlorinated solvent degreasing equipment

Vacuum pumps in laboratory operations

Equipment use for steam cleaning

Lime storage silo

Attachment E

List of Applicable Requirements

Attachment E - List of Applicable Requirements

JEA
NGS/SJRPP/STI
Facility ID No.: 0310045

This NGS/SJRPP/STI facility currently operates under the Title V Permit 0310045-016-AV, which was issued under the provisions of Chapter 403, Florida Statutes (F.S.); Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214; the City of Jacksonville Ordinance Code (JOC), Title X, Chapter 376; and, the Jacksonville Environmental Protection Board (JEPB) Rule 2, Parts I thru VII and Parts IX thru XII. The following requirements are applicable.

1. Emissions unit applicable regulations hereby incorporates by reference the Title V core list of applicable regulations that all Title V sources are presumptively subject.

2. Facility-wide applicable regulations specified in operation permit 0310045-016-AV Section II are hereby incorporated by reference.

3. Emission Unit Specific Applicable Requirements

   a. NGS Boiler No. 3 (EU-003)

      i. Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection A are hereby incorporated by reference.

      ii. EU-003 is an affected source under Federal CAIR, which is implemented in Florida under Rule 62-296.400, F.A.C.

      iii. The federal CAMR has been vacated and is thus presumed not applicable under FDEP rules also.

      iv. EU-003 is a Best Available Retrofit Technology (BART) eligible source, but is not subject-to the BART provisions implemented under Rule 62-296.340, F.A.C. (see attached April 2, 2008 FDEP Letter to JEA).

   b. NGS Combustion Turbines Nos. 3 through 6 (EU-006 through EU-009)
   Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection C are hereby incorporated by reference.

   c. SJRPP Boiler Nos. 1 and 2 (EU-016 through EU-017)

      i. Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection D are hereby incorporated by reference.

ii. Emission Unit Specific Applicable Requirements specified in construction permit 0310045-017-AC are hereby incorporated by reference. This construction permit permitted the installation of a SCR on each of the two SJRPP Boilers.

iii. Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section IV are hereby incorporated by reference.

iv. EU-0016 and EU-0017 are affected sources under Federal CAIR, which is implemented in Florida under Rule 62-296.400, F.A.C.

v. The federal CAMR has been vacated and is thus presumed not applicable under FDEP rules also.

d. SJRPP Fuel and Limestone Handling and Storage Operations (EU-023)
Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection E are hereby incorporated by reference.

e. SJRPP Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations (EU-022)
Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection F are hereby incorporated by reference.

f. SJRPP Cooling Towers (2) (EU-024)
Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection G are hereby incorporated by reference.

g. NGS: CFB Boilers No. 2 and No. 1 (EU-026 and EU-027)

i. Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection H are hereby incorporated by reference.

ii. EU-026 and EU-027 are affected sources under Federal CAIR, which is implemented in Florida under Rule 62-296.400, F.A.C.

iii. The federal CAMR has been vacated and is thus presumed not applicable under FDEP rules also.

h. NGS: Materials Processing Operations (EU-028, -029, -031, -033 through -038, -042, -051, -052, and -053)
Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection I are hereby incorporated by reference along with the requested revision (May 20, 2008 letter to FDEP) to incorporate "coal and/or pet coke" as an approved fuel while conducting the visible emissions testing.

i. ST: Materials Processing Operations
Emission Unit Specific Applicable Requirements specified in operation permit 0310045-016-AV Section III, Subsection H are hereby incorporated by reference.

Additional Applicable Requirements

Currently, JEA has identified and addressed all applicable regulatory requirements. If new regulatory requirements become applicable in the future, or if non-compliance items are discovered after submittal of this application, the necessary steps will be taken to ensure compliance in a timely manner. This is in accordance with company policy of maintaining continuous compliance with all applicable rules and regulations.

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

April 2, 2008

Mr. James Chansler
JEA
St. Johns River Power Plant
21 West Church Street
Jacksonville, Florida 32202

Re: BART (Best Available Retrofit Technology) Exemption Request for the St. Johns River Facility

Dear Mr. Chansler:

The Department has received a request from your company for a section 62-296.340(5), Florida Administrative Code exemption, along with the supporting documentation. The Department has reviewed the information you have submitted and has determined that your BART-eligible source meets the exemption criteria. This determination constitutes final agency action, effective as of the date of this notice, unless a petition is filed in accordance with the process outlined below.

A person whose substantial interests are affected by the Department's Proposed Agency Action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 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 twenty-one days of receipt of this written notice. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within twenty-one days of publication of the public notice or within twenty-one days of receipt of this notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for Notice of Agency Action may file a petition within twenty-one 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 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 Department'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 how and when petitioner received Notice of the Agency Action or Proposed Action;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(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 of statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action 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 Department'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 Department's Final Action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

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 's Office of General Counsel, Mail Station 35,3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the Clerk of the Department.

If you have any questions related to this matter, please call Tom Rogers (850-921-9554) or e-mail him (Tom.Rogers@dep.state.fl.us) at your convenience.

Sincerely,

Lawrence A. George

Lawrence A. George, Administrator
Office of Policy Analysis and Program Management

Cc: Pat Comer
Tom Rogers
Brenda Johnson, U.S. EPA, Region 4
Catherine Collins, U.S. Fish and Wildlife Service
Dee Morse, U.S. National Park Service

Attachment F

Compliance Report and Plan

Compliance Report and Plan

At the time of the filing of this application, all units are in compliance with applicable rules and regulations. It should be noted, however, that the Department of Environmental Protection and the Jacksonville Environmental Quality Division have recently raised concerns regarding maintenance and repair activities associated with the spray dryer absorbers (also referred to as polishing scrubbers) used on Northside Units 1 and 2 (Emission Units ID Nos. 26 and 27). Discussions among Department and JEA representatives continue and this matter has not been resolved as of the date of the filing of this Title V air operation permit renewal application. If necessary, this Compliance Report and Plan may be revised to reflect the outcome of these discussions and final resolution of this matter.

Attachment G

List of Equipment/Activities Regulated Under Title VI

List of Equipment/Activities Regulated Under Title VI

NGS

The equipment contains at least 50 lbs of a listed refrigerant (R-22)

Carrier Model 30GTN060-E620L 104 lbs total for both circuits refrigeration circuits.

Carrier Model 30HR 070D600	104 lbs
York Model YCAL0061EC46X	104 lbs total in both circuits refrigeration circuits
Carrier Model 38AKS024-621	120 lbs; one of two serving Control Room #3 in the Turbine Building
Carrier Model 38AKS024-621	120 lbs; second of two serving Control Room #3 in the Turbine Building
Carrier Model 38AH054-621	72 lbs total for both refrigerant circuits.

This equipment contains at least 50 lbs of a listed refrigerant R-134A:

Trane Model FADA0404GA 73 lbs total.

Below is a list of equipment known to be on site which contain a listed refrigerant (R-22) in quantities substantially less than 50 lbs each. The numbers are approximate as the exact numbers are subject to change based on units being replaced, retired or added:

80 central A/C units

15 Window units, including one that is R-410A

20 refrigerators; some of which may be R-12

2 ice machines

No water coolers

3 sample cooler

In addition, there is one recycling (previously registered with the EPA in accordance with Title VI requirements, and applicable rules and regulations) machine for capturing refrigerant when any work is performed by on-site licensed JEA personnel, with some refrigerant work currently performed by licensed outside contractors. This is subject to change in the future.

Estimated total quantity of refrigerant on site:
R-22: 1554 lbs
R-134A:73 lbs
R-410A: 3 lbs.

SJRPP

Equipment containing 50 lbs. or greater of a listed refrigerant

Line #	Location Bldg. #	Unit Number	Date Installed	Model #	Manufacture	Type of refrigerant	Quantity of refrigerant (lbs)
1	U-1 ID/FD Fan Bldg #19	A/C#1A	10/13/00	50EW-044-F610EA	Carrier	R-22	70
2	U-1 ID/FD Fan Bldg #19	A/C#1B	10/13/00	50EW-044-F610EA	Carrier	R-22	70
3	U-1 ID/FD Fan Bldg #19	A/C#1C	10/13/00	50EW-044-F610EA	Carrier	R-22	70
4	U-2 ID/FD Fan Bldg #20	A/C#2A	1/1/93	50DW044DAD600JA	Carrier	R-22	80
5	U-2 ID/FD Fan Bldg #20	A/C#2B	1/1/93	50DW044DAD600JA	Carrier	R-22	80
6	U-2 ID/FD Fan Bldg #20	A/C#2C	1/1/93	50DW044DAD600JA	Carrier	R-22	80
7	SERVICE #5	A/C#3	5/2/02	50EJB024-E610-0A-1	Carrier	R-22	56
8	SERVICE #5	A/C#1	5/2/02	50EJC084-E610EA-1	Carrier	R-22	50
9	AQCS Bldg #22	AH1-1	7/1/87		McQuay	R-22	55
10	AQCS Bldg #22	AH1-2	7/1/87		McQuay	R-22	55
11	PB locker shower	AH-41	7/1/08		TRANE	R-22	100
12	Control Bldg #35	CHLR WC1-1	4/8/98	3BGN-090	Carrier	R-22	156
13	Control Bldg #35	CHLR WCI-2	3/27/96	3BGT-090	Carrier	R-22	156
14	Control Bldg #35	CHLR WCL-3	4/1/97	3BGN-090	Carrier	R-22	156
15	C/T AC units	A/C#2	6/4/88	BWH240B400DA	GE	R-22	50

Below is a list of equipment which contains a listed refrigerant (R-22) in quantities less than 50 lbs. These numbers are an approximation
Air conditioning units- 120
Window units- 46
Water coolers- 30
Ice machines- 8

Attachment H

Verification of Risk Management Plan Submittal

st. johns river POWER PARK

Risk Management Plan (RMP) Reporting Center
c/o CSC
Suite 300
8400 Corporate Drive
New Carrollton, MD 20785

Attn: Risk Management Plans
Via: UPS

RE: Five Year Update/Re-submission of RMP Submittal and Certification Statement
St. Johns River Power Park
11201 New Berlin Road
Jacksonville, Florida 32226
EPA ID: 1000 0014 4676

Dear Sir or Madam:

Please find enclosed the referenced facility's RMP submittal CD with this certification statement.

To the best of the undersigned's knowledge, information, and belief formed after reasonable inquiry, the information submitted on the enclosed diskette is true, accurate, and complete.

Bruce W Kofler
Signature

Bruce Kofler
Print Name

Manager, Environmental Compliance
Title

8/14/07
Date

Attachment I

Fuel Analysis Specifications

NGS- Coal Quality Specifications

Quality ' as received'	**Minimum**	**Maximum**
Heat content, Btu/lb (HHV)	9500	na
Hardgrove Grindability	35	80
As received Particle size (inches)	0	2.5
Ash Fusion (reducing, soft F)	2,050	2,680
Volatile Matter	na	47.0
Proximate Analysis		
Volatile Matter	30	36
Fixed Carbon	42	na
Moisture	na	10.0 (Note 3)
Ash	15	20
Ultimate Analysis (% by weight)		
Carbon	59	72
Hydrogen	3.9	5.3
Nitrogen	0.8	1.6
Oxygen	3.0	9.8
Chlorine	na	0.1 (Note 4)
Sulfur	0.5	6.0
Moisture	na	10.0 (Note 3)
Ash	15	20
Fluoride	na	Note 5
Lead	na	Note 5
Mercury	na	Note 5
Mineral Analysis of Coal Ash		
Phosphorous Pent oxide	0.04	3.0
Silicon Oxide	30.0	65.0
Ferric Oxide	2.9	45
Aluminum Oxide	18.0	36.0
Titanium Oxide	0.3	3.0
Calcium Oxide	0.5	9.0
Magnesium Oxide	0.1	2.0
Sulfur Trioxide	0.1	8.0
Potassium Oxide	0.1	4.0 (Note 6)
Sodium Oxide	0.1	2.0 (Note 6)

JEA reserves the right to accept or reject any or all bids. If JEA accepts a bid, the Terms and Conditions outlined in "Product Delivery Contract for the Supply of Coal for JEA Jacksonville, Florida No. JSC-053-06, dated: June 1, 2006 will apply.

Notes:

1. na = no limit applicable.
2. All data is for fuel "as received", and is percent by weight unless otherwise noted.
3. Surface moisture of the crushed fuel should be below 10% to avoid conveying and feeding hang-ups.
4. The chlorine level in the fuel should be less than 0.1% on a dry basis to avoid corrosion and agglomeration problems.
5. The emissions guarantee shall be based upon controlled emissions as resulting from the combined inputs from fuel and limestone that do not exceed the following values:
   - Lead – 0.00278 lb/MBtu (HHV)
   - Mercury – 0.0000174 lb/MBtu (HHV)
   - Fluorine (as HF) – 0.0106 lb/MBtu (HHV)
6. The fuels fired in the boiler should have a combined acetic acid soluble sodium (Na) and potassium (K) content less than 0.05% (500 ppm) on a dry fuel basis to prevent bed sintering and agglomeration.

JEA reserves the right to accept or reject any or all bids. If JEA accepts a bid, the Terms and Conditions outlined in "Product Delivery Contract for the Supply of Coal for JEA Jacksonville, Florida No. JSC-053-06, dated: June 1, 2006 will apply.

JEA NGS Quality Guarantees of Fuel Grade Petroleum Coke

Quality 'as received'	**Minimum**	**Maximum**
Heat content, Btu/lb (HHV)	13000	na
Hardgrove Grindability	25	80
As received Particle size (inches)	0	3
Proximate Analysis (% by weight)		
Volatile Matter	7.0	14.0
Fixed Carbon	71.0	88.0
Moisture (%)	na	10.0
Ash	na	3.0
Ultimate Analysis (% by weight)		
Carbon	78.0	89.0
Hydrogen	3.2	5.8
Nitrogen	0.4	2.0
Oxygen	0.1	.18
Sulfur	3.0	8.0
Moisture	na	10.0 (Note 1)
Ash	na	3.0
Vanadium (ppm)	na	3500 (Note 2)
Nickel (ppm)	na	600 (Note 2)
Fluoride	na	(Note 3)
Lead	na	(Note 3)
Mercury	na	(Note 3)
Chlorine	na	(Note 4)
Alkalis	na	(Note 5)

Notes:

1. Surface moisture of the crushed fuel should be below 10% to avoid conveying and feeding hang-ups
2. The total vanadium and nickel content in the fuel should not exceed 2,000 ppm. The boiler manufacturer (Foster Wheeler) has recommended that optimum boiler performance is achieved when total vanadium and nickel content does not exceed 2,000 ppm. Operation at higher levels than 2,000 ppm will result in increased outages for unit cleaning and repairs.
3. The emissions guarantee shall be based upon controlled emissions as resulting from the combined inputs from fuel and limestone that do not exceed the following values:
    - Lead – 0.00278 lb/Mbtu (HHV)
    - Mercury – 0.0000174 lb/Mbtu (HHV)
    - Fluorine (as HF) – 0.0106 lb/Mbtu (HHV)
4. The chlorine level in the fuel should be less than 0.1% on a dry fuel basis to avoid corrosion and agglomeration problems.
5. The fuels fired in the boiler should have a combined acetic acid soluble sodium (Na) and potassium (K) content less than 0.05% (500 ppm) on a dry fuel basis to prevent bed sintering and agglomeration.
6. na = no limit applicable.
7. All data is for fuel "as received" and is percent by weight unless otherwise noted.

JEA reserves the right to accept or reject any or all bids. If JEA accepts a bid, the Terms and Conditions outlined in "Product Delivery Contract for the Supply of Petroleum Coke for JEA Jacksonville, Florida No. JSC-095-05, dated: July 1, 2005 will apply.

NGS

#6 RESIDUAL FUEL OIL PRODUCT QUALITY SPECIFICATIONS

Description	ASTM Test Method	#6 Residual Fuel Oil	
		Minimum	Maximum
Gravity, API @ 60 Deg F	D287	10.20	--
Flash Point, Deg F	D93	150	--
Sulfur, % weight	D4294	--	(1)
Viscosity, SSF @122 Deg F	D445	80	300
Ash, % weight	D482	--	0.10
Pour Point, Deg F	D97	--	100
Water by Distillation, % volume	D95	--	0.50
Sediment by Extraction, % weight	D473	--	0.20
Vanadium, ppm	AA/IP 288	--	200
Sodium, ppm	AA/IP 288	--	70
Asphaltenes, % weight	AA/IP 143	--	8.00
Heat of Combustion, Btu/Gallon	D240	150,000	--
Nitrogen, % weight (2)	D4629/D3228/D5762	Report	Report
Total Aluminum and Silicon, ppm	D5184	--	200
Nickel, ppm	AA	Report	Report

(1) As specified in Bid Form (permit maximum is 1.8%)
(2) Reported for environmental purposes

NGS

#2 DIESEL FUEL OIL PRODUCT QUALITY SPECIFICATIONS

Description	ASTM Test Method	#2 High Sulfur Diesel 0.5% Sulfur		#2 Low Sulfur Diesel 0.05% Sulfur		#2 Ultra Low Sulfur Diesel 0.0015% Sulfur	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Gravity, API @ 60 Deg F	D287/D4052	30	--	30	--	30	--
Flash Point, Deg F	D93	130	--	130	--	130	--
Sulfur, % weight	D129/D1552/D4294	--	0.50	--	0.05	--	--
Sulfur, ppm	D5453/D6920	--	--	--	--	--	15
Viscosity, cSt @104 Deg F	D445	2.0	3.0	2.0	3.0	2.0	3.0
Ash, ppm	D482	Report	Report	Report	100	Report	100
Pour Point, Deg F	D97	--	0	--	0	--	0
Water and Sediment, % volume	D1796/D2709	--	0.50	--	0.50	--	0.50
Vanadium, ppm	AA/IP 288	--	1.5	--	1.5	--	1.5
Calcium, ppm	AA	--	4.0	--	4.0	--	4.0
Lead, ppm	AA	--	1.0	--	1.0	--	1.0
Potassium, ppm	AA	--	2.0	--	2.0	--	2.0
Nitrogen, ppm (1)	D4629/D3228	Report	Report	Report	Report	Report	Report
Heat of Combustion, Btu/Gallon	D240	138,000	--	138,000	--	138,000	--
Carbon Residue on 10% bottoms, % weight	D189	--	0.25	--	0.25	--	0.25
Distillation, Deg F	D86						
10% Point		--	480	--	480	--	480
90% Point		--	640	--	640	--	640
End Point		--	690	--	690	--	690

(1) Reported for environmental purposes

Jones Fork

6. Quality Guarantees of Coal:

Note: 1. Offers of a pre-blended petcoke/other fuel product are not acceptable.
2. Synfuel offers with a latex binder may be acceptable.

"X" here if quality is same as previously offered					
	"As Received"	Acceptable Limits			
Quality "As Received"	Quality Offered	Btu/lb	HGI	Suspension Btu/lb	Rejection Btu/lb
Heat Content (Btu/lb)	12,300	12,913	40	12,813	12,713
		12,613	41	12,513	12,413
		12,330	42	12,230	12,130
		12,065	43	11,965	11,865
Hardgrove Grindability	43	11,814	44	11,714	11,614
		11,578	45	11,478	11,378
		11,354	46	11,254	11,154
		11,143	47+	11,043	10,943
Proximate Analysis (% by weight)	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum	Suspension	Rejection
Volatile Matter	34.0	23	40		
Fixed Carbon	46.70	37	60		
Ash	11.0	6	15	16	18
Moisture	7.0	4	15		
Ultimate Analysis (% by weight)	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum	Suspension	Rejection
Carbon	67.76	50	80		
Hydrogen	4.5	3.5	6		
Sulfur	1.30	0.5	2.5	4	4.2
Oxygen	6.87	3	9.5		
Nitrogen	1.43	0.4	1.9		
Chlorine	0.14	-	0.3		
Fluorine (ppm)	78.50	-	100		
Ash Mineral Analysis (% by weight)	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum		
Ferric Oxide	9.66	5	30		
Calcium Oxide	3.69	0.5	6.5		
Magnesium Oxide	1.05	0.1	2		
Sodium Oxide	0.59	0.1	2		
Potassium Oxide	2.33	0.1	4		
Silicon Oxide	48.7	30	58		
Aluminum Oxide	27.84	18	36		
Titanium Oxide	1.19	0.3	3		
Sulfur Trioxide	3.03	0.1	7		
Phos. Pentoxide	0.35	0.1	3		
Mercury	0.08				
Arsenic	8.88				
Undetermined	1.22				
Ash Fusion Temp (°F) Reducing Atmosphere	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum		
Hemispherical	2,350	2300	No Max		
Size Consist (Size) Percent of product less than 1/4 inch	54%				

6. Quality Guarantees of Coal:

Note: 1. Offers of a pre-blended petcoke/other fuel product are not acceptable.
2. Synfuel offers with a latex binder may be acceptable.

"X" here if quality is same as previously offered:

Quality "As Received"	"As Received" Quality Offered	Acceptable Limits Btu/lb	Acceptable Limits HGI	Suspension Btu/lb	Rejection Btu/lb
Heat Content (Btu/lb)	11,500	12,913	40	12,813	12,713
		12,613	41	12,513	12,413
		12,330	42	12,230	12,130
		12,065	43	11,965	11,865
Hardgrove Grindability	45	11,814	44	11,714	11,614
		11,578	45	11,478	11,378
		11,354	46	11,254	11,154
		11,143	47+	11,043	10,943

Proximate Analysis (% by weight)	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum	Suspension	Rejection
Volatile Matter	30.0	23	40		
Fixed Carbon	51.0	37	60		
Ash	16.0	6	15	16	18
Moisture	8.0	4	15		

Ultimate Analysis (% by weight)	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum	Suspension	Rejection
Carbon	69.0	50	80		
Hydrogen	4.5	3.5	6		
Sulfur	0.8	0.5	2.5	4	4.2
Oxygen	6.2	3	9.5		
Nitrogen	1.2	0.4	1.9		
Chlorine	0.1	-	0.3		
Fluorine (ppm)		-	100		

Ash Mineral Analysis (% by weight)	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum
Ferric Oxide	5.3	5	30
Calcium Oxide	0.5	0.5	6.5
Magnesium Oxide	0.7	0.1	2
Sodium Oxide	0.2	0.1	2
Potassium Oxide	2.2	0.1	4
Silicon Oxide	58.0	30	58
Aluminum Oxide	30.0	18	36
Titanium Oxide	1.3	0.3	3
Sulfur Trioxide	0.3	0.1	7
Phos. Pentoxide	0.2	0.1	3
Mercury			
Arsenic			
Undetermined	0.1		

Ash Fusion Temp (°F) Reducing Atmosphere	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum
Hemispherical	2,500	2300	No Max

Size Consist (Size)	
Percent of product less than 1/4 inch	50%

6. Quality Guarantees of Coal:

Note: 1. Offers of a pre-blended petcoke/other fuel product are not acceptable.
2. Synfuel offers with a latex binder may be acceptable.

"X" here if quality is same as previously offered		X			
	"As Received"	Acceptable Limits			
Quality *"As Received"*	Quality Offered	Btu/lb	HGI	Suspension Btu/lb	Rejection Btu/lb
Heat Content (Btu/lb)	11,000	12,913	40	12,813	12,713
		12,613	41	12,513	12,413
		12,330	42	12,230	12,130
		12,065	43	11,965	11,865
Hardgrove Grindability	51	11,814	44	11,714	11,614
		11,578	45	11,478	11,378
		11,354	46	11,254	11,154
		11,143	47+	11,043	10,943
Proximate Analysis (% by weight)	*"As Received"* Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum	Suspension	Rejection
Volatile Matter	32.7	23	40		
Fixed Carbon	44.1	37	60		
Ash	11.0	6	15	16	18
Moisture	13.0	4	15		
Ultimate Analysis (% by weight)	*"As Received"* Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum	Suspension	Rejection
Carbon	62.6	50	80		
Hydrogen	4.1	3.5	6		
Sulfur	0.7	0.5	2.5	4	4.2
Oxygen	7.3	3	9.5		
Nitrogen	1.2	0.4	1.9		
Chlorine	0.1	-	0.3		
Fluorine (ppm)	53	-	100		
Ash Mineral Analysis (% by weight)	*"As Received"* Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum		
Ferric Oxide	8.4	5	30		
Calcium Oxide	2.3	0.5	6.5		
Magnesium Oxide	2.2	0.1	2		
Sodium Oxide	0.6	0.1	2		
Potassium Oxide	2.1	0.1	4		
Silicon Oxide	60.3	30	58		
Aluminum Oxide	20.2	18	36		
Titanium Oxide	1.0	0.3	3		
Sulfur Trioxide	2.1	0.1	7		
Phos. Pentoxide	0.2	0.1	3		
Mercury	0.01 ppm				
Arsenic	1.5 ppm				
Undetermined	0.6				
Ash Fusion Temp (°F) Reducing Atmosphere	"As Received" Quality Offered	Acceptable Limits Minimum	Acceptable Limits Maximum		
Hemispherical	2,440	2300	No Max		
Size Consist (Size) Percent of product less than 1/4 inch	52%				

Emerald

6. Quality Guarantees of Coal:

Note: 1. Offers of a <u>pre-blended</u> petcoke/other fuel product are <u>not</u> acceptable.
2. Synfuel offers with a latex binder may be acceptable.

Quality "As Received"	*"As Received"* Quality Offered	Acceptable Limits Btu/lb	Acceptable Limits HGI	Suspension Btu/lb	Rejection Btu/lb
Heat Content (Btu/lb)	**13,000 typical**	12,913	40	12,813	12,713
		12,613	41	12,513	12,413
		12,330	42	12,230	12,130
		12,065	43	11,965	11,865
Hardgrove Grindability	**55 typical**	11,814	44	11,714	11,614
		11,578	45	11,478	11,378
		11,354	46	11,254	11,154
		11,143	47+	11,043	10,943
<u>Proximate Analysis (% by weight)</u>	***"As Received"* Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**	**Suspension**	**Rejection**
Volatile Matter	**35.0**	23	40		
Fixed Carbon	**50.4**	37	60		
Ash	**8.5**	6	15	16	18
Moisture	**8.5**	4	15		
<u>Ultimate Analysis (% by weight)</u>	***"As Received"* Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**	**Suspension**	**Rejection**
Carbon	**76.6**	50	80		
Hydrogen	**5.0**	3.5	6		
Sulfur	**2.6**	0.5	2.5	4	4.2
Oxygen	**5.7**	3	9.5		
Nitrogen	**1.5**	0.4	1.9		
Chlorine	**0.1**	-	0.3		
Fluorine (ppm)	**70**	-	100		
<u>Ash Mineral Analysis</u> (% by weight)	***"As Received"* Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**		
Ferric Oxide	**17.5**	5	30		
Calcium Oxide	**3.4**	0.5	6.5		
Magnesium Oxide	**0.8**	0.1	2		
Sodium Oxide	**0.6**	0.1	2		
Potassium Oxide	**1.6**	0.1	4		
Silicon Oxide	**46.5**	30	58		
Aluminum Oxide	**24.7**	18	36		
Titanium Oxide	**1.1**	0.3	3		
Sulfur Trioxide	**2.8**	0.1	7		
Phos. Pentoxide	**0.5**	0.1	3		
Undetermined	**0.5**				
Ash Fusion Temp (°F) Reducing Atmosphere	**"As Received" Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**		
Hemispherical	**2,290**	2300	No Max		
<u>Size Consist (Size)</u> Percent of product less than 1/4 inch	**60%**				

Fola

6. Quality Guarantees of Coal:

Note: 1. Offers of a <u>pre-blended</u> petcoke/other fuel product are <u>not</u> acceptable.
2. Synfuel offers with a latex binder may be acceptable.

"X" here if quality is same as previously offered					
	"As Received"	Acceptable Limits			
Quality *"As Received"*	**Quality Offered**	**Btu/lb**	**HGI**	**Suspension Btu/lb**	**Rejection Btu/lb**
Heat Content (Btu/lb)	**12,350**	12,913	40	12,813	12,713
		12,613	41	12,513	12,413
		12,330	42	12,230	12,130
		12,065	43	11,965	11,865
Hardgrove Grindability	**42**	11,814	44	11,714	11,614
		11,578	45	11,478	11,378
		11,354	46	11,254	11,154
		11,143	47+	11,043	10,943
<u>Proximate Analysis</u> <u>(% by weight)</u>	***"As Received"* Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**	**Suspension**	**Rejection**
Volatile Matter	**34.0**	23	40		
Fixed Carbon	**46.0**	37	60		
Ash	**13.0**	6	15	16	18
Moisture	**7.0**	4	15		
<u>Ultimate Analysis</u> <u>(% by weight)</u>	***"As Received"* Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**	**Suspension**	**Rejection**
Carbon	**66.87**	50	80		
Hydrogen	**4.28**	3.5	6		
Sulfur	**1.30**	0.5	2.5	4	4.2
Oxygen	**6.17**	3	9.5		
Nitrogen	**1.29**	0.4	1.9		
Chlorine	**.09**	-	0.3		
Fluorine (ppm)		-	100		
<u>Ash Mineral Analysis</u> <u>(% by weight)</u>	***"As Received"* Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**		
Ferric Oxide	**4.42**	5	30		
Calcium Oxide	**1.37**	0.5	6.5		
Magnesium Oxide	**.90**	0.1	2		
Sodium Oxide	**.27**	0.1	2		
Potassium Oxide	**2.38**	0.1	4		
Silicon Oxide	**57.28**	30	58		
Aluminum Oxide	**30.63**	18	36		
Titanium Oxide	**1.68**	0.3	3		
Sulfur Trioxide	**.43**	0.1	7		
Phos. Pentoxide	**.13**	0.1	3		
Mercury					
Arsenic	**6.00**				
Undetermined	**.51**				
Ash Fusion Temp (°F) Reducing Atmosphere	**"As Received" Quality Offered**	**Acceptable Limits Minimum**	**Acceptable Limits Maximum**		
Hemispherical	**2,500**	2300	No Max		
<u>Size Consist (Size)</u> Percent of product less than 1/4 inch	**55**				

INSPECTORATE

INSPECTORATE COLOMBIA LTDA.
Calle 77A No 74-172
Tel 3532550 Fax 3531364
Barranquilla - Colombia

Certificate :01-14045
Our Ref :6367-1
Slate :08184

TO : Coal Marketing Company Ltd.
(JEA / SJRPP)
CERREJON C/O CMC COAL MARKETING CO. LTD.

VESSEL	:	YASA UNSAL SUNAR
SHIPPER	:	CARBONES DEL CERREJON LIMITED
CONSIGNEE	:	JEA/SJRPP
PRODUCT	:	STEAM COAL FROM "EL CERREJON"
SELLER	:	CERREJON C/O CMC COAL MARKETING CO. LTD.
LOADING PORT	:	PUERTO BOLIVAR, COLOMBIA
DISCHARGE PORT	:	JACKSONVILLE, FLA. USA (SJRCT-ST JOHNS RIVER COAL TERMINAL)
DATE	:	JUNE 07th, 2008
QUANTITY	:	46,389.00 MT
	:	51,135.00 ST

SAMPLING AND ANALYSIS CERTIFICATE

This is to certify that the sampling of this cargo of coal was conducted by INSPECTORATE COLOMBIA LTDA. according to the ASTM standards:

INSPECTORATE COLOMBIA LTDA., certifies that the following analytical results were established by us, at the Laboratory of PUERTO BOLIVAR, COLOMBIA in accordance with the applicable ASTM standards:

CALCULATED COMPOSITE	AS RECEIVED
PROXIMATE ANALYSIS	
Total Moisture, pct. wt.	13.36
Ash, pct. wt.	9.33
Volatile matter, pct. wt	32.76
Fixed carbon, pct. wt	44.55
Sulphur, pct. wt.	0.57
Gross calorific value,Btu/Lb	11020

RESULTS BASED ON AVERAGE WEIGHTED COMPOSITE SAMPLE

MINERAL ANALYSIS OF ASH,% wt	IGNITED BASIS
Silica, SiO_2	60.27
Alumina,Al_2O_3	19.97
Titania,TiO_2	1.06
Ferric Oxide,Fe_2O_3	8.69
Lime, CaO	2.18
Magnesia, MgO	2.10
Sodium Oxide,Na_2O	0.49
Potassium Oxide, K_2O	2.10
Phos. Pentoxide, P_2O_5	0.20

INSPECTORATE

INSPECTORATE COLOMBIA LTDA.
Calle 77A No 74-172
Tel 3532550 Fax 3531364
Barranquilla - Colombia

Certificate :01-14045
Our Ref :6367-1
Slate :08184

VESSEL : YASA UNSAL SUNAR

ANALYSIS CERTIFICATE

Sulfur Trioxide, SO3	2.05
Undetermined	0.89

HARDGROVE GRINDABILITY INDEX
HGI= 52 at 4.30 Percent of moisture

	AS RUN
FUSION TEMPERATURE OF ASH (°F)	OXIDIZING
Initial deformation temperature. IT	2399
Softening temperature, (H=W),ST	2485
Hemispherical temperature, (H=1/2W),HT	2579
Fluid temperature FT.	2675

FUSION TEMPERATURE OF ASH (°F)	REDUCING
Initial deformation temperature. IT	2269
Softening temperature, (H=W),ST	2365
Hemispherical temperature, (H=1/2W),HT	2459
Fluid temperature FT.	2560

	AS RECEIVED
FLUORINE (PPM)	47
ULTIMATE ANALYSIS	
Total moisture, pct. wt	13.36
Carbon, pct. wt	62.92
Hydrogen, pct. wt	4.29
Nitrogen, pct. wt	1.30
Ash, pct. wt	9.33
Sulfur, pct. wt	0.57
Chlorine, pct. wt	0.03
Oxigen, pct. wt (by diff)	8.20

PUERTO BOLIVAR, COLOMBIA
June 10th, 2008

For and on behalf of,

INSPECTORATE COLOMBIA LTDA.

FORMATO SPAC REV. #2 11/04

Attachment J

Procedures for Startup and Shutdown

Procedures for Startup and Shutdown

Procedures for startup and shutdown will be completed in accordance with the manufactures' operating procedures and/or based on plant experience. Excess emissions resulting from startup and shutdown are permitted in condition 26 of PSD-FL-265 and in specific permit conditions of Operation Permit 0310045-008-AV with Rule 62-210.700(1) referenced.

The following is further information on startup and shutdown of specific emissions units.

NGS – CFB Nos. 1 and 2

Startup and Shutdown Procedures

The CFBs are started and shut down in the most efficient manner possible taking into account manufacturer recommendations, personnel and equipment safety and limitations, operating experience, and other factors such as fuel type and process variables.

NGS – Boiler No. 3

Startup and Shutdown Plans – O&M Procedures

The JEA will maintain and operate Boiler No. 3 efficiently to maximum performance to minimize environmental emissions. JEA will take necessary actions to ensure the unit does not exceed permitted limits, and will remove a unit from service if required.

NGS Boiler No. 3 is started-up on natural gas. L.P. gas is used as ignitor fuel source. After Start-up the unit is fueled by natural gas and/or #6 fuel oil, depending upon availability.

All JEA units are operated under the boiler, turbine/generator, and operational guidelines as furnished by the manufacturers and JEA internal guidelines and procedures.

Boiler equipment is maintained under a preventative maintenance routine schedule as set forth in JEA's internal P.M. program. Some examples of boiler equipment PM's are: weekly burner cleaning, daily sootblowing, scheduled boiler washings, and continuous boiler emission monitoring. Other maintenance is performed on an as needed basis.

When excessive emissions conditions occurs, the control room operator takes immediate corrective action.

When a unit shut down is required or unit trip occurs, the unit is brought down under established manufacturer and JEA operational procedures.

NGS – Combustion Turbines No. 5, No. 6, No. 7 and No. 8

Startup and Shutdown Plans

The JEA will maintain and operate Combustion Turbines (CTs) No. 5, No. 6, No. 7 and No. 8
efficiently to maximum performance to minimize environmental emissions. JEA will take necessary actions to ensure the units do not exceed permitted limits, and will remove a unit from service if required.

The NGS CTs are started and operated on No. 2 fuel oil.

All JEA units are operated under the boiler, turbine/generator, and operational guidelines as furnished by the manufacturers and JEA internal guidelines and procedures. Combustion turbine equipment is maintained under a preventative maintenance routine schedule as set forth in JEA's internal P.M. program.

When excessive emissions conditions occurs, the control room operator takes immediate corrective action.

When a unit shut down is required or unit trip occurs, the unit is brought down under established manufacturer and JEA operational procedures.

JEA Northside Generating Station – Best Operational Practices

Startup Procedures

Activity	Time Start	Time Complete
Pull tags, align boiler for start up	0	1
Circulator(s) In Service	0	2
Closed Cooling Water In Service	0	2
Turbine Lube Oil System In Service	2	2
Seal Oil System In Service	2	2
Turbine on Turning Gear	2	2
Condensate System In Service/Deareator Full/Circulate	0	6
Pull Vacuum/Seal Steam	2	2
Place BFP In-Service	2	2
Drum Filled to Operational Level	2	1
Start ID Fans & Blowers	1	3
Boiler Purge Complete	2	3
Load Bed	3	11
Fire Startup Burners	4	12
Turbine Pre-Warm	4	4
Refractory Cure	5	17
"Build Bed Temp to 1100 deg., Start Solid Fuel"	17	10
"Build Bed Temp to 1400 deg., Build Boiler Pressure"	27	4
Roll Turbine	15	3
Unit Online - Breaker Closed	18	0
Hold @ 25% MW Loading	18	3
Unit Offline - Peform Overspeed Trip Test	21	1
2nd Roll up of Turbine After O/S Tests	22	1

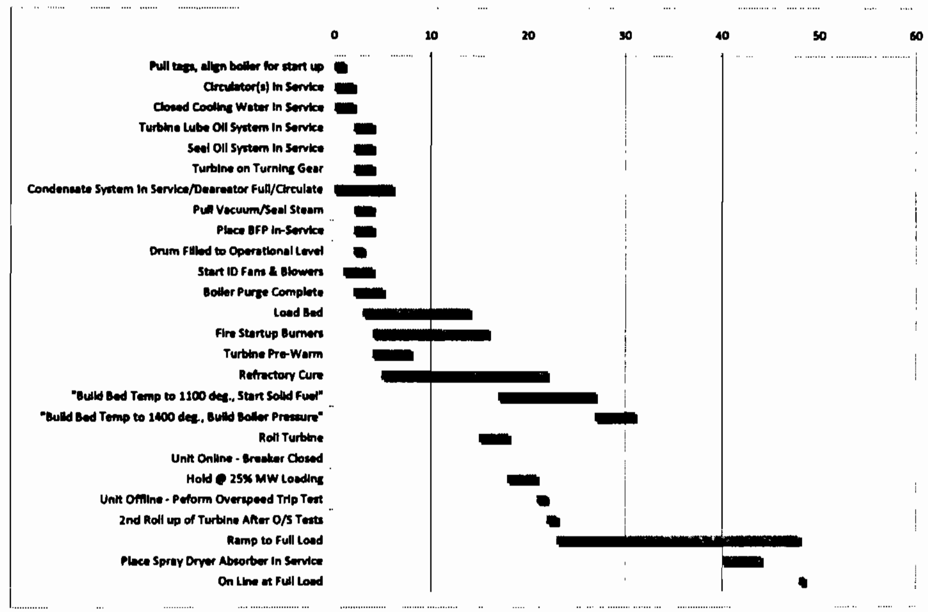
Ramp to Full Load	23	25
Place Spray Dryer Absorber In Service	40	4
On Line at Full Load	48	0.5

Time zero represents final clearance holder sign off on the boiler, which is typically the last thing we are waiting for to conduct a start up. Some of the items may be started prior to this time depending upon system conditions.

The above chart takes us from boiler release at zero hours, online in 24 hours, with a full bed inventory turnover and full load reached at 48 hours after release.

NGS CFB Startup

Activity	Time Start	Time Complete
Pull tags, align boiler for start up	0	1
Circulator(s) In Service	0	2
Closed Cooling Water In Service	0	2
Turbine Lube Oil System In Service	2	2
Seal Oil System In Service	2	2
Turbine on Turning Gear	2	2
Condensate System In Service/Deareator Full/Circulate	0	6
Pull Vacuum/Seal Steam	2	2
Place BFP In-Service	2	2
Drum Filled to Operational Level	2	1
Start ID Fans & Blowers	1	3
Boiler Purge Complete	2	3
Load Bed	3	11
Fire Startup Burners	4	12
Turbine Pre-Warm	4	4
Refractory Cure	5	17
"Build Bed Temp to 1100 deg., Start Solid Fuel"	17	10
"Build Bed Temp to 1400 deg., Build Boiler Pressure"	27	4
Roll Turbine	15	3
Unit Online - Breaker Closed	18	0
Hold @ 25% MW Loading	18	3
Unit Offline - Peform Overspeed Trip Test	21	1
2nd Roll up of Turbine After O/S Tests	22	1
Ramp to Full Load	23	25
Place Spray Dryer Absorber In Service	40	4
On Line at Full Load	48	0.5



Shut-down Procedures, NS 1 & 2

Activity	Time Start (hour)	Duration (hours)
Begin reducing AQCS slurry density	0	24
Begin reducing load	24	5
SDA out of service at 240 °F inlet or 75 MW	26	0.25
Clear and drain AQCS tanks	26.25	6
Run fuel off of solid fuel feeder belts	26	3
Verify all economizer crushers running	24	0.5
Place above bed burners in service	26	3
Remove unit from service (off-line)	29	0.25
Hang crossover clearance	29.25	1
Relieve boiler pressure using HP/LP bypass system	29	4
Close boiler stop valve at 100 psi	33	0.1
Open all vents and drains at 25 psi	33	2
Open top 4 floor HRA doors	29	1
Take furnace draft to -0.5 in.	30	0.5
Increase total air flow to 2000 klbs/hr	30.5	0.25
Maintain PA duct pressure 65 - 70 in.	30.5	4
Strip bed from boiler	24	15
Flush INTREX sections	29	11
Crack open cycone crossover inlet doors at <300 °F	37	0.5
Begin exterior crossover cleaning	38	12
Blasting in back pass area begins	37	13
Remove fans from service at <120 °F	50	0.5
Open remaining backpass doors	50.5	1
Adjust furnace draft to 0.5 in. using 1 ID fan	51.5	0.5
Place locking device on ID fan in service	52	0.5
Hang boiler and stripper cooler clearances	52	2
Begin internal crossover cleaning	54	12
Shut down blowers when LOS achieved on INTREX's	66	0.25
Stop stripper cooler rotary valves	40	0.1
Place second gathering conveyor in service	40	1
Place second bed ash blower in service	40	1
Shut down bed ash blowers when surge hoppers empty	41	0.25

JEA-Northside Generating Station
SDA-Startup Procedures

1. Start emergency conveyor
2. Close, or verify closed, the discharge isolation slide gate
3. Place the air lock slide gates in automatic control
   a. Switch air lock sequence control to ON, and place it in automatic
   b. Place both air lock controls in AUTO
   c. Verify that both airlock slide gates cycle properly
4. Place SDA bin activator in AUTO
5. Place the recycle slurry mix tank in service
   a. Close the mix tank drain valve
   b. Fill the tank to 50% using reuse water through valve 920
   c. Start the mix tank agitator
   d. Open, or verify open, valve 631
   e. Start A or B recycle slurry transfer pump
      1. Verify valve sequence during start up
6. Place the recycle slurry storage tank in service
   a. Close the storage tank drain
   b. Place the recycle slurry separator in AUTO
   c. Fill the storage tank to 80%
      1. Open the "chain valve" to admit reuse water, or
      2. Transfer water over from the mix tank by placing valves 631 and 633 in AUTO and adding water using valve 920
   d. Start the storage tank agitator
   e. If not already done, place valves 631 and 633 in AUTO
   f. Start A or B feed slurry transfer pump
7. Place fluidizing air in service
   a. Start 2 fluidizing air blowers
      1. Line one blower up to the fabric filter hoppers
      2. Line one blower up to the recycle bin
8. Verify that the AQCS system is in service
   a. Emergency conveyor in
   b. Recycle mix tank at 50% level with one pump in service
   c. Recycle storage tank at 80% level with one pump in service
   d. Two fluidizing air blowers in service
9. Verify that SDA inlet temperature is >275F
10. Verify that atomizing air is available
    a. 2 compressors for 1 SDA in service
    b. 3 compressors for 2 SDA's in service
    c. Open, or verify open, atomizing air valve to the SDA
    d. Verify SDA air pressure >90 PSI
11. Set up SDA for service
    a. Verify a minimum of 8 nozzles available and in service
    b. Place the final filter in AUTO for the pump to be placed in service
    c. Place penthouse drain 572 in AUTO
12. Begin spraying in the SDA
    a. Set the feed slurry pump speed controller output to 0%
    b. Start the feed slurry pump
       NOTE: Minimum flow is approx 80 GPM
    c. Allow the SDA outlet temperature to stabilize with minimum flow
    d. Increase pump speed controller slopwly until outlet temperature reaches 200°F

1. Verify nozzle flow remains <15 GPM
2. Add nozzles as needed

e. Verify that the feed slurry pump speed output is lined up with the
f. feed slurry flow demand control output
g. Place the feed slurry pumpspeed controller in AUTO
h. Verify SDA outlet temeprature is stable
   1. Enter 200°F in the outlet duct temperature controller setpoint

13. Place the SDA spray control in automatic
   a. Verify that the AQCS system is functioning normally
   b. Verify outlet duct temperature controller is controlling outlet temperature to the setpoint
   c. Enter the spray flow GPM as the setpoint into the flow demand controller
   d. Place the flow demand controller in AUTO
   e. Set the outlet duct temperature controller
      1. Divide the current spray flow by 250

      NOTE: The controller works on percentages, dividing by 250 gives this controller a functional input for the control output value.

      2. Enter this value as the control output for the SDA temperature controller
      3. Place the SDA temperature controller in AUTO
      4. Place the flow demand controller in CASCADE
   f. Increase SDA outlet temperature
      1. In increments of 5F, move the set point to the desired temperature.
      2. When making adjustments, allow the SDA and temperatures to stabilize before making the next adjustment.
      3. To many quick adjustments or a single large adjustment can cause a problem or a series of problems.
      4. The SDA controls will maintain the set temperature by varying pump speeds and the flows associated with them.
      5. Monitor flow rates and determine proper nozzle placement.

14. Establish density in the AQCS tanks
   a. Set the density controller
      1. Set the recycle density controller output to 100

      NOTE: This gives a 0% output to the feeders

      2. Set the recycle density controller setpoint to 0
   b. Place the normal ash conveyor in service
      1. Start the ash delumper
      2. Start the normal ash conveyor
      3. Open the discharge isolation slide gate
      4. Shut down the emergency conveyor
      5. Place discharge isolation slide gate in AUTO
      6. Place emergency ash conveyor control in AUTO
   c. Set up the recycle bin rotary feeders
      1. Open the recycle bin slide gate to the recycle feeder to be placed in service
      2. Place the recycle feeder in AUTO

      NOTE: The recycle feeders will not run unless reuse water flow rate is >100 GPM

      3. Place the recycle feeder speed controller in AUTO

      4. Place the recycle density controller in AUTO
   d. Increase density
      1. Set the recycle density controller set point to a value 3% higher than the current density. **NOTE: This will begin adding ash and building density in the mix tank**
      2. Once density reaches the value in the set point, incrementally increase the set point until you reach 20% density.
      3. This must be done slowly to prevent overloading the slurry mixing process. It may take two hours to reach a 20% density.

JEA-Northside Generating Station
SDA-Shutdown Procedures

NOTE: The SDA should be shut down when the CFB load drops below 25% MCR or the SDA inlet temperature drops below 240 deg.

1. Place the heated reuse water inlet control valve (FCV-920) in manual at 0 control output.
   a. Verify that all ash supplies to mix tank are secured so that no ash can enter the mix tank
2. Verify that the in service final filter is in AUTO and that valve 572 (ring header drain) is in AUTO
3. Gradually reduce SDA feed slurry flow to minimum values.
4. Remove the operating feed slurry pump from service.
   a. Verify all valves operate in the proper sequence as follows:
      1. The feed slurry pump discharge valve (A = 512 or B = 912) and flush valve (A = 514 or B= 914) will open and remain open during the duration of the flush.
      2. The ring header drain (572) will open for 60 seconds, then close.
      3. After a 30 second delay "A" SDA zone nozzles will open for 40 seconds then close
      4. After a 30 second delay "B" SDA zone nozzles will open for 40 seconds then close
      5. After a 30 second delay "C" SDA zone nozzles will open for 40 seconds then close
      6. The flush valve (A= 514 or B = 914) closes.
      5. If the SDA is to be out of service for more than 24 hours, all SDA nozzles should be cleaned to insure a clean restart.
      6. If the SDA is to be out of service for more than 8 hours inspect and clean both final filters
      7. If the SDA is to be out of service for 4 days or more
         a. Shut down the Recycle Ash Feeders.(003 and 004)
         b. Close both Recycle Bin bottom slide gates (005 and 006)
         c. Drain the Recycle Slurry Mix Tank
         d. Insure that the Recycle Slurry Mix Tank agitator (002) and Recycle Slurry Transfer Pumps trip at 35% tank level. (If not remove those from service at 35% tank level.)
         e. Drain the Recycle Slurry Storage Tank
         f. Ensure that the Recycle Slurry Storage tank agitator (002) and Feed Slurry Transfer Pumps trip at 35% tank level
            1. If pumps do not trip out, remove the pumps from service at ~35%

SJRPP – Boiler No. 1 and Boiler No. 2
Startup and Shutdown Plans
Unit Start-Up

The SJRPP units utilize Electrostatic Precipitators for opacity control, Wet Limestone Scrubbers for sulfur dioxide control, and Staged Combustion Technologies in conjunction with Selective Catalytic Reaction (SCR) for control of nitrogen oxides.

During start-up, the SJRPP units initially utilize No. 2 Fuel Oil igniters. Once steam quality and turbine conditions are sufficient, coal is introduced to the furnace and oil igniters remain in service for flame stabilization at low burner capacities. Opacity is reduced to less than 20% through partial energization of precipitator fields after coal is introduced to the furnace and the precipitator reaches 200 F. After opacity is less than 20%, scrubber module(s) are placed in service to facilitate sulfur dioxide removal. After the precipitator has thermally soaked for two hours in excess of 200 F, additional precipitator fields are energized to further reduce opacity and particulate burden to the scrubber.

Excessive NOx formation does not typically occur at low heat input levels associated with unit start-up. The units will be initially started with the selective catalytic reaction (SCR) system out of service and by-passed to prevent oil residue contamination of the catalyst banks. Once the flue gas leaving the boilers reaches 612 degrees F, the SCRs will be placed in service.

Unit Shut Down

Upon a unit shut-down or unit trip, automatic controls will abruptly isolate all fuel sources from the furnace, de-energize the precipitator and open the scrubber bypass. No further intentional combustion can occur until the furnace and SCR is sufficiently purged with air. The purging requirement is a requisite for the start-up procedure to begin anew.

Attachment K

O&M Plan

O&M Plan

The emission units will be operated and maintained in accordance with manufacturer's recommendations, operations and maintenance experience, and technical guidance taking into account protection of equipment, safety of personnel and other factors as deemed necessary to maintain compliance with the permitted limits.

Attachment L

Compliance Demonstration Reports

Submittal Dates for Northside Stack Tests

Unit	Emission Unit No.	Submittal Date
1 PM/PM10, VE:	EU-027	4/10/2007
2 PM/PM10, VE:	EU-026	4/10/2007
3 PM, VE:	EU-003	8/8/2007
GT3 VE, NOx:	EU-006	3/26/2008
GT4 VE, NOx:	EU-007	3/26/2008
GT5 VE, NOx:	EU-008	3/26/2008
GT6 VE, NOx:	EU-009	3/26/2008
1 VOC	EU-027	7/30/2007
2 VOC	EU-026	7/30/2007

SJRPP 2007 Annual Performance Test Information Summery

Test dates were: Unit 1 Particulate October 23, 2007
Unit 2 Particulate October 24, 2007
Other VE October 22, 2007
STI VEs October 22, 2007

Performance Report Submitted: December 4, 2007

TABLE 1
Summary of Particulate Emissions

Source	Particulate (lb/mmBtu)	Permit (lb/mmBtu)
Unit 1 Compliance	0.0032	0.03
Unit 2 Compliance	0.0026	0.03

TABLE 2
Summary of Visible Emissions

Source	Average VE (%)	Highest 6 min (%)	Permitted (%)
Unit 1 Stack Soot Blowing	5.0	5.0	20
Unit 2 Stack Soot Blowing	0.0	0.0	20
Limestone Reclaim Hopper	0.0	0.0	5
Limestone Silo (1DC)	0.0	0.0	5
Limestone Silo (2DC)	0.0	0.0	5
Fuel Handling Building	0.0	0.0	5
Unit 1 Fuel Storage Bins	0.0	0.0	5
Unit 2 Fuel Storage Bins	0.0	0.0	5
Saleable Fly Ash Silo 1A	0.0	0.0	5
Saleable Fly Ash Silo 1B	0.0	0.0	5
Saleable Fly Ash Silo 2A	0.0	0.0	5
Saleable Fly Ash Silo 2B	0.0	0.0	5
Non-Saleable Fly Ash Silo 1A	0.0	0.0	5
Non-Saleable Fly Ash Silo 2A	0.0	0.0	5

TABLE 3
Summary of Visible Emissions (Separation Technologies / Pro Ash)

Source	Average VE (%)	Highest 6 min (%)	Permitted (%)
Central Vacuum	0.0	0.0	5.0
Ammonia Feed ash Silo	0.0	0.0	5.0
Ammonia Filter Receiver	0.0	0.0	5.0
Dust Collector	0.0	0.0	5.0
East Separator A Filter Rec.	0.0	0.0	5.0
West Separator B Filter Rec.	0.0	0.0	5.0

Unit 1 Data

Test Date: October 25, 2007

TABLE 1
Relative Accuracy Summary

PARAMETERS	LOCATION	RELATIVE ACCURACY	BIAS	ALLOWED ANNUAL	ALLOWED BIANNUAL
NOx (lb/mmBtu)	Outlet	3.501	NB	7.5%	10%
SO2 (PPM)	Outlet	3.540	NB	7.5%	10%
C02 (%)	Outlet	1.804	NB	7.5%	10%
SO2 (lb/mmbtu)	Outlet	4.809	NA	20%	NA
HIGH FLOW (kscfh)	Outlet	1.560	NB	7.5%	10%
SO2 (lb/mmbtu)	Inlet	2.439	NA	20%	NA
CO2 (%)	Inlet	1.610	NA	20%	NA

TABLE 1
Gaseous Emissions Summary **Unit 1**

Run #	Average of RATA Runs	Test Date	NOx PPM	NOx lb/mmBtu	SO2 PPM	SO2 lb/mmBtu	CO2 %
1	1 – 3	10-25-07	281.9	0.488	124.7	.0.301	12.4
2	4 – 6	10-25-07	287.8	0.498	126.5	0.304	12.4
3	7 – 9	10-25-07	288.9	0.503	125.2	0.303	12.3
Avg.			**286.2**	**0.496**	**125.5**	**0.303**	**12.4**

Unit 2 Data

Test Date: October 24, 2007

TABLE 1
Relative Accuracy Summary

PARAMETERS	LOCATION	RELATIVE ACCURACY	BIAS	ALLOWED ANNUAL	ALLOWED BIANNUAL
NOx (lb/mmBtu)	Outlet	1.882	NB	7.5%	10%
SO2 (PPM)	Outlet	5.363	NB	7.5%	10%
C02 (%)	Outlet	2.159	NA	7.5%	10%
SO2 (lb/mmbtu)	Outlet	3.633	NA	20%	NA
HIGH FLOW (kscfh)	Outlet	2.413	NB	7.5%	10%
SO2 (lb/mmbtu)	Inlet	2.734	NA	20%	NA
CO2 (%)	Inlet	2.896	NA	20%	NA

TABLE 2
Gaseous Emissions Summary **Unit 2**

Run #	Average of RATA Runs	Test Date	NOx PPM	NOx lb/mmBtu	SO2 PPM	SO2 lb/mmBtu	CO2 %
1	1 – 3	10-24-07	214.0	0.344	67.7	0.151	13.4
2	4 – 6	10-24-07	225.6	0.364	67.4	0.151	13.3
3	7 – 9	10-24-07	226.8	0.368	65.5	0.148	13.3
Avg.			**222.1**	**0.359**	**66.9**	**0.150**	**13.3**

TABLE 1
Relative Accuracy Summary
Unit 1

PARAMETERS	LOCATION	RELATIVE ACCURACY	ALLOWABLE
CO (ppm)	Stack	6.585	10%
CO (lb/mmbtu)	Stack	7.527	10%
CO_2 (%)	Stack	1.804	20%

CO LB/MMBTU RELATIVE ACCURACY

PLANT: SJRPP
UNIT: 1 Outlet
LOAD: NORMAL
DATE: 10/25/2007

ANALYZER: TECO
SERIAL # 0702220031

RUN	TIME START	TIME END	REFERENCE METHOD (CO lb/mmbtu)	CEM RESPONSE (CO lb/mmbtu)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	838	859	0.060	0.064	-0.004	0.000
2	919	940	0.070	0.074	-0.004	0.000
3	951	1012	0.068	0.064	0.004	0.000
4	1024	1045	0.048	0.051	-0.003	0.000
5	1058	1119	0.052	0.054	-0.002	0.000
6	1130	1151	0.034	0.032	0.002	0.000
7	1203	1224	0.045	0.049	-0.004	0.000
8	1235	1256	0.036	0.039	-0.003	0.000
9	1306	1327	0.029	0.028	0.001	0.000
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			0.049	0.051	-0.012	0.000

TABLE 1
Relative Accuracy Summary
Unit 2

PARAMETERS	LOCATION	RELATIVE ACCURACY	ALLOWABLE
CO (ppm)	Stack	9.079	10%
CO (lb/mmbtu)	Stack	6.475	10%
CO_2 (%)	Stack	2.159	20%

CO PPM RELATIVE ACCURACY

PLANT: SJRPP
UNIT: 2 Outlet
LOAD: NORMAL
DATE: 10/24/2007

ANALYZER: TECO 48i
SERIAL # 0702220029

RUN	TIME START	TIME END	REFERENCE METHOD (CO ppm)	CEM RESPONSE (CO ppm)	ARITHMATIC DIFFERENCE	DIFFERENCE SQUARED
1	853	914	252.99	270.30	-17.306	299.502
2	924	945	272.83	291.40	-18.569	344.807
3	1005	1026	260.26	284.80	-24.542	602.307
4	1036	1057	141.65	149.50	-7.853	61.665
5	1106	1127	211.83	229.10	-17.274	298.379
6	1138	1159	201.90	210.60	-8.699	75.664
7	1230	1251	142.52	148.40	-5.876	34.527
8	1303	1324	139.25	147.90	-8.649	74.807
9	1338	1359	153.83	158.30	-4.474	20.015
			AVERAGE	AVERAGE	SUM OF DIFF.	SUM OF THE SQUARES
			197.451	210.033	-113.241	1811.674

SO$_3$ Data

TABLE 1
Summary of SO$_3$ Emissions

Source	Method 8 lb/hr	Method 8A lb/hr	Method 8 tons/yr	Method 8A tons/yr	Allowable tons/yr
Unit 1	67.88	37.42	297.3	163.88	1,066
Unit 2	73.27	18.89	320.9	82.75	1,066

Attachment M

Compliance Assurance Monitoring Plan

Compliance Assurance Monitoring Plan for NGS/SJRPP

This permit application incorporates by reference the approved CAM Plan listed in Appendix CAM of the current Title V Operating Permit 0310045-016-AV. The existing current Appendix CAM is attached.

It should also be noted here that a CAM Plan is not required for NO_x and SO_2 emissions since the use of CEMS that provides results in units of the standard for the pollutant of interest and meets the criteria in 40 CFR Part 64.3 (d)(2) is considered presumptively acceptable CAM.

CAM Plan for Separation Technologies LLC
Ash Processing Facility
St. John's River Power Park, Jacksonville, FL

Please refer to the May 2004 permit application for the STI process that included the CAM plan for Ash Processing Facility- Separator Dust Collector Vent (EU046). Since the CAM plan was submitted and approved within the last five years of submittal of this Title V renewal Application package, it is not included in this document.

APPENDIX CAM

Compliance Assurance Monitoring Requirements

JEA

Northside Generating Station

Emissions Units 026 & 027

St. Johns River Power Park

Emissions Units 016 & 017

Compliance Assurance Monitoring Requirements

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.

[40 CFR 64.6(a)]

2. The attached CAM plan(s) include the following information:
   (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
   (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
   (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.

[40 CFR 64.6(c)(1)]

3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 9.**) and reporting exceedances or excursions (see **CAM Conditions 10. – 14.**).

[40 CFR 64.6(c)(2)]

4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 17.**).

[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.

[40 CFR 64.7(a)]

6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the

operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

8. Response to excursions or exceedances.
   a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
   b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under **CAM Condition 8.a.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

11. Elements of a QIP:
   a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
   b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(i) Improved preventive maintenance practices.
(ii) Process operation changes.
(iii) Appropriate improvements to control methods.
(iv) Other steps appropriate to correct control performance.
(v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

a. Failed to address the cause of the control device performance problems; or
b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

<u>40 CFR 64.9 Reporting And Recordkeeping Requirements.</u>

15. <u>General reporting requirements.</u>

a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
   (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   (iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. <u>General recordkeeping requirements.</u>

a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10.** through **14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

<u>40 CFR 64.10 Savings Provisions.</u>

17. It should be noted that nothing in this appendix shall:

a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.

c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

Northside Generating Station

Emissions Units 026 & 027

2,764 MMBtu/Hr Coal And Petroleum Coke-Fired Boilers
Particulate Matter Emissions Controlled By Baghouses

Monitoring Approach and Corrective Action Procedures

Table 1. Monitoring Approach

		Compliance Indicator
I.	Indicator	Stack opacity
	Measurement Approach	Continuous opacity monitoring system (COMS)
II.	Indicator Range	An excursion is defined as 5 consecutive 6-minute averages of opacity greater than 6.0%.
III.	Performance Criteria	
	A. Data Representativeness	Based on available data under normal operation, the representative stack opacity of each unit is < 5 %. A 50% average opacity above 5% during non-startup or shutdown periods is atypical and may indicate a potential problem with the baghouse.
	B. Verification of Operational Status	Annual testing during normal operation is used to calibrate the opacity monitor and determine the opacity and verify particulate mass loading.
	C. QA/QC Practices and Criteria	Install and operate COMS according to 40 CFR Appendix B, Performance Specification 1 and general provisions 60.13.
	D. Monitoring Frequency	Continuous.
	E. Data Collection Procedures	The COMs collects data that are reduced to 6-minute averages. (5 consecutive 6-minute averages greater than 6.0% indicate an excursion)
	F. Averaging Period	6 minutes.

Table 2. Corrective Action Procedures Summary

		Description
I.	Initiation of Corrective Action Procedures	Corrective action shall be initiated with the discovery of 5 consecutive 6-minute averages of opacity greater than the opacity that defines an excursion (as defined in Table 1). The plant staff that made the discovery shall immediately notify the shift supervisor or responsible official. This action describes a corrective action trigger.
II.	Time of Completion of Corrective Action Procedures	As soon as practically possible.
III.	Corrective Action	The shift supervisor or responsible official will implement the following as a corrective action. Procedures as described in the Fabric Filter Bag Inspection and Diagnostic Procedures (FFBIDP) as presented in the Operations and Maintenance Plan (O&M Plan) includes the following alternatives that will be initiated as necessary. • Perform operational diagnostics to identify cause of the excursion. • If operational diagnostics indicate the failure of a bag(s), the failed bag will be identified and the reason for failure will be identified. • If isolation of the compartment can be accomplished to reduce opacity below the excursion, such measures will be undertaken. • In the event of the need for bag replacement, the task will be undertaken based on procedures described in the O&M Plan for the facility. Regardless of the failure mechanism, baghouse operation will be restored such that the cause of excursion is identified and appropriate actions taken to ensure opacity below excursion levels.

St. Johns River Power Park

Emissions Units 016 & 017

6,144 MMBtu/Hr Coal And Petroleum Coke-Fired Boilers
Particulate Matter Emissions Controlled By ESP

Monitoring Approach and Corrective Action Procedures

Table 3. Monitoring Approach

		Compliance Indicator
IV.	Indicator	Duct opacity.
	Measurement Approach	Continuous opacity monitoring system (COMS).
V.	Indicator Range	An excursion is defined as any 1-hour block average of opacity greater than 18% (other than startup and shutdown periods).
VI.	Performance Criteria	
	A. Data Representativeness	Based on available data under normal operation, the representative stack opacity of each unit is in the range of 5 to 15%. In addition, the COMS are located upstream of the scrubber and as such; the opacity at the stack exit is lower than the value indicated by the COMS. Therefore, 18% opacity during non-startup or shutdown periods is atypical and may indicate a potential problem with the ESP.
	B. Verification of Operational Status	Annual testing during normal operation is used to calibrate the opacity monitor and determine the opacity and verify particulate mass loading.
	C. QA/QC Practices and Criteria	Install and operate COMS according to 40 CFR Part 60 Appendix B, Performance Specification 1 and general provisions 60.13.
	D. Monitoring Frequency	Continuous.
	F. Data Collection Procedures	The COMS collects data that are reduced to 6-minute averages and the 1-hour block average is calculated based on the 6-minute averages.
	F. Averaging Period	One hour.

Table 4. Corrective Action Procedures Summary

		Description
IV.	Initiation of Corrective Action Procedures	Corrective action shall be initiated with the discovery of a one-hour block average of opacity greater than 18% and that defines an excursion (as defined in Table 1). The plant staff that made the discovery shall immediately notify the shift Leader or responsible official. This action describes a corrective action trigger.
V.	Time of Completion of Corrective Action Procedures	As soon as practically possible.
VI.	Corrective Action	The shift Leader or responsible official will implement the following as a corrective action. Procedures, as presented in the O&M Plan, include the following alternatives that will be initiated as necessary. • Perform operational diagnostics to identify cause of the excursion. • If operational diagnostics indicate a malfunction of the ESP, the reason for failure will be identified. • In the event of the need for the unit shutdown to bring opacity to below excursion levels, the task will be undertaken based on procedures described in the O&M Plan for the facility. Regardless of the failure mechanism, ESP operation will be restored such that the cause of excursion is identified and appropriate actions taken to ensure opacity below excursion levels.

Attachment N

Alternative Methods of Operation

Alternative Methods of Operation

Emission Units 026 and 027 (CFB Units 1 and 2) can operate on coal, coal treated with a latex binder or petcoke or a blend of these fuels. In addition, these units use natural gas (including landfill gas) and distillate fuel oil for start up.

Emission Unit 033 (Limestone Dryer/Mills) can operate both on natural gas and fuel oil.

Emissions Unit 003 (NGS Boiler No. 3) can operate on No. 6 residual fuel oil, natural gas, LP gas, "on-specification" used oil, landfill gas, and a blend of fuel oil and natural gas and/or landfill gas. "On-specification" used oil containing any quantifiable levels of PCBs will only be fired when the emissions unit is at normal operating temperatures.

Emission Units 016 and 017 (SJRPP Boiler No. 1 and Boiler No. 2) can operate on coal, coal treated with latex binder, a blend of petroleum coke and coal, No. 2 fuel oil (startup, low-load operation and flame stabilization) and "on-specification" used oil.

Emission Units 006 (NGS CT No. 3), 007 (NGS CT No. 4), 008 (NGS CT No. 5) and 009 (NGS CT No. 6) are equipped with direct water spray fogger devices in the inlet ducts of each CT to provide adiabatic inlet air cooling that increases turbine output and decreases heat rate. The CTs can operate with or without operation of the foggers. Per operation permit 0310045-016-AV, each CT shall not exceed 399 hrs/yr operation while using foggers.

Attachment O

Detailed Description of Control Equipment

JEA
NORTHSIDE GENERATING STATION REPOWERING
CONTROL EQUIPMENT DESCRIPTION

POLISHING SCRUBBER DESCRIPTION

A polishing scrubber is installed downstream of each of the new CFB boilers to reduce sulfur dioxide and particulate emissions to acceptable levels. The system includes an absorber vessel followed by a fabric filter. Draft for the system, which is approximately 10 iwc, is provided by an induced draft fan located downstream of the polishing scrubber system.

SCRUBBER

The scrubbing process is a semi-dry process using calcium products as the reagent for removing sulfur dioxide from the flue gas. Flue gas entering the scrubber at approximately 280° is humidified to within 30 — 42 °F of adiabatic saturation. Sulfur dioxide is absorbed and reacted with the alkaline sorbent to form calcium sulfite and calcium sulfate byproducts. The scrubber system is designed to provide adequate removal efficiency which, in combination with the sulfur dioxide removal efficiency in the CFB boiler, will achieve the allowable sulfur dioxide emission rate.

The source of reagent is a combination of calcium oxide (CaO) in the fly ash from the CFB boiler, recirculated fly ash from the particulate collector and fresh reagent prepared from pebble lime. Fresh reagent is prepared as calcium hydroxide or as a lime slurry. Calcium hydroxide is prepared in a hydrator and is provided with a wet scrubber to reduce particulate emissions. Lime slurry is prepared in a slaker.

FABRIC FILTER

A fabric filter is installed for control of particulate matter. The particulate collector is a pulse jet fabric filter with an expected flow rate of 762,000 ACFM and using high pressure low volume compressed air as the cleaning medium. Flue gas from the polishing scrubber containing calcium sulfite, calcium sulfate, calcium oxide, fuel ash and inert material enter the fabric at a temperature of approximately 150 - 155° F. The fabric filter has eight (8) compartments with a maximum inlet velocity of 1800 fpm. Sufficient cloth area is included to provide a maximum filtration velocity of 3.5 f with one compartment out of service for maintenance. Filter media is a nominal 6" diameter by 18 - 20 ft long bag. A minimum spacing between bags within a compartment is 2 inches. Bag cleaning would be performed on line and would be initiated to limit the pressure drop across the fabric filter to a maximum 6 iwc. The overall particulate removal ' efficiency would be approximately 99.99%. Particulate matter collected in the hopper is conveyed by a negative pressure pneumatic system to the fly ash silo or recirculated back to the polishing scrubber.

DUST COLLECTION & DUST SUPPRESSION

Dust Collection and Dust Suppression is furnished throughout the system at various transfer points. There is either Dust Collection or Dust Suppression at the points.

DUST COLLECTION

Dust laden air enters the collector via ductwork under suction. The diffuser absorbs the impact of the high velocity dust particles and distributes the flow of the incoming air. The dust laden air travels upward and through the filtration bag. The exterior of the bag filters the air from the particulate.

The collector housing is dust tight and is divided by a cell plate/tubesheet into two plenums. The lower section/dirty air plenum contains the filter bags, discharge hopper, and inlet. The discharge hopper is fitted with an air lock to enable continuous discharge of dust to the conveyed material main stream.

The filter bags fit around and are supported by wire cages. A pulse pipe with multiple orifices is located above each row of filter bags so an orifice is directly above the throat of each venturi in that row.

The upper/clean air plenum houses the blow pipes and supports the air header, solenoid valves, diaphragm valves and provides an exhaust outlet for the filtered air stream to the atmosphere.

The cleaning sequence is as follows:

The cycle timer actuates the normally closed solenoid valve causing it to open. The diaphragm valve opens, as a result of the decrease in pressure from the opening of the solenoid valve. A momentary inrush of high pressure clean and dry compressed air flows from the header to the pulse pipe, down through each venturi, and into each filter bag. Thus all the bags in a single row are cleaned simultaneously. This cleaning process is repeated for each row of bags. The time between pulses and the duration of the pulse is adjustable. A magnehelic gauge shows the pressure drop across the collector and is a good indication of the collector performance. A differential pressure switch will initiate the cleaning sequence based upon the pressure drop of the dust collector.

DUST SUPPRESSION

The chemical/water spray is applied to the conveyed material stream. The conveyed materials are dampened to eliminate dust producing characteristics.

The system shall consist of the following components:

The proportioner mixes the chemical and water in the appropriate ratio.

The spray jet controller governs the flow of mixed solution, supplied by the proportioner, to the spray manifold assemblies.
The spray manifold assemblies, are a series ofjets that actually apply the solution to the conveyed material.
The automatic sequencing control panel to provided adjustment of the spraying sequence.

The proportioner and pumping system automatically mixes the chemical solution and water in a preselected ratio, and supplies the mixture to the spray locations. The system shall include a proportioner, a chemical injection pump, inlet water pressure regulator, solution pump, motor drives, control panel, and other necessary equipment.

The material flow switches will activate only when the presence of material is detected. Thus activating the spray flow controllers. The spray flow controllers will control the flow of spray solution to the spray manifold assemblies at the application points.

The spray manifold assemblies are made up of multiple spray housing and strainer assembly with jet nozzles for location in chutes and loading skirts as design requires. The location is such that the water solution is contained in the chute/loading skirt housing.

rate of 1,500 TPH. Coal and petroleum coke would be reclaimed from within the enclosed storage pile and conveyed to the new Crusher House at a maximum rate of 700 TPH. Within the Crusher House the coal and petroleum coke are crushed and sized at a maximum rate of 1,400 TPH (700 TPH/crusher) and transferred to the boiler feed silos (ten total, five per CFB boiler) by either of two 700 TPH conveyors.

JEA's Alternate 1 involves the construction of additional equipment at SJRCT including a second ship unloader, additional conveyors and transfer points and an enclosed surge pile as well as additional conveyors and transfer points, stackers and reclaimers, and slightly expanding the existing storage pile at SJRPP. From the SJRPP storage pile, coal and petroleum coke would be reclaimed and conveyed to the NGS Crusher House at a maximum rate of 700 TPH. Within the Crusher House the coal and petroleum coke are crushed and sized at a maximum rate of 1,400 TPH (700 TPH/crusher) and transferred to the boiler feed silos (ten total, five per CFB boiler) by either of two 700 TPH conveyors.

The existing SJRPP Rotary Railcar Dumper will support the NGS Repowering Project under both scenarios, increasing the potential throughput of the SJRPP Rotary Railcar Dumper from 5.13 million tons (SJRPP Requirement) to 7.55 million tons per year. Under the Base Case, coal and petroleum coke will be delivered to the enclosed NGS fuel storage pile at a maximum rate of 1,500 TPH on a new conveyor system connecting SJRPP and NGS. Under Alternate 1, coal and petroleum coke will be delivered to the existing SJRPP storage pile at a maximum rate of 4,000 TPH, reclaimed and conveyed to NGS at a maximum rate of 1,500 TPH on a new conveyor system.

Pebble Lime will be delivered to NGS and pneumatically conveyed from the tanker truck into a storage silo at a maximum rate of 20 TPH and 175,200 TPY. The pebble lime is later hydrated and pumped to the add-on AQCS for the CFB boilers to control SO_2 emissions.

Fly ash emitted by the CFB boilers and collected within each particulate matter AQCS will be pneumatically transferred to a corresponding waste bin at an average rate of 27 TPH. From the waste bin, the fly ash is pneumatically conveyed to either of two fly ash silos at a rate of 27 TPH. From the silos, the fly ash can be either hydrated or transferred directly to a tanker truck. Each silo will be equipped with four hydrators capable of processing 25 TPH of fly ash each. From the hydrators, the hydrated fly ash will be loaded directly into dump trucks. Transfer of dry fly ash directly into a tanker truck is accomplished at rates as high as 250 TPH with emissions vented to a fabric filter.

Bed ash discharged from the CFB boilers is transferred to a corresponding bed ash silo at an average rate of 21 TPH. From the silos, the bed ash can be either hydrated or transferred directly to a tanker truck. Each silo will be equipped with two hydrators each capable of processing 59 TPH of fly ash. From the hydrators, the hydrated bed ash can be loaded directly into dump trucks. Transfer of dry bed ash directly into a tanker truck is accomplished at rates as high as 250 TPH with emissions vented to a fabric filter.

CONTROL TECHNOLOGIES:

PARTICULATE MATTER (PM_{10}/TSP) CONTROL TECHNOLOGIES

Particulate matter emissions will be generated by the CFB Boilers, the limestone dryers/mills, and the materials handling and storage operations. Review of the available control technologies is presented for each emissions unit classification.

CFB Boilers

Particulate matter emissions are generated as a result of inert materials within the fuel, the bed media (fuel, ash, and limestone) and the incomplete combustion of the fuel in the form of unburned carbon. For CFB boilers, the most stringent control technology for particulate matter has been the use of an add-on AQCS to reduce emissions to levels of 0.011 lb/mmBtu (One unit was restricted to 0.01 lb/mmBtu but that limit is less stringent than the 0.011 lb/mmBtu because of rounding (0.01 = 0.014)). The available control options include cyclone separators, wet scrubbers, fabric filters and electrostatic precipitators (ESP). As part of the BACT evaluation the applicant's CFB boiler vendor evaluated three options for controlling particulate matter emissions.

The evaluations were supported by AQCS vendor proposals and guarantees for each at 0.011 lb/mmBtu. These evaluations included the following:

- The use of a fabric filter in conjunction with a spray dryer absorber (SDA) was proposed for the direct control of particulate matter and sulfur dioxide (SO_2) from the CFB boilers. The AQCS's were proposed by Wheelabrator Air Pollution Control (WAPC) Inc. and included a particulate matter (PM_{10}/TSP) guarantee of 0.011 lb/mmBtu. The overall AQCS proposed by WAPC included use of a dry scrubbing system incorporating two (2) spray dryers and a fabric filter for each CFB boiler. Use of a fabric filter on a CFB boiler and use of a fabric filter in combination with a spray dryer is a proven technology and available from other vendors such as ABB Environmental Services.
- The use of the ESP in conjunction with a circulating fluidized bed scrubber was proposed as a second option for the direct control of particulate matter and SO_2 emissions from the CFB boilers. The AQCS was proposed by Environmental Elements Corporation and included a particulate matter (PM_{10}/TSP) guarantee of 0.011 lb/mmBtu. The circulating fluidized bed scrubber is considered a "newer" technology with reportedly lower capital and operating costs over the more conventional spray dryer absorber/fabric filter. The proposed combination has been successfully demonstrated on other projects including the Black Hills Power & Light's Neil Simpson Station where it is meeting a permit limit of 0.02 lb/mmBtu with measured levels of 0.009 and 0.007 lb/mmBtu after initial commissioning and one year of operation, respectively.
- All three options for the CFB boilers to reduce SO_2 emissions included particulate matter (PM_{10}/TSP) guarantees of 0.011 lb/mmBtu.
- Particulate Matter (PM/PM_{10}) emissions of 0.011 lb/mmBtu from the CFB boilers are less than or equal to other BACT determinations for similar sized CFB boilers. The use of a SDA/FF. CFBS/ESP, or CFBS/FF as an add-on AQCS is considered to be the most stringent control technology available and therefore constitutes BACT.

Limestone Dryers/Mills

Particulate matter emissions are generated as a result of the fuel combustion and the limestone milling operation. For rock dryers/mills, the most stringent control technology has been the use of add-on AQCS to reduce emissions to levels of 0.02 gr/dscf. As part of the BACT evaluation, the applicant's CFB boiler vendor identified a fabric filter as the most stringent control technology for controlling particulate matter emissions.

The use of a fabric filter for the direct control of particulate matter from the limestone dryers/mills was proposed by Pennsylvania Crusher Corporation and included a particulate matter guarantee of 0.01 gr/dscf. The applicant's proposed use of a fabric filter with a guaranteed grain loading of 0.01gr/dscf is the most stringent control technology and the most stringent emission limitation, and is therefore BACT.

Materials Handling and Storage Operations

Particulate matter emissions generated from materials handling and storage operations are typically controlled by one or more strategies. Typical strategies include but are not limited to the following:

1. Handling and storing bulk materials in a wet or semi-wet condition. These materials are considered "conditioned materials" and will typically have moisture contents greater than 3.5 percent.
2. Direct application of water and/or chemicals to bulk materials for purposes of increasing moisture content and/or stabilizing small particles is considered a "Wet Suppression" technique.
3. Indirect application of water to materials for purposes of knocking down fugitive dust once it is released from the operation is considered the use of "Water Sprays."
4. Total or partial enclosures, or wind breaks/guards to reduce or eliminate particulate emissions or causes of such emissions.
5. Best operating practices includes design features and operating practices to reduce or eliminate the causes of fugitive dust emissions.
6. Dust collection systems which collect and control particulate emissions from partial or totally enclosed operations with the use of an add-on AQCS.

The most stringent control technology is the total enclosure of the emissions unit or activity which is generating the particulate matter. However, in some cases this approach is not practical based on either economic or safety reasons and the available control strategies must be implemented.

For dry materials handling activities which are totally or partially enclosed and require industrial ventilation (Dust Collection System) for health or safety reasons, which accordingly and are vented to the outside, the use of an add-on AQCS is typically required as BACT. The most stringent control technology applied to dust collection systems is the use of a fabric filter. The most stringent emission limitation associated with materials handling operation AQCS's is a grain loading of 0.01 gr/dscf and a 5% opacity standard. The applicant has proposed that the following emissions units at NGS be equipped with dust collection systems equipped with fabric filters meeting the 0.01 gr/dscf and a 5% opacity limitation:

- Emissions Unit 29 - Crusher House
- Emissions Unit 31 - Boiler Fuel Silos
- Emissions Unit 32 - Limestone Receiving Bins
- Emissions Unit 34 - Limestone Crusher Conveyor Transfers
- Emissions Unit 35 - Limestone Feed Silos
- Emissions Unit 36 - Fly Ash Waste Bins
- Emissions Unit 37 - Fly Ash Transfer and Storage Systems
- Emissions Unit 38 - Bed Ash Transfer and Storage Systems
- Emissions Unit 40 - Bed Ash Truck Loadout Systems
- Emissions Unit 41 - Fly Ash Truck Loadout Systems
- Emissions Unit 42 - Pebble Lime Silo

For the bed ash and fly ash hydrators (Emissions Unit 39), use of a fabric filter is not feasible due to the high water vapor content within the exhaust gas stream. Use of high efficiency venturi scrubbers was therefore proposed. The most stringent control technology applied to the hydrators is the use of a high efficiency venturi scrubber. The most stringent emission limitation associated with the hydrators is a 5% opacity standard as requested by the applicant.

For the materials handling and storage operations (Emissions Unit 28) which do not require ventilation for health or safety reasons, the applicant has proposed the use of control strategies 1-5 listed above, or combinations thereof. Implementation of the control strategies will ensure that the 5% opacity limitation is met from the operations. The following emissions units/activities will implement the associated control strategies as needed to meet a 5% opacity limitation:

- Transfer Towers - Emissions Units 28c, 28g, 28i, 28o & 28q
- Enclosed Fuel Storage Pile Operations - Emissions Unit 28h
- Limestone Lowering Well - Emissions Unit 28d
- Fly & Bed Ash Hydrator Loadouts - Emissions Unit 28r

For the conveyors, the applicant has proposed the use of conditioned materials, best operating practices and covers to eliminate particulate matter emissions. Implementation of the control strategies will ensure that visible emissions do not exceed 5 percent opacity from the operations.

For the Limestone Storage Pile and Reclaim Hopper (Emissions Unit 28p), the applicant has proposed the use of conditioned materials and water sprays on the pile and hopper, as needed, to control particulate matter emissions. Implementation of the control strategies will ensure that visible emissions do not exceed 10 percent opacity from the operations.

For the Ship Unloading Operations (Emissions Unit 28a), the applicant has proposed the use of conditioned materials and partial enclosures of the shiphold and water sprays on the ship unloading hopper to control particulate matter emissions. Implementation of the control strategies will ensure that visible emissions do not exceed 10 percent opacity from the operations.

For the Ship Unloader Conveyor D-1, the applicant has proposed the use of conditioned materials and wind screens to control particulate matter emissions. Implementation of the control strategies will ensure that visible emissions do not exceed 10 percent opacity from the operations.

Information provided by the applicant indicated the economic impact associated with the use of additional dust collection systems equipped with a fabric filter would require an additional capital investment of about $83,600 and annual operating costs of about $37,900 per system. The economics were based on the individual transfer operations (<2 transfer points) with transfer rates 1,500 TPH and 2.42 million TPY of coal and petroleum coal, and 3.9 TPY of particulate matter emissions. With potential reductions of 99 percent over the proposed controls, use of a dust collection system and fabric filter resulted in an estimated incremental cost of about $9,770 per ton. The $9,770/ton incremental cost is excessive by comparison with the Department's Indiantown BACT Determinations which reported costs of $9,244/ton as excessive. Therefore, BACT for the individual transfer operations is the use of conditioned materials, partial enclosures, water sprays, and/or wet suppression, as needed.

NITROGEN OXIDES (NO_x) CONTROL TECHNOLOGIES

NO_x is emitted from CFB boilers and the limestone dryers during the combustion process. The formation of NO_x occurs through one of three primary mechanisms which include the following:

- Thermal NO_x;
- Fuel NO_x; and
- Prompt NO_x.

Thermal NO_x refers to the mechanism by which NO_x is formed through the dissociation of molecular nitrogen and oxygen in the combustion air into their atomic states and through various reactions produce NO_x. At temperatures above 2,200 °F, thermal NO_x production is significant and increases exponentially as temperatures increase further. The primary factors impacting thermal NO_x production include temperature, oxygen and nitrogen concentrations, and the residence time within the combustion zone. These same factors impact complete combustion of the fuels.

Fuel NO_x refers to the mechanism by which NO_x is formed through the reduction and oxidation of nitrogen contained within the chemical structure of the fuel. This nitrogen is known as fuel bound nitrogen (FBN) and for solid and liquid fuels can be significant enough to make Fuel NO_x the primary mechanism.

Prompt NO_x refers to the mechanism by which NO_x is formed under fuel rich conditions through the formation of intermediate species and their eventual oxidation. The formation of prompt NO_x has a weak temperature dependence that can become strong under fuel rich conditions. Prompt NO_x typically contributes the smallest magnitude to the total overall NO_x emissions of the three formation methods discussed.

By understanding the mechanisms and chemical reactions which produce NO_x emissions, control strategies can be developed. These strategies include precombustion controls, combustion techniques, and post combustion techniques.

CFB Boilers

For CFB boilers, available control technologies which have been commercially demonstrated include the following:

- Precombustion Controls;
- Combustion Controls; and
- Selective Noncatalytic Reduction (SNCR).

Precombustion controls focus on fuel quality, specifically the maximum FBN within a given fuel. Information presented within the application indicated the use of coal with an estimated FBN content of 1.3 percent by weight and petroleum coke with an estimated FBN content of 1.7 percent by weight. These values have been used by JEA for design purposes based on available fuels.

Combustion controls focus on reducing the production of both Thermal and Fuel NO_x by reducing combustion temperatures and limiting available oxygen. With operating bed temperatures between 1,500 °F and 1,600 °F, the amount of Thermal NO_x formed within a CFB boiler is less than that of conventional units (i.e., Stoker, Cyclone or Pulverized Coal Unit) making Thermal NO_x only a minor factor in overall NO_x emissions. In addition to their low operating temperature, CFB boilers can be designed to suppress Fuel NO_x by use of staged combustion. This is accomplished by directing less than a theoretical amount of combustion air through the distributor plate and adding the remaining combustion air above the dense bed. As a result, the FBN decomposes into molecular nitrogen rather than forming NO_x.

Selective non-catalytic reduction (SNCR) is a post combustion control technology involving the injection of either ammonia or urea into specific temperature regions of the CFB boiler. The ammonia or urea reacts with the NO_x to produce nitrogen and water. The effectiveness of the SNCR depends on the temperature where the reagents are injected; the mixing of the reagent within the combustion gases; the residence time of the reagent within the temperature window; and the ratio of reagent to NO_x. SNCR can reduce NO_x emissions by 50 to 70 percent over uncontrolled levels.

For CFB boilers of the size class proposed by the applicant, NO_x emissions as low as 0.11 lb/mmBtu have be achieved through precombustion controls, combustion controls, and SNCR. The applicant reported and the Department noted BACT and LAER determinations on smaller CFB boilers as low as 0.039 lb/mmBtu. The Department considered the size variations between the smaller units and the proposed unit and agreed with the applicant that the smaller units were not representative of the larger units proposed and thus can be excluded from the BACT evaluation. For the proposed CFB boilers, the applicant has received a vendor guarantee of 0.09 lb/mmBtu through the use of precombustion controls, combustion controls, and SNCR. This control strategy represents the most stringent control technology and the proposed emission limit is representative of the most stringent emission limitation for a CFB boiler of this size, and is therefore BACT.

While the use of SNCR is BACT and the most stringent control technology, the applicant evaluated the use of selective catalytic reduction (SCR) as a post combustion control technology to further reduce NO_x emissions. The applicant reported that its use would add significant capital costs to the project. In addition, there are uncertainties associated with its use as a transfer technology and it has never been demonstrated on a CFB boiler which raise technical feasibility issues. To avoid catalyst poisoning with the calcium in the limestone/bed media, the SCR would need to be installed after the SO_2 and PM AQCS and a reheat system incorporated to raise the flue gas temperature which would result in additional costs and impacts. Based on the identification of SNCR as BACT and uncertainties and costs of adding SCR as a transfer technology, the use of SCR was correctly rejected by the applicant.

Limestone Dryers/Mills

For the limestone dryers/mills, combustion controls focusing on reduction of Thermal NO_x are considered the most stringent control technology. For the dryers/mills, the vendor has provided a NO_x emissions estimate based on a rate of 0.2 lb/mmBtu which can be achieved through combustion controls using low-NOx burners. The use of combustion controls constitutes BACT for the limestone dryers/mills.

CARBON MONOXIDE (CO) CONTROL TECHNOLOGIES

Carbon monoxide (CO) emissions will be generated by the CFB Boilers and the limestone dryers/mills as a result of the incomplete combustion of the fuels. Review of the available control technologies is presented for each emissions unit classification.

CFB Boilers

The only control strategy currently used for controlling CO emissions from utility steam generators, including CFB boilers, are combustion controls. Combustion controls include the following:

- High Temperatures;
- Sufficient Excess Air;

- Sufficient Residence Times; and
- Perfect Air/Fuel Mixing.

For somewhat smaller CFB boilers, compared to the size proposed by the applicant, CO emissions as low as 0.13 lb/mmBtu at full loads can be achieved through combustion controls. For each CFB boiler, the applicant has proposed an emission limit of 350 lb/hr (~0.13 lb/mmBtu @ Full Load) which has been guaranteed by the boiler vendor, to apply at all times other than during startup, shutdown, and malfunction conditions. For the CFB boilers, data provided by the applicant reveals higher CO emission rates at lower loads. The requested single mass emission limitation was proposed by the applicant in-lieu of 0.22 lb/mmBtu, which is "worst case" at lower loads, and covers operations over the load range. Based on the high degree of NO_x control and given the generally inverse relationship between CO and NO_x emission rates, the relatively low mass emission rate of 350 lb/hr for CO constitutes BACT.

At the request of the Department, the applicant investigated the use of transfer technologies including a thermal oxidizer and an oxidation catalyst. The Department's intent was to evaluate the availability of such add-on AQCS for use on steam generators and, if possible, further reduce CO emissions from the proposed CFB boilers. The applicant conducted the requested investigation but found that neither technology was technically or economically feasible for CFB boilers of the size contemplated. Technical feasibility of the catalyst required its location downstream of the add-on AQCS's, installation of a natural gas-fired reheat system, and use of a heat recovery system to minimize costs. Based on the US. Environmental Protection Agency's Cost Control Manual, the installation of such a system would increase the total capital cost of the project by $2.6 million, with an annualized cost of $21.8 million per year and a levelized cost of about $19,990 per ton to further limit CO and VOC emissions. The addition of add-on controls would therefore reduce emissions, but at costs significantly higher than values which have been previously determined by the Department to be excessive.

For CFB boilers, the use of good combustion practices to minimize NO_x formation while maximizing combustion efficiency is recognized as the most stringent control technology for CO emissions. The proposed emission rates have been guaranteed by the CFB boiler manufacturer and constitute BACT.

Limestone Dryers/Mills

Carbon monoxide (CO) would be emitted from the limestone dryers/mills as a result of incomplete combustion of the fuels fired. The only control strategy currently used for controlling CO emissions from rock dryers, including limestone dryers/mills, is good combustion techniques. For limestone dryers/mills, CO emissions at 50 ppmv can be achieved through combustion controls. Combustion controls constitute BACT for the limestone dryers/mills.

VOLATILE ORGANIC COMPOUNDS (VOC) CONTROL TECHNOLOGIES

Volatile organic compound (VOC) emissions will be generated by the CFB Boilers and the limestone dryers/mills as a result of the incomplete combustion of the fuels as is CO. Review of the available control technologies is presented for each emissions unit classification.

CFB Boilers

Control strategies associated with VOC are the same as for CO.

For CFB boilers, VOC emissions as low as 0.004 lb/mmBtu through good combustion practices have been reported on a unit with a higher NOx emission rate of 0.125 lb/mmBtu. For each CFB boiler, the applicant has proposed emissions limit of 14 lb/hr (~0.005 lb/mmBtu @ Full Load). As with CO emissions, the use of good combustion practices to minimize NO_x formation while maximizing combustion efficiency is recognized as the most stringent control technology for CO emissions. The add-on controls as discussed for CO could reduce emissions but at costs significantly higher than values which have been previously determined by the Department to be excessive. The proposed emission rates have been guaranteed by the CFB boiler manufacturer and constitute BACT.

Limestone Dryers/Mills

VOCs are emitted from the limestone dryers/mills as a result of incomplete combustion of the fuels fired. The only control strategy currently used for controlling VOC emissions from rock dryers, including limestone dryers/mills, is good combustion techniques which represents the most stringent control technology. For limestone dryers/mills, VOC emissions at 0.02 lb/mmBtu can be achieved through combustion controls. Combustion controls constitute BACT for the limestone dryers/mills.

TOTAL FLUORIDE CONTROL TECHNOLOGIES

Total fluoride, expected to be emitted as hydrogen fluoride (HF), will be generated from the CFB boilers and Limestone Dryers/Mills as a result of trace amounts of fluoride within the fuels and limestone. Review of the available control technologies is presented for each emissions unit classification.

CFB Boiler

For CFB boilers, the most stringent control technology has been the use of an add-on PM AQCS and CFB boiler technology to reduce total fluorides emissions to levels of 1.36×10^{-3} lb/mmBtu. The available control options include the following:

- Spray Dryer Absorber/Fabric Filter; or
- Circulating Fluidized Bed Scrubber/Electrostatic Precipitator (ESP).
- Circulating fluidized bed scrubber with a fabric filter (proposed by ABB Environmental Services).

The fluoride contents of the coal, petroleum coke, and limestone were estimated as 0.0001 lb/lb, 0.000031 lb/lb, and 0.000001 lb/lb, respectively. The worst-case coal scenario results in uncontrolled fluoride emissions of 3.89×10^{-3} lb/mmBtu. The worst-case petroleum coke scenario results in uncontrolled fluoride emissions of 1.78×10^{-3} lb/mmBtu. These values represent worst case release rates which were presented by the applicant's CFB boiler vendor to the AQCS vendors. The AQCS vendors provided proposals and guarantees for fluoride removal by their systems of 0.43 lb/hr (1.57×10^{-4} lb/mmBtu).

The use of a SDA/FF, a CFBS/ESP, or a CFBS/FF will provide for the indirect control of fluoride from the CFB boilers. All three AQCS's included a fluoride guarantee of 1.57 x 10-4 lb/mmBtu which is lower than the most stringent emission limitation for a coal fired CFB boiler and represents BACT.

Total Fluoride (HF) emissions of 0.43 lb/hr, on a 3-hour average, from the CFB boilers are lower than other BACT determinations for similar sized CFB boilers. The use of a SDA/FF, CFBS/ESP, or CFBS/FF as add-on AQCS's is considered to be the most stringent control technology available and therefore constitutes BACT.

Limestone Dryers/Mills

For the limestone dryers/mills, the applicant has proposed fuel quality, the firing of natural gas and low sulfur distillate oil, as BACT which is considered the most stringent control technology. Both natural gas and low sulfur distillate oil contain insignificant amounts of fluoride and the Department considers their use as BACT.

MERCURY (Hg) CONTROL TECHNOLOGIES

Mercury emissions will be generated from the CFB boilers and Limestone Dryers/Mills. The mercury emitted from these operations is associated with trace amounts contained within the fuels and limestone used within each operation. Review of the available control technologies is presented for each emissions unit classification.

CFB Boilers

For CFB boilers, the most stringent control technology for mercury emissions has been the use of an add-on PM AQCS and CFB boiler technology to reduce mercury emissions to levels of 1.45 x 10-5 lb/mmBtu. The available control options include the following:

- Spray Dryer/Fabric Filter;
- Fluidized Bed Scrubber/Electrostatic Precipitator (ESP);

- Fluidized Bed Scrubber/Fabric Filter; and
- Carbon Injection System

The mercury contents of the coal, petroleum coke, and limestone have been estimated at 1.70 x 10-7 lb/lb, 3.0 x 10-8 lb/lb, and 1.0 x 10-8 lb/lb, respectively. The worst-case coal scenario results in uncontrolled mercury emissions of 1.74 x 10-5 lb/mmBtu. The worst-case petroleum coke scenario results in uncontrolled mercury emissions of 1.47 x 10-5 lb/mmBtu. These values represent worst case release rates which were presented by the applicant's CFB boiler vendor to the AQCS vendors. The AQCS vendors provided proposals and guarantees that mercury emissions from their systems will not exceed 0.03 lb/hr (1.05 x 10-5 lb/mmBtu). The use of either the SDA/FF, CFBS/ESP, or CFBS/FF will provide for the indirect control of mercury from the CFB boilers. All three AQCS's proposed included mercury guarantees of 1.05 x 10-5 lb/mmBtu which is more stringent than the most stringent emission limitation and represents BACT. The use of a carbon injection system designed to further control Hg emissions was evaluated based on a vendor quote by the applicant. Total capital costs of $680,000, annualized costs of $1,000,000 per year, and incremental costs of about $9.5 x 106 per ton to control Hg emissions were estimated. The $9.5 million per ton incremental cost is excessive and is consistent with other Department determinations which did not require add-on AQCS's for Hg. Because of the ability of the proposed AQCS to meet the most stringent emission limitation and consideration of the economic impacts the use of a SDA/FF, CFBS/ESP, or CFBS/FF is BACT.

Mercury (Hg) emissions of 0.03 lb/hr, on a 3-hour average, from the CFB boilers is lower than other BACT determinations for similar sized CFB boilers. The use of either a SDA/FF, CFBS/ESP, or CFBS/FF as add-on AQCS's is considered to be the most stringent control technology available and therefore constitutes BACT.

<u>Limestone Dryers/Mills</u>

For the limestone dryers/mills, the applicant has proposed fuel quality, the firing of natural gas and low sulfur distillate oil, as BACT which is considered the most stringent control technology. Both natural gas and low sulfur distillate oil contain insignificant amounts of mercury and the Department considers their use as BACT.

DEPARTMENT BACT DETERMINATION

Following are the BACT limits determined for the JEA Repowering Project. The emission limits as well as the applicable averaging times, are given in the permit Specific Conditions Nos. 12-22, 24, and 25.

CFB Boilers

PSD Pollutant	Control Technology	Proposed BACT Limit(s)
CO	Good Combustion Practices	350 lb/hr (24-hour block average)
NO_x	CFB Boiler Technology Selective Non-Catalytic Reduction (SNCR)	0.09 lb/mmBtu (30-day rolling average)
PM_{10}/TSP	CFB Boiler Technology Add-On Air Quality Control System (AQCS) Fabric Filter or Electrostatic Precipitator	0.011 lb/mmBtu (3-hour average) 10% opacity
VOC	Good Combustion Practices	14 lb/hr (3-hour average) (whichever is less)
Hg	CFB Boiler Technology SO_2 & PM AQCS's	0.03 lb/hr (6-hour average)
HF	CFB Boiler Technology SO_2 & PM AQCS's	0.43 lb/hr (3-hour average)

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

Limestone Dryers/Mills

PSD Pollutant	Control Technology	Proposed BACT Limit(s)
CO	Combustion Controls	Work Practice - Good Combustion Practices
NO_x	Low NO_x Burners	Work Practice - Good Combustion Practices
PM_{10}/TSP	Add-On AQCS - Fabric Filter	0.01 gr/dscf - Gas/Oil 5% Opacity
VOC	Good Combustion Practices	Work Practice - Good Combustion Practices
Hg	Fuel Quality - Use of Natural Gas and/or Low Sulfur Distillate Oil (0.05% Sulfur)	Work Practice - Use of Natural Gas and Low Sulfur Distillate Oil
HF	Fuel Quality - Use of Natural Gas and/or Low Sulfur Distillate Oil (0.05% Sulfur)	Work Practice - Use of Natural Gas and Low Sulfur Distillate Oil

Materials Handling & Storage Operations - Particulate Matter

Handling & Storage Operation	Control Technologies	Proposed BACT Limits
Ship Unloading Operations Shiphold Receiving Hoppers Receiving Conveyors	 1, 4 & 6 1, 3, 4 & 6 1, 4 & 6	 10% Opacity 10% Opacity 10% Opacity
Conveyors	1, 4 & 6	5% Opacity
Transfer Towers	1, 2, 4 & 6	5% Opacity
Stackers/Reclaimers Enclosed Fuel Pile Limestone Lowering Well Limestone Reclaim Hopper	 1, 3, 4 & 6 1, 3, 4 & 6 1, 3 & 6	 5% Opacity 5% Opacity 10% Opacity
Storage Piles Enclosed Fuel Pile Limestone Pile	 1, 3, 4 & 6 1, 3 & 6	 5% Opacity 10% Opacity
Bed and Fly Ash Hydrator Loadouts	1, 3, 4 & 6	5% Opacity
Limestone Receiving Bins	1, 4 & 5	5% Opacity
Limestone Crusher Conveyor Transfers	4 & 5	5% Opacity
Limestone Feed Silos	4 & 5	5% Opacity
Bed Ash Transfer and Storage Systems	4 & 5	5% Opacity
Bed Ash Truck Loadout Systems	4 & 5	5% Opacity
Fly Ash Waste Bins	4 & 5	5% Opacity
Fly Ash Transfer and Storage Systems	4 & 5	5% Opacity
Fly Ash Truck Loadout Systems	4 & 5	5% Opacity
Bed & Fly Ash Hydrators	4 & 7	5% Opacity
Pebble Lime Silo	4 & 5	5% Opacity
Crusher House	4 & 5	5% Opacity
Boiler Fuel Silos	4 & 5	5% Opacity

Control Strategies:

1. Conditioned Materials
2. Wet Suppression, as needed
3. Water Sprays, as needed
4. Enclosures (Total, Partial, Covers, & Wind Screens)
5. Dust Collection System - AQCS
6. Best Operating Practices
7. Venturi Scrubbers

The facility is considered a "fossil fuel fired steam electric plant of more than 250 million BTU per hour of heat input". This kind of facility is one of the 28 source categories with the lower applicability threshold of 100 tons per year with respect to the Rule 62-210.200, Prevention of Significant Deterioration of Air Quality (PSD). Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a PSD-major source.

Units 1 and 2 were certified pursuant to Electrical Power Plant Siting in accordance with Chapter 62-17, F.A.C. and Chapter 403, Part II, F.S.

D. Modification Request

St. Johns River Power Park (SJRPP) submitted an application for a minor source air construction permit to install selective catalytic reduction (SCR) in Boilers Nos. 1 and 2 (Units 1 and 2) in order to comply with the requirements of EPA's Clean Air Interstate Rule (CAIR) as implemented by the Department in Rule 62-296.470, F.A.C. The addition of SCR will have the co-benefits of reducing emissions of mercury to meet EPA's Clean Air Mercury Rule (CAMR) implemented by the Department in Rule 62-296.480, F.A.C.

The primary purpose of the project will be to decrease nitrogen oxides (NOx) emissions from Units 1 and 2 to meet the annual and ozone season NOx CAIR allocations. While the addition of SCR will substantially decrease emissions of NOx, there is the potential for collateral increases in emissions of sulfuric acid mist (SAM) and particulate matter (PM). The potential increase of SAM emissions is a result of the oxidation of sulfur dioxide (SO_2) to sulfur trioxide (SO_3) that is emitted as SAM after the flue gas desulfurization (FGD) system. Potential increases in SAM emissions will be minimized through the injection of ammonia to react with SO_3 prior to the electrostatic precipitator (ESP). The reactants, primarily ammonium sulfate, will be collected in the ESP. The potential increase in PM from the reaction of ammonia and SO_3 will be collected in the ESP and FGD system. There will be no emissions increase over the PSD significant emission rates from the installation of SCR. There are no other planned changes in Units 1 and 2.

E. Reviewing and Process Schedule

10-17-06:	Date of Receipt of Application
11-15-06:	DEP's 1st Completeness Request
12-11-06:	Applicant's response to DEP's 1st Completeness Request. Application complete.

F. Project Description

SCR is a process that uses catalyst to promote the conversion of NOx to nitrogen and water in the flue gas. The conversion occurs between the boiler economizer and the air heaters in a specially designed ductwork section called the SCR Reactor, which contains the catalyst. Ammonia vapor mixed with dilution air is injected into the flue gas upstream of the catalyst and is thoroughly mixed with the flue gas prior to the catalyst. As the flue gas passes over the catalyst, the nitrogen monoxide and nitrogen dioxide combine with the ammonia to form nitrogen and water.

Each unit will have two SCR reactors. Each SCR reactor will consist of a steel reactor box designed to support the SCR catalyst modules and to properly distribute flue gas through the catalyst layers. Flue gas flow will be vertically downward through the catalyst. Flue gas ductwork will be provided from the economizer outlet to the air heater inlet including a SCR bypass duct and associated dampers. Bypass dampers are installed primarily for startup and maintenance. The SCR inlet duct will include a large particle ash (LPA) screen, static flue gas mixer, and ammonia injection grid. Ash hoppers will be located below the inlet diverter damper and LPA screen.

The new SCR system will be designed for operation over load ranges of 50 percent of full load (approximately 300 MW) and higher. The minimum temperature required for injected ammonia vapor to react with the NOx in the SCR reactor is approximately 630°F. The minimum temperature corresponds to the lowest expected temperature at low load. Ammonia is introduced in the SCR as a mixture of anhydrous ammonia and air. Anhydrous ammonia will be delivered to the site by tank truck and unloaded into one of two bulk storage tanks. In addition, provisions for delivery by rail will be provided. Liquid anhydrous ammonia will be transferred from the storage tanks to ammonia vaporizers. After vaporization, the ammonia gas will be mixed with ambient air and distributed into the flue gas through the ammonia injection grids (AIG) located upstream of the reactor. The air/ammonia vapor mixture is distributed across the entire duct cross section using the ammonia injection grid (AIG). The AIG consists of a series of stacked layers of parallel pipes, each with nozzles that inject the mixture into a particular section of the SCR reactor inlet duct. The pipes will extend the entire width of the ductwork and contain a sufficient number of nozzles with orifices sized for the particular ammonia distribution requirement. If necessary, as determined by the physical flow model test of the SCR reactor and associated ductwork, a static mixer may be required upstream of the AIG to help reduce the stratification of temperature and chemical composition of the flue gas flow out of the economizers.

The catalyst used for NOx reduction primarily consists of a vanadium and titanium mixture. Titanium dioxide is used as the base material that disperses and supports vanadium pentoxide (V_2O_5) which is the active catalyst material. V_2O_5 is widely used in the SCR industry due to its resistance to sulfur poisoning. The vanadium content controls the reactivity of the catalyst, but also catalyzes the oxidation of SO_2 to SO_3. For moderate to high sulfur coal applications, it is necessary to minimize the vanadium content to reduce SO_2 oxidation. Additionally, the vanadium already present in the petcoke fuel will deposit on the catalyst, potentially increasing the oxidation of SO_2 to SO_3. Tungsten oxide also provides thermal and mechanical stability to the catalyst. The concentrations of vanadium pentoxide, titanium dioxide and tungsten oxide will be customized to meet the specific requirements for Units 1 and 2 SCR system installations.

Each SCR reactor will include soot blowers and sonic horns to keep the catalyst free of fly ash buildup. Provisions for catalyst loading into the reactors will be included. The SCR reactors will be designed for three initial layers of catalyst and a spare level for future additional layer of catalyst. To minimize potential catalyst poisoning, the units will be equipped with limestone addition in the combustion process. Limestone will be fed on to the coal conveyor when transporting fuel to the silos. A limestone system to receive, store and feed limestone to the coal conveyors will be provided.

An additional ammonia injection grid will be designed and located within the duct work leading to the ESP. The system will be designed to remove up to 90 percent of the SAM after the air heater. The ammonia injection system will be controlled by proprietary software from PECO-FGC, Inc. The control system regulating the amount of ammonia injected to control SAM will be integrated into the plant digital control system (DCS). The design of the injection grids, including the locations and sizes of the nozzles regulating the amount of ammonia, was performed using the computerized modeling of the ductwork leading to the ESP. The amount of ammonia injected through the injection grid into the flue gas conditioning system will be regulated based on load and SO_2 content of flue gas. A control algorithm will regulate the system within the DCS to remove up to 90 percent of SAM from the flue gas. On an annual basis, the permittee will demonstrate that SAM emissions as a result of this project do not exceed the baseline annual emissions (1317 tons/year) by the PSD significant emission rate (7 tons/year or more). The permittee shall install and operate the ammonia injection system at a frequency and injection rate for SAM control to satisfy this requirement. An automated control system will be used to adjust the ammonia flow rate for the given set of operating conditions based on the most recent performance test results.

Ammonia slip after the ESP is expected to be 2 parts per million or less. Annual testing of ammonia slip will be conducted and corrective measures taken if this target level is exceeded.

Figure 3 below is a diagram of a typical SCR installation in a power plant. This configuration is known as dusty or hot side SCR meaning it is placed before the electrostatic precipitator.

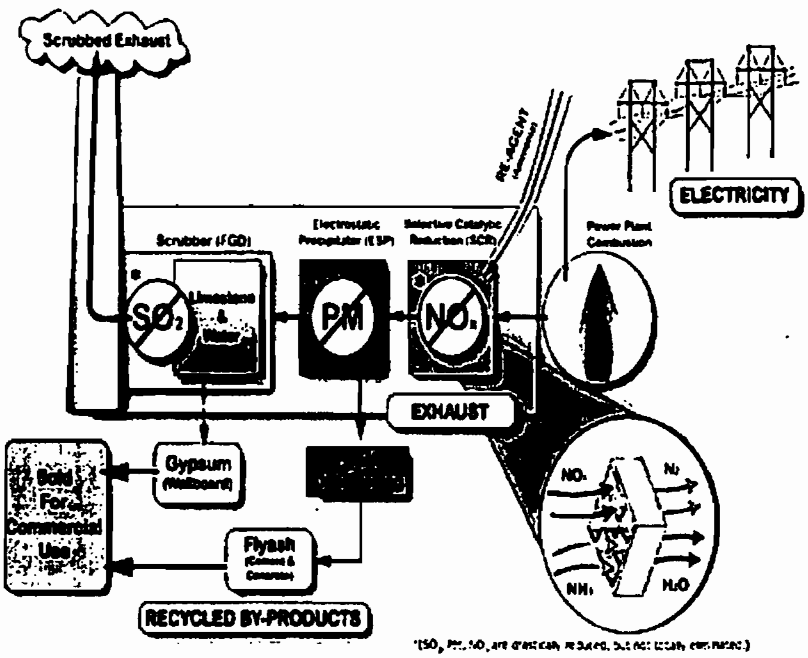


Figure 3. Diagram of a typical SCR Installation

G. Project Emissions

Presented in Table 1 is the heat input reported in the Annual Operating Report (AOR) for the period 2001 through 2005. This table also presents the capacity factor for Units 1 and 2, as well as the average for both units during the period 2001 through 2005. During the period 2001 through 2005, the average capacity factor based on heat input for Units 1 and 2 ranged from 79.4 percent in 2005 to 89.8 percent in 2002. The average capacity factors for the years 2005, 2004, 2003, 2002, and 2001 were 79.4, 84.5, 88.1, 89.8 and 89.0 percent, respectively. The average two-year capacity factors based on heat input were 81.9, 86.3, 88.9, and 89.4 percent for the periods 2005-2004, 2004-2003, 2003-2002, and 2002-2001, respectively. The average 5-year capacity factor was 86.2 percent.

Table 2 presents the annual emissions reported in the AORs for the years 2001 through 2005 for PM and SAM. Table 3 presents the average calendar year emissions for each consecutive 2-year period from 2001 through 2005 based on the average calendar year emissions in Table 2. The annual average emissions for each consecutive 2-year period are consistent with the definition of baseline actual emissions for fossil fuel fired steam electric generating units. The highest two consecutive 2-year emissions for the period 2001-2002 are proposed as the basis for future comparisons. This 2-year period also has the highest heat input.

ST JOHNS RIVER POWER PARK

NO_X REDUCTION PROJECT

SYSTEM DESCRIPTION
FOR

SELECTIVE CATALYTIC REDUCTION SYSTEM

144805.43.1406

October 5, 2007
Revision 1

BLACK & VEATCH

1.0 System Description

1.1 Function

The purpose of the Selective Catalytic Reduction (SCR) System is to reduce the NO_x emissions exiting the stack. This system is designed for operation over load ranges of 50 percent of full load, (approximately 300 MW net) and higher. The minimum temperature required for ammonia injection to react with the NOx in the SCR reactor is 612°F, which corresponds to lowest expected temperature at low loads.

1.2 General Description

Selective Catalytic Reduction is a process that uses catalyst to promote the conversion of nitrogen oxides (NO_x) to nitrogen and water vapor in the flue gas. This conversion occurs between the boiler economizer and the air heaters in a specially designed ductwork section, called the SCR Reactor, which contains the catalyst. Ammonia vapor, mixed with dilution air, is injected into the flue gas upstream of the catalyst and is thoroughly mixed with the flue gas prior to its admittance to the catalyst. As the flue gas passes over the catalyst, the nitrogen monoxide (NO) and nitrogen dioxide (NO_2) combine with the ammonia (NH_3) to form nitrogen (N_2) and water (H_2O).

2.0 Component Description

2.1 Description

The purpose of the catalyst is to promote the reaction between NO_x and ammonia (NH_3) to form nitrogen (N_2) and water (H_2O) at temperatures between 612°F and 800°F. This is the temperature range of the flue gas downstream of the economizer and upstream of the air heater.

The catalyst used for NO_x reduction service primarily consists of a vanadium, titanium, and tungsten mixture. However, the final catalyst composition can consist of many active metals and support materials. Titanium dioxide (TiO_2) is used as the base material that disperses and supports vanadium pentoxide (V_2O_5) and tungsten trioxide (WO_3), which are the active catalyst materials. Vanadium pentoxide is widely used in the SCR industry due to its resistance to sulfur poisoning. The vanadium content controls the reactivity of the catalyst, but also catalyzes the oxidation of SO_2 to SO_3. For this moderate to high sulfur coal application, it is necessary to minimize the vanadium content to reduce SO_2 oxidation. Additionally, the vanadium already present in the petcoke fuel may deposit on the catalyst, increasing the oxidation of SO_2 to SO_3 over time. Tungsten trioxide also provides thermal and mechanical stability to the catalyst. The concentrations of vanadium pentoxide, titanium dioxide, and tungsten trioxide are customized to meet the specific requirements for this SCR system installation. The catalyst is made up of numerous catalyst modules that are loaded into the SCR reactor.

The catalyst is selected to ensure adequate NO_x reduction and acceptable SO_2 oxidation. In addition, the catalyst is designed to withstand temperatures up to 880°F.

Testing of the catalyst will be performed if the performance results are not met and for the Catalyst Management Program. The program is used to monitor catalyst performance throughout the life of the catalyst in order to ensure the optimal catalyst design is used as plant operation could vary in the future. Each catalyst module has a removable catalyst test box, with an installed handle. There are a total of 84 catalyst test boxes per layer.

2.2 Design Conditions

The catalyst sizing is determined by the physical and chemical characteristics of the flue gas. For this project, a catalyst pitch of 8.2 mm is used, with a wall thickness of 1.0 mm. These two parameters work together to ensure a proper balance between percent open area (to reduce pressure losses) and mechanical strength required for catalyst handling and washing.

3.0 Reactor and Ductwork

3.1 Description

The purpose of the reactor and associated ductwork is to bring the flue gas into contact with the SCR catalyst in order to facilitate the chemical reactions from nitrogen oxides to nitrogen and water.

The ductwork for the SCR system consists of an inlet duct, an outlet duct, a bypass duct, the reactor housing, and the associated dampers and expansion joints as indicated on the SCR system arrangement drawings. The ammonia injection grid penetrates one wall of the SCR reactor inlet duct and extends the entire width of the duct.

Each unit is provided with two SCR reactors (one per economizer outlet/air heater inlet path) with up to four layers of catalyst modules. The SCR system is located between the boiler economizer outlet and the air preheater inlet. The SCR system is upstream of the air preheaters, electrostatic precipitators (ESP), induced draft (ID) fans, and scrubbers. The boiler flue gas exits the boiler economizer in two sections and is directed through the two SCR reactors using dampers. The flue gas passes through a static mixing device and through the ammonia injection grid before entering the SCR catalyst field. Ammonia is injected into the flue gas at the ammonia injection grid (AIG), at a ratio of 1.05 moles of ammonia for every mole of nitrogen oxides (NO_x) being removed. The flue gas then passes through the SCR catalyst, where the ammonia reacts with the NO_x in the flue gas to form nitrogen and water vapor. The flue gas then exits the SCR reactors and enters the two existing air preheaters. The boiler flue gas then passes through the ESP, ID fans, and scrubbers and discharges into the atmosphere via the chimney. For maintenance requirements, each SCR reactor may be bypassed by closing the reactor inlet diverter damper and closing the reactor outlet isolation dampers. During SCR reactor bypass operation, flue gas is directed from the boiler economizer outlet to the air preheater inlet. Additional maintenance dampers are provided at the SCR inlet and outlet for double isolation of the reactor while the boiler is in operation. This provides for zero leakage of flue gas into the SCR reactor during bypass operation.

The reactor is a vertical, downward flow design and is capable of holding a total of four catalyst layers. Only the upper three layers are initially loaded with catalyst. The fourth layer will be added later when the catalyst performance deteriorates to an unacceptable level, or if changes in fuel blends require additional catalyst activity. The catalyst modules are stacked in frames designed to support the full weight of the modules. Each layer is capable of holding catalyst that is up to 5.3 feet in height. Each reactor layer is equipped with sonic horns to prevent ash from accumulating on the catalyst surface. If petcoke firing returns to the fuel mix, catalyst will be installed only on Layers 2 through 4, and sootblowers will be installed on those layers. Soot blowers will be located approximately 20 inches above the catalyst face, independent of the catalyst depth. Catalyst module frames are designed based on the actual catalyst module length, to maintain the soot blower dimension above the catalyst face. Each reactor layer is also designed to facilitate the periodic removal and replacement of the catalyst modules.

NOx monitoring equipment is located upstream of the ammonia injection grid and at the outlet of the SCR reactor. Carbon monoxide (CO) and oxygen (O2) instrumentation is located on the ductwork at the economizer outlet. A sample grid is located downstream of the fourth catalyst layer (at the outlet of SCR reactor) for tuning the ammonia injection grid. A differential pressure transmitter is installed across the catalyst layers to monitor any change in differential pressure due to catalyst plugging. Test ports are located on the ductwork in the following locations:

- Between the economizer outlet and the inlet diverter damper (upstream of the LPA screen)
- After the inlet maintenance damper (upstream of the static mixer)
- After the ammonia injection grid upstream of the SCR reactor
- On the SCR reactor before and after each catalyst layer
- Between the SCR reactor outlet and the air preheater inlet

Ductwork, plate, and stiffeners are constructed of ASTM A588 steel material. Turning vanes and flow straightening devices located in the ductwork consist of ASTM A588 steel material. The ductwork is designed to minimize the need for internal trusses wherever possible. Turning vanes and flow straightening devices are provided as indicated by flow modeling studies performed by the catalyst supplier during the detailed design. Expansion joints are located in the ductwork as required to accommodate thermal movement of the ductwork.

3.2 Design Conditions

The SCR reactors are sized to provide a flue gas velocity of 16.4 to 19.6 feet per second at the catalyst face. The velocity in the ductwork containing the static mixer, ammonia injection grid, and the SCR outlet isolation louver damper is approximately 50 feet per second. The velocity in the remaining ductwork is between 45 and 60 feet per second.

The design pressure and temperature of the SCR inlet duct, reactor, and outlet duct is ±35 inches wg and 800º F, respectively.

4.0 Ammonia Injection Grid

4.1 Description

The function of the ammonia injection grid is to introduce ammonia into the flue gas before it enters the SCR reactor.

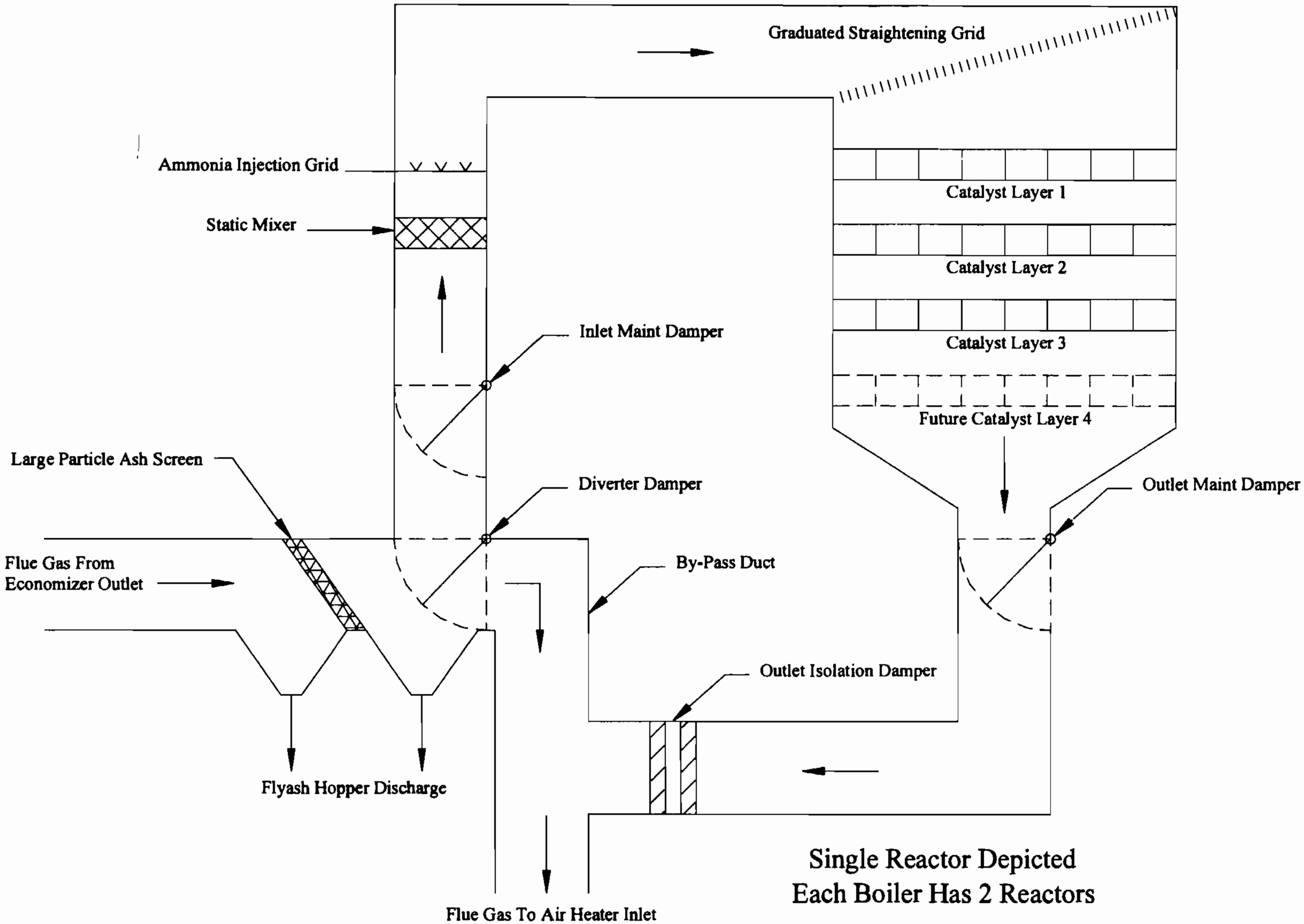
An air/ammonia vapor mixture flows from the ammonia vaporization equipment into the ammonia injection grid distribution header, where it is introduced into the SCR reactor inlet duct and distributed across the entire duct cross section via the ammonia injection grid (AIG). The AIG consists of a series of stacked layers of parallel pipes, each with nozzles that inject the mixture into a specific section of the SCR reactor inlet duct. The pipes extend the entire width of the ductwork and contain a sufficient number of nozzles sized for the particular ammonia distribution requirement. The piping from the distribution header includes manual flow control valves, flow elements, and differential pressure indicators to adjust/tune the ammonia injection flow.

The AIG distribution header, supply lines, and all components outside the flue gas stream are manufactured of carbon steel. The AIG grid located inside the flue gas stream is constructed of ASTM A335 P11 alloy steel.

During the initial SCR reactor startup phase, and approximately once a year thereafter, the flow rate of the air/ammonia vapor through the nozzles is optimized by manually adjusting the ammonia flow control valves in the AIG supply lines. This initial setting and periodic adjustment optimizes the distribution of the ammonia across the SCR inlet duct cross-section to minimize both the NO_x emissions and ammonia slip. The flow elements consist of Type 316 stainless steel orifice plates installed between a pair of carbon steel orifice flanges. Differential pressure indicators measure the pressure drop across the flow orifice. The sample grid at the SCR Reactor outlet is used to collect NOx readings which provide indication for adjustment of the flow control valves.

There potential increase in SAM emissions due to the SCR process will be minimized through the injection, downstream of the SCR, of ammonia to react with the SO_3 prior to the electrostatic precipitator (ESP). The system is designed to be designed to remove 90% of the SAM after the air heater. The amount of ammonia injected into the flue gas conditioning system will be regulated based on load and SO_2 content. The reactant, primarily ammonium sulfate, will be collected in the ESP and FGD system. The ammonia slip after the ESP, from the SCR process, is expected to be 2 parts per million or less.

SJRPP SCR System



St. Johns River Power Park FGD System

Purpose

The purpose of the Research-Cottrell Double-Loop™ FGD System is to reduce the sulfur dioxide (SO_2) emissions exiting each of the two (2) pulverized coal-fired balanced draft steam generators, (675 megawatt units) to meet the new source performance standards (NSPS) promulgated by the EPA and published in the June 11, 1979 Federal Register. Each steam generator is designed to burn 4.0 percent maximum sulfur, 0.30 percent maximum chlorine coal. The FGD System uses in situ oxidation (greater than 99 percent) to produce commercial grade gypsum as a by-product.

Process Description: Gas Side

The SJRPP FGD Systems utilize a limestone reagent. Limestone (a mineral found abundantly in the United States) provides the chemical (calcium carbonate – the major constituent of limestone) that reacts with the sulfur dioxide. The product of these reactions is a slurry containing calcium sulfite and calcium sulfate (gypsum). This slurry is dewatered to produce a stable and saleable gypsum end-product.

The limestone contacts the SO_2 laden flue gas in vessels called absorber towers. Each unit has three (3) absorber towers which are 48 feet in diameter. Two (2) towers are used to treat 100% of the flue gas at rated maximum load. The third tower on each unit is normally kept as a standby/ spare, although the FGD System design permits all three (3) towers to be operated simultaneously.

The towers provide the proper chemical conditions for an efficient reaction of SO_2 and calcium carbonate to take place, so that approximately 95 percent of the SO_2 treated in the absorber towers is removed at all times. Since only about 90% SO_2 removal is required for high sulfur fuel, not all of the gas needs to be treated to meet emissions requirements. A portion of the gas is bypassed and mixed with the treated gas to meet the overall emissions goal. This minimizes the number of towers, pumps and limestone used at any time.

Flue gas enters the absorber tower tangentially in the cyclonic quencher. The quencher cools the gas and saturates it with moisture, reducing the gas temperature from about 277° F to approximately 123° F. This is done by spraying 15% solids slurry containing limestone (1% to 3% of the total) and reaction products (remainder) into the flue gas using a centrifugal pump. Through this gas/liquid contacting, the quencher also removes between 10% and 25% of the incoming SO_2 and much of the residual particulate exiting the Research-Cottrell electrostatic precipitators.

From the quencher, the partially treated saturated gas passes around the bowl or liquid-gas separator (which separates low reactivity quencher slurry from high reactivity absorber slurry) and enters the absorber loop. Here the gas, now straightened from cyclonic to vertical, contacts two (2) absorber sections which remove most of the remaining SO_2. Both of these sections, the spray tower and the wetted film contactor (WFC) or packing, contact the gas with a 12% solids slurry containing limestone (8% to 12% of the solids) and reaction products at a pH of 5.8 to 6.1.

The absorber sprays direct slurry downward into the gas through small spray nozzles. The wetted film contactor sprays feed slurry down, onto an open grid surface of polypropylene. This grid design is patented and is called the wetted film contactor because the slurry running down it forms a high surface film wherein the reaction of SO_2 with $CACO_3$ is maximized.

When the flue gas leaves the absorber section, the SO_2 removal process is completed. The gas, however, must now be stripped of water and slurry droplets carried up from the absorber sections. This is done in a two stage mist eliminator section system. Here, the gas passes through two (2) sections of polypropylene packing which collects these droplets by collision of the droplets with the packing surfaces. Water wash sprays below each mist eliminator periodically to remove any collected buildup and allow it to drain back into the absorber sections.

The treated gas then exits into the main outlet ductwork where it mixes with any unscrubbed (or bypass) gases. The resultant gas mixture is unsaturated in moisture content, reducing the chance for condensation in the ductwork and stack and is elevated in temperature from the treated gas temperature. Additional reheat can be provided by the supplemental reheat system to give added buoyancy to exit the 640 foot tall stack.

Process Description: Liquid Side

Following through the liquid or slurry side of the system, limestone is delivered to the site by truck or rail and stored in the SJRPP limestone storage area. Reclaim conveyors feed the limestone (still in pebble form) to day-storage silos. From here, a belt-type gravimetric weigh feeder delivers the limestone to the ball mill system where the limestone is ground up and mixed with water in a rubber-lined rotating drum-type ball mill. Ball mill discharge is fed to classifiers which recycle the coarse material back to the ball mill for regrinding and allow the finely ground material to proceed to the reagent feed tank.

The resultant slurry is a mixture of 40% solids (1.34 SGU) (i.e. limestone) and 60% water, where the particle size of the ground limestone is such that a minimum 80% can pass through a 200 mesh screen. This "reagent slurry" is stored in reagent feed tanks which deliver limestone slurry to the FGD System on demand through centrifugal pumps called the reagent feed pumps.

Fresh limestone, as reagent slurry, enters the absorber feed tanks, which circulate a slurry of fresh limestone and reaction products (primarily unoxidized material called calcium sulfite) to the absorber sprays and wetted film contactor sections of the tower, using centrifugal pumps (absorber feed pumps). The spent slurry returns to the absorber feed tanks through the bowl return line. Solids generated in the "absorber loop" of the process are discharged from the absorber feed tank to the quencher loop sump (i.e. the bottom portion of the absorber towers) via the absorber hydroclone underflow, or the absorber feed tank overflow line.

From the quencher sumps, the partially reacted slurry is circulated through the quencher spray levels by centrifugal pumps (quencher pumps). This slurry has a 10-20% solids (1.06-1.12 SGU) content and contains primarily reaction products (mostly oxidized material called calcium sulfate) plus small amounts of unreacted limestone. The oxidation process is enhanced by bubbling air through holes in pipes called "spargers" into both the absorber feed tanks and the quencher sumps. The purpose of this process is to oxidize the sludge which improves the dewaterability of the slurry in the waste handling system.

The quencher slurry is pumped via a hydroclone feed pump to a first stage quencher hydroclone. The underflow from these hydroclones consists of about 35-60% solids and is transferred to the waste transfer tank while the overflow from the first stage hydroclone is fed to a second stage quencher hydroclone. The overflow from the second stage hydroclone is purged to control the chloride in the FGD System. The underflow of the second stage hydroclone is sent back to the quencher sump.

Slurry from the waste transfer tanks (one for each operating absorber tower) is recycled via waste transfer pumps and transferred to a common waste slurry tank. The slurry from this tank is sent to a filter feed sump using a second stage dewatering pump. Slurry from the filter feed sump is delivered to two-stage vacuum filters. Each stage consists of two operating vacuum drum filters which operate by pulling water through a filter cloth which is impermeable to solids. If concentration of chloride in the gypsum cake exceeds the required level, the gypsum cake will be reslurried in the reslurry tank and sent to the second stage vacuum filters.

All water recaptured from the dewatering system is recycled back to the FGD System to minimize the need for fresh make up water. This provides a closed loop operation.

Operating History

Both units have maintained greater than 99% system availability and compliance with emissions regulations with the commencement of operation of Unit #1 on December 12, 1986 and Unit #2 on March 24, 1988.

SJRPP is currently selling by-product gypsum to both a wall board manufacturer as well as to area farmers who utilize the gypsum as a

Attachment P

NGS CT Chart

NORTHSIDE STATION COMBUSTION TURBINES
BASE LOAD MW vs TEMPERATURE

#	AMBIENT TEMP °F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR	AMBIENT TEMP °F	GROSS MW (X)	x Coeff. Net MW	HEAT CONSUMED MBTU/HR
1	20	67.97	67.63	868	60	58.77	58.43	747
2	21	67.74	67.40	865	61	58.54	58.20	744
3	22	67.51	67.17	861	62	58.31	57.97	741
4	23	67.28	66.94	858	63	58.08	57.74	738
5	24	67.05	66.71	855	64	57.85	57.51	735
6	25	66.82	66.48	852	65	57.62	57.28	733
7	26	66.59	66.25	849	66	57.39	57.05	730
8	27	66.36	66.02	846	67	57.16	56.82	727
9	28	66.13	65.79	842	68	56.93	56.59	724
10	29	65.90	65.56	839	69	56.70	56.36	721
11	30	65.67	65.33	836	70	56.47	56.13	719
12	31	65.44	65.10	833	71	56.24	55.90	716
13	32	65.21	64.87	830	72	56.01	55.67	713
14	33	64.98	64.64	827	73	55.78	55.44	710
15	34	64.75	64.41	824	74	55.55	55.21	708
16	35	64.52	64.18	821	75	55.32	54.98	705
17	36	64.29	63.95	818	76	55.09	54.75	702
18	37	64.06	63.72	815	77	54.86	54.52	699
19	38	63.83	63.49	812	78	54.63	54.29	697
20	39	63.60	63.26	809	79	54.40	54.06	694
21	40	63.37	63.03	806	80	54.17	53.83	691
22	41	63.14	62.80	802	81	53.94	53.60	689
23	42	62.91	62.57	799	82	53.71	53.37	686
24	43	62.68	62.34	796	83	53.48	53.14	683
25	44	62.45	62.11	793	84	53.25	52.91	681
26	45	62.22	61.88	791	85	53.02	52.68	678
27	46	61.99	61.65	788	86	52.79	52.45	675
28	47	61.76	61.42	785	87	52.56	52.22	673
29	48	61.53	61.19	782	88	52.33	51.99	670
30	49	61.30	60.96	779	89	52.10	51.76	667
31	50	61.07	60.73	776	90	51.87	51.53	665
32	51	60.84	60.50	773	91	51.64	51.30	662
33	52	60.61	60.27	770	92	51.41	51.07	660
34	53	60.38	60.04	767	93	51.18	50.84	657
35	54	60.15	59.81	764	94	50.95	50.61	654
36	55	59.92	59.58	761	95	50.72	50.38	652
37	56	59.69	59.35	758	96	50.49	50.15	649
38	57	59.46	59.12	755	97	50.26	49.92	647
39	58	59.23	58.89	753	98	50.03	49.69	644
40	59	59.00	58.66	750	99	49.80	49.46	641
41	60	58.77	58.43	747	100	49.57	49.23	639

KSCT	
Y INTERCEPT	72.576
SLOPE	0.2301

DISPATCH HEAT RATE CURVES

A =	1.78910E+02
B =	8.82453E+00
C =	-1.50705E-02
D =	5.20028E-04
AA =	3.40192E-01
BB =	9.99987E-01
CC =	1.79499E-07
DATE:	05/21/93

Attachment Q

NGS and SJRPP Tables

I.19. Visible Emissions (VE). VE tests shall be conducted on the following emissions units to determine compliance with their applicable limits, as follows:

Emissions Units at NGS	EPA Method(s)	Duration of VE Test	Frequency	Material
Vessel Hold (EU-028a)	9	30 min	I only	C or PC
Vessel Unloader & Spillage Conveyors (EU-028a)	9	3 hr	I only	C & LS
Belt Conveyor No. 1 (EU-028)	9	3 hr	I only	C & LS
Transfer Towers (EU-028c, -028g, -028i, -028o, -028q & -028v)	9	3 hr	I only	C & LS
Fuel Storage Building (EU-028h)	9	30 min	I only	C or PC
Limestone Storage Pile (EU-028p)	9	30 min	I only	LS
NSPS - OOO				
Limestone Prep Building Dust Collectors - Baghouse Exhaust (EU-034)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Silos Bin Vent Filters - Baghouse Exhaust (EU-035)	9-VE 5-PM	IVE - 60 min RVE - 30 min	Meth 9: I & R Meth 5: I only	LS
Limestone Dryer/Mill Building (EU-033)	22	IVE - 75 min	I only	LS
NSPS - Y				
Crusher House Building Baghouse Exhaust (EU-029)	9	IVE - 3 hr RVE - 30 min	I & R	C and/or PC*
Fuel Silos Dust Collectors - Baghouse Exhaust (EU-031)	9	IVE - 3 hr RVE - 30 min	I & R	C and/or PC*
Other				
Fly Ash Transport Blower Discharge - Baghouse Exhaust (EU-036)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Fly Ash Silos Bin Vents - Baghouse Exhaust (EU-037)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Bed Ash Silos Bin Vents - Baghouse Exhaust (EU-038)	9	IVE - 30 min RVE - 30 min	I & R	Ash
AQCS Pebble Lime Silo - Baghouse Exhaust (EU-042)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Fly Ash Slurry Mix System Vents - Baghouse Exhaust (EU-051)	9	IVE - 60 min RVE - 60 min	I & R	Ash
Bed Ash Slurry Mix System Vents - Baghouse Exhaust (EU-052)	9	IVE - 30 min RVE - 30 min	I & R	Ash
Bed Ash Surge Hopper Bin Vents - Baghouse Exhaust (EU-053)	9	IVE - 60 min RVE - 60 min	I & R	Ash

C – Coal and/or Coal coated with latex
I – Initial R - Renewal (once every 5 years)
IVE – Initial Visible Emissions Test, RVE - Renewal Visible Emissions Test
LS – Limestone; PC-Petroleum Coke

Note: No methods other than the ones identified above may be used for compliance testing unless prior DEP or the ERMD-AQD approval is received in writing.
[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; 0310045-012-AC/PSD-FL-265B; 40 CFR 60.11(b); and, 40 CFR 60, Appendix A]

* In accordance with the May 20, 2008 request to revise the permits PSD-FL-265 and Title V Permit No. 0310045-016-AV to incorporate coal and/or pet coke as approved fuels while conducting VE testing.

21 West Church Street
Jacksonville, Florida 32202-3139

May 20, 2008

Ms. Trina L. Vielhauer, Chief
Bureau of Air Regulation
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

JEA.

ELECTRIC

WATER

SEWER

RE: Northside Generating Station (NGS)
Title V Permit No. 0310045-016-AV
PSD Permit No. PSD-FL-265
Request for Permit Revision

Dear Ms. Vielhauer:

The above referenced permits currently require VE testing of the crusher house bag-house exhaust (EU29) and boiler feed silo bag-house exhaust (EU31) every five years for permit renewal while processing coal (see specific condition I.19 of the Title V permit and specific condition 41 of the PSD permit). Since these units typically operate on a mix of pet coke and coal, we request that the permits be revised to require that these emission units be tested on coal and/or pet coke ("C and/or PC").

If you have any questions or wish to discuss this submittal further, please contact Bert Gianazza at (904) 665-6247.

Sincerely,

James M. Chansler

James M. Chansler, P.E., D.P.A.,
Chief Operating Officer
Responsible Official

Cc: Syed Arif, P.E., FDEP

Revised Table 6 - Part B. SJRPP: Materials Handling and Storage Operations

Emission Unit No.	Materials Handling and Storage Operations Emission Unit/Point	Type Source	VE Limit (% Opacity)	AQCS	Predicted Emissions (lbs/hr)	VE Testing Frequency	Rationale
022: SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations							
022a	Gypsum Dewatering Building	Fugitive	5	1	0.04	Upon Request	Wet byproduct w/insignificant emissions
022a	Gypsum Storage Enclosure	Fugitive	5	1	0.008	Upon Request	Wet byproduct w/insignificant emissions
022j	Gypsum Truck Loadout	Fugitive	5	1	0.28	Upon Request	Wet byproduct w/insignificant emissions
022j	Fly Ash Loadout for Silo 1A (metal structure)	Fugitive	10	1 & 3	0.06	Upon Request	Emissions vented back to Saleable Ash Silo
022j	Fly Ash Loadout for Silo 1B (metal structure)	Fugitive	10	1 & 3	0.06	Upon Request	Emissions vented back to Saleable Ash Silo
022j	Fly Ash Loadout for Silo 2A (metal structure)	Fugitive	10	1 & 3	0.06	Upon Request	Emissions vented back to Saleable Ash Silo
022j	Fly Ash Loadout for Silo 2B (metal structure)	Fugitive	10	1 & 3	0.06	Upon Request	Emissions vented back to Saleable Ash Silo
022k	Solid Waste Disposal Area	Fugitive	10	1 & 2	0.31	Upon Request	Wet byproduct w/insignificant emissions
022l	*Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)*	Point-Vent	5	4 & 5	0.2	Annually	Vent with minor emissions
022l	*Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)*	Point-Vent	5	4 & 5	0.2	Annually	Vent with minor emissions
022l	*Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)*	Point-Vent	5	4 & 5	0.2	Annually	Vent with minor emissions
022l	*Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)*	Point-Vent	5	4 & 5	0.2	Annually	Vent with minor emissions
022l	*Non-Saleable Fly Ash Silo Unit 1-A with Fabric Filter (concrete structure)*	Point-Vent	5	4 & 5	0.2	Annually	Vent with minor emissions
022l	*Non-Saleable Fly Ash Silo Unit 2-A with Fabric Filter (concrete structure)*	Point-Vent	5	4 & 5	0.2	Annually	Vent with minor emissions
022m	*Wet Fly Ash Load out 1A/1B*	Fugitive	10	1, 4 & 6	0.2	Upon Request	Wet byproduct w/insignificant emissions
022m	Bottom Ash Loadouts 1A/1B	Fugitive	10	1	0.09	Upon Request	Wet byproduct w/insignificant emissions
022m	*Wet Fly Ash Load out 2A/2B*	Fugitive	10	1, 4 & 6	0.2	Upon Request	Wet byproduct w/insignificant emissions
022m	Bottom Ash Loadouts 2A/2B	Fugitive	10	1	0.09	Upon Request	Wet byproduct w/insignificant emissions
022n	Unpaved Road, By-Product Transport	Fugitive	10	1 & 2	0.58	Upon Request	No emission vent, reasonable precautions conducted (watering)
023: SJRPP: Fuel and Limestone Handling and Storage Operations							
023a	Rotary Railcar Dumper Building - Unloading and Transfer Points	Point-Fugitive	10	1, 2, 4 & 6	0.15	Upon Request	No emissions vent, minor emissions, enclosed source w/spray bar
023b	Conveyor C-3 Tunnel Ventilation - 6,400 cfm; No control	Point-Vent	5	4	0.32	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023b	Conveyor C-3 Tunnel Ventilation - 6,400 cfm; No control	Point-Vent	5	1, 3 & 4	0.32	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023b	Conveyor C-3 Tunnel Ventilation - 21,600 cfm; No control	Point-Vent	5	1 & 4	0.32	Upon Renewal of Title V	Provides tunnel ventilation only, minor emissions
023c	Shiphold Operations	Fugitive	10	1, 4 & 6	0.54	Upon Request	No emissions vent, minor emissions
023d	Ship Unloader Hopper and Spillage Collector Transfers	Fugitive	10	1, 3, 4 & 6	0.28	Upon Request	No emissions vent, minor emissions
023d	Ship Unloader Hopper to Transfer CT-1, Spillage Conveyor	Fugitive	10	1, 3, 4 & 6	1	Upon Request	Enclosed conveyor, no emissions vent
023e	Fuel Transfer Building (DC-2)	Fugitive	10	1, 3 & 4	0.65	Upon Request	No emissions vent, minor emissions, enclosed source
023e	Transfer Station No. 1	Fugitive	5	1, 2 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 2	Fugitive	5	1, 2 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 3	Fugitive	5	1, 2 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 4	Fugitive	5	1 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 5	Fugitive	5	1 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 6	Fugitive	5	1 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Station No. 7	Fugitive	5	1 & 4	0.04	Upon Request	Enclosed conveyor, no emissions vent
023e	Transfer Point 9GC-04 to 9GC-05	Fugitive	5	1	0.007	Upon Request	No emissions vent, minor emissions (gypsum)
023f	Stacker/Reclaimer (Stacker Mode)	Fugitive	10	1 & 3	2.29	Upon Request	No emissions vent, minor emissions
023f	Stacker	Fugitive	10	1 & 3	1.15	Upon Request	No emissions vent, minor emissions
023f	Reclaimer	Fugitive	10	1 & 3	0.43	Upon Request	No emissions vent, minor emissions
023g	Petroleum Coke Reclaimer System (PC-1)	Fugitive	10	1	0.32	Upon Request	No emissions vent, minor emissions
023g	Emergency Reclaim Hoppers - Loadout	Fugitive	10	1	0.29	Upon Request	Same as other reclaim systems; not typically used
023j	Limestone Truck Loadout & Transfer	Fugitive	10	1	0.1	Upon Request	No emissions vent, minor emissions.
023k	Limestone Storage Pile #1 - Existing	Fugitive	10	1	0.26	Upon Request	No emissions location, minor emissions
023k	Limestone Storage Pile #2 - Fuel Yard	Fugitive	10	1, 2 & 3	0.71	Upon Request	No emissions location, minor emissions.
023k	*Limestone Reclaim Loadout - Grizzley*	Fugitive	10	1 & 3	None	Upon Request	Minor emissions
023k	Coal Pile	Fugitive	10	1, 2 & 3	0.26	Upon Request	No emissions location, minor emissions
023k	Petroleum Coke Pile	Fugitive	10	1, 2 & 3	0.71	Upon Request	No emissions location, minor emissions
023l	Limestone Reclaim Hopper with Fabric Filter (3DC-01)	Point-Vent	5	1, 4 & 5	0.14	Annually	Vent with minor emissions
023l	*Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)*	Point-Vent	5	1, 4 & 5	0.05	Annually	Minor emissions
023l	*Quick Lime Silo with Filter Vent (used for water treatment)*	Point-Vent	5	4 & 5	None	Upon Renewal of Title V	Minor emission source, low volume material handling; 15 min VE suggested
023l	Fuel Handling Building with Fabric Filter (DC-3)	Point-Vent	5	1, 4 & 5	0.24	Annually	Vent with minor emissions
023l	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)	Point-Vent	5	1, 4 & 5	0.009	Annually	Vent with minor emissions
023l	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)	Point-Vent	5	1, 4 & 5	0.009	Annually	Vent with minor emissions

NOTE:

a. "*Italics*" indicates that the emission point was not included in Revised Table 6 of PSD-FL-010(C), but is associated with the material handling and storage operations at JEA's SJRPP.

b. The VE limit (% opacity) shall be used for compliance purposes and demonstrated using EPA Reference Method 9, pursuant to 40 CFR Part 60, Appendix A, and Chapter 62-297, F.A.C.

c. **Air Quality Control Systems (AQCS)**

1. Conditioned Materials
2. Wet Suppression, as needed
3. Water Sprays, as needed
4. Enclosures (Total, Partial, Covers, & Wind Screens)
5. Dust Control System - AQCS
6. Best Operating Practices

d. Predicted emissions (lbs/hr): these values were predicted/estimated and used in a preliminary screening/modeling evaluation for as permitting action (PSD-FL-010) and are not considered to be allowable emission limits.

Table 6 – Part A

Emissions Unit	SO_2	NO_x	PM	Opacity (%)
Steam Generating Boiler No. 1 (6,144 MMBtu/hr maximum heat input)	4,669 lb/hr 0.76 lb/mmBtu (30-day rolling average)	3,686 lb/hr 0.6 lb/mmBtu	184 lb/hr 0.03 lb/mmBtu	20
Steam Generating Boiler No. 2 (6,144 MMBtu/hr maximum heat input)	4,669 lb/hr 0.76 lb/mmBtu (30-day rolling average)	3,686 lb/hr 0.6 lb/mmBtu	184 lb/hr 0.03 lb/mmBtu	20
Cooling Towers			67 lb/hr (each tower)	N/A

Table 6 – Part C

New Materials Handling Operations	PM/PM_{10} (lb/hr)	Opacity (%)
Hopper Belt, Spillage Conveyors, and DC-1 Transfer Points - New Ship Unloader	0.13/0.06	10
Shiphold – New	0.54/0.26	10
Unloader Hopper and Spillage Collector Transfers - New Ship Unloader	0.28/0.13	10
Enclosed Pile – Vehicle Activities	0.04/0.01	5
Enclosed Storage Pile - 3 Transfer Points	0.13/0.06	5
Transfer Tower D-1	0.04/0.02	5
Transfer Tower D-2	0.04/0.02	5
New Blend Hopper	0.12/0.06	5
New Transfer Tower #1-NGS	0.09/0.04	5
New Transfer Tower #2-NGS	0.09/0.04	5
New Stacker	0.66/0.31	10
NGS Reclaimer	0.52/0.24	10
SJRPP Reclaimer	0.52/0.24	10
New Reclaim Transfer Tower	0.04/0.02	5
New Transfer Tower #3-NGS	0.08/0.04	5
New Transfer Tower #4-NGS	0.06/0.03	5

Note: PM_{10} limits apply only to new and modified emission points. If only one standard is listed, the standard applies to PM emissions.

Attachment R

Acid Rain and CAIR Forms

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: ☐ New ☐ Revised ✓ Renewal

STEP 1

Identify the source by plant name, state, and ORIS or plant code.

Plant name	State	ORIS/Plant Code
Northside	Florida	0667

STEP 2
Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO_2 Opt-in unit, enter "yes" in column "b".

For new units or SO_2 Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO_2 Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO_2 Opt-in Units Commence Operation Date	New or SO_2 Opt-in Units Monitor Certification Deadline
1A	No	Yes		
2A	No	Yes		
3	No	Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

Northside
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
(ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part;
(2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
(ii) Have an Acid Rain Part.

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements.

The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
(2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Northside
Plant Name (from STEP 1)

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4
For SO_2 Opt-in units only.

In column "f" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

f	g	h (not required for renewal application)
Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application

Northside
Plant Name (from STEP 1)

STEP 5

For SO_2 Opt-in units only.
(Not required for SO_2 Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" (and in column "f").

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO_2 Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO_2 Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO_2 Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO_2 Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

STEP 6

For SO_2 Opt-in units only.

Attach additional requirements, certify and sign.

A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
D. Attach a complete compliance plan for SO_2 under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature	Date

STEP 7

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Michael Brost Name	Vice President, Electric Systems Title
JEA Owner Company Name	
(904) 665-7547 Phone	brosmj@jea.com E-mail address
Signature	Date 5-6-08

United States
Environmental Protection Agency
Acid Rain, CAIR, and CAMR Programs OMB Nos. 2060-0258, 2060-0567, 2060-0570, and 2060-0584

EPA

Certificate of Representation

For more information, see instructions and 40 CFR 72.24; 40 CFR 96.113, 96.213, or 96.313, or a comparable state regulation under the Clean Air Interstate Rule (CAIR) NO_X Annual, SO_2, and NO_X Ozone Season Trading Programs; 40 CFR 97.113, 97.213, or 97.313; or 40 CFR 60.4113, or a comparable state regulation under the Clean Air Mercury Rule (CAMR), as applicable.

FACILITY (SOURCE) INFORMATION

This submission is: ☐ New ✓ Revised (revised submissions must be complete; see instructions)

STEP 1
Provide information for the facility (source).

Facility (Source) Name Northside	State FL	Plant Code 0667
County Name Duval		
Latitude	Longitude	

STEP 2
Enter requested information for the designated representative.

Name Michael Brost	Title Vice President, Electric Systems
Company Name JEA	
Address 21 West Church Street, Jacksonville, FL 32202	
Phone Number (904) 665-7547	Fax Number (904) 665-4238
E-mail address brosmj@jea.com	

STEP 3
Enter requested information for the alternate designated representative.

Name Athena Mann	Title Vice President, Environmental Services
Company Name JEA	
Address 21 West Church Street, Jacksonville, FL 32202	
Phone Number (904) 665-6252	Fax Number (904) 665 4238
E-mail address mannat@jea.com	

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: **Complete one page for each unit located at the facility identified in STEP 1** (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NO_x Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ☐ CAIR NO_x Annual ☐ CAIR SO_2 ☐ CAIR NO_x Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code
1	OB	Source Category: Electric Utility; NAICS Code: 221112

Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 11/16/1966

Check One: Actual ✓ Projected ☐

Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
1	NA (Retired)	

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: <u>Complete one page for each unit located at the facility identified in STEP 1</u> (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ✓ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
1A	CFB	Source Category: Electric Utility	1	297.5	350.0
		NAICS Code: 221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 05/29/2002		Check One: Actual ✓ Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: **Complete one page for each unit located at the facility identified in STEP 1** (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ☐ CAIR NOx Annual ☐ CAIR SO_2 ☐ CAIR NOx Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type			Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
2	OB	Source Category	Electric Utility	2	NA (retired)	
		NAICS Code	221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 03/25/1972		Check One: Actual ✓ Projected ☐				

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: <u>Complete one page for each unit located at the facility identified in STEP 1</u> (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ✓ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code
2A	CFB	Source Category: Electric Utility; NAICS Code: 221112

Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 02/19/2002

Check One: Actual ✓ Projected ☐

Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
2	297.5	350.0

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ✓ CAIR NO_x Annual ✓ CAIR SO_2 ✓ CAIR NO_x Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
3	DB	Source Category: Electric Utility	ST3	563.7	563.7
		NAICS Code: 221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 06/28/1977		Check One: Actual ✓ Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NO_x Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ☐ CAIR NO_x Annual ☐ CAIR SO_2 ☐ CAIR NO_x Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
AUXA	OB	Source Category: Electric Utility	AUXA	NA (Retired)	
		NAICS Code: 221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 11/16/1966		Check One: Actual ✓ Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ☐ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Check One	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
GT3	CT	Source Category: Electric Utility		GT3		62.1
		NAICS Code: 221112				
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 02/07/1975			Actual ✓			
			Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NO_x Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ☐ Acid Rain ✓ CAIR NO_x Annual ✓ CAIR SO_2 ✓ CAIR NO_x Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
CT 4	CT	Source Category: Electric Utility	4		62.1
		NAICS Code: 221112			

Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy):	Check One:
01/10/1975	Actual ✓ Projected ☐

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ☐ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
~~CT~~5	CT	Source Category: Electric Utility	5		62.1
		NAICS Code: 221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 12/16/1974		Check One: Actual ✓ Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ☐ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ☐ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
GT6	CT	Source Category: Electric Utility	6		62.1
		NAICS Code: 221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 12/11/1974		Check One: Actual ✓ Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Northside

Facility (Source) Name (from Step 1)

STEP 5: Read the appropriate certification statements, sign, and date.

Acid Rain Program

I certify that I was selected as the designated representative or alternate designated representative (as applicable) by an agreement binding on the owners and operators of the affected source and each affected unit at the source (i.e., the source and each unit subject to the Acid Rain Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and each affected unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the affected source and each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the designated representative or alternate designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the affected source and each affected unit at the source; and
>
> Allowances, and proceeds of transactions involving allowances, will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of allowances, allowances and proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Interstate Rule (CAIR) NO_X Annual Trading Program

I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative (as applicable), by an agreement binding on the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source (i.e., the source and each unit subject to the CAIR NO_X Annual Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the CAIR NO_X Annual Trading Program on behalf of the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_X unit, or where a utility or industrial customer purchases power from a CAIR NO_X unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the CAIR designated representative or alternate CAIR designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the CAIR NO_X source and each CAIR NO_X unit at the source; and
>
> CAIR NO_X allowances and proceeds of transactions involving CAIR NO_X allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_X allowances by contract, CAIR NO_X allowances and proceeds of transactions involving CAIR NO_X allowances will be deemed to be held or distributed in accordance with the contract.

Northside
Facility (Source) Name (from Step 1)

Clean Air Interstate Rule (CAIR) SO_2 Trading Program

I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative (as applicable), by an agreement binding on the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source (i.e., the source and each unit subject to the SO_2 Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the CAIR SO_2 Trading Program, on behalf of the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR SO_2 unit, or where a utility or industrial customer purchases power from a CAIR SO_2 unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the CAIR designated representative or alternate CAIR designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the CAIR SO_2 source and each CAIR SO_2 unit at the source; and
>
> CAIR SO_2 allowances and proceeds of transactions involving CAIR SO_2 allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR SO_2 allowances by contract, CAIR SO_2 allowances and proceeds of transactions involving CAIR SO_2 allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Interstate Rule (CAIR) NO_X Ozone Season Trading Program

I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative (as applicable), by an agreement binding on the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source (i.e., the source and each unit subject to the CAIR NO_X Ozone Season Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the CAIR NO_X Ozone Season Trading Program on behalf of the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_X Ozone Season unit, or where a utility or industrial customer purchases power from a CAIR NO_X Ozone Season unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the CAIR designated representative or alternate CAIR designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit; and
>
> CAIR NO_X Ozone Season allowances and proceeds of transactions involving CAIR NO_X Ozone Season allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_X Ozone Season allowances by contract, CAIR NO_X Ozone Season allowances and proceeds of transactions involving CAIR NO_X Ozone Season allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Mercury Rule (CAMR) Hg Budget Trading Program

I certify that I was selected as the Hg designated representative or alternate Hg designated representative, as applicable, by an agreement binding on the owners and operators of the source and each Hg Budget unit at the source (i.e., the source and each unit subject to the CAMR Hg Budget Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all the necessary authority to carry out my duties and responsibilities under the Hg Budget Trading Program on behalf of the owners and operators of the source and of each Hg Budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the source and of each Hg Budget unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a Hg Budget unit, or where a utility or industrial customer purchases power from a Hg Budget unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the Hg designated representative or alternate Hg designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each Hg Budget unit at the source; and
>
> Hg allowances and proceeds of transactions involving Hg allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of Hg allowances by contract, Hg allowances and proceeds of transactions involving Hg allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Mercury Rule (CAMR) Program Other Than the Hg Budget Trading Program

I certify that I was selected as the Hg designated representative or alternate Hg designated representative, as applicable, by an agreement binding on the owners and operators of the source and each electric generating unit (EGU) (as defined at 40 CFR 60.24(h)(8)) at the source (i.e., the source and each unit subject to a CAMR Program other than the Hg Budget Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all the necessary authority to carry out my duties and responsibilities under a State Plan approved by the Administrator as meeting the requirements of 40 CFR 60.24(h) on behalf of the owners and operators of the source and of each EGU at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the source and of each EGU at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an EGU, or where a utility or industrial customer purchases power from an EGU under a life-of-the-unit, firm power contractual arrangement, I certify that I have given a written notice of my selection as the Hg designated representative or alternate Hg designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each EGU at the source.

Northside	
Facility (Source) Name (from Step 1)	

General

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Signature (Designated Representative)	Date 6.28.07
Signature (Alternate Designated Representative)	Date 6-28-07

Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

This submission is: ✓ New ☐ Revised ☐ Renewal

STEP 1

Identify the source by plant name and ORIS or EIA plant code

Plant Name: Northside	State: Florida	ORIS or EIA Plant Code: 0667

STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO_X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO_2) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO_X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
1A	X	X	X		
2A	X	X	X		
3	X	X	X		
GT3	X	X	X		
GT4	X	X	X		
GT5	X	X	X		
GT6	X	X	X		

Plant Name (from STEP 1) Northside

STEP 3

Read the standard requirements.

CAIR NO_x ANNUAL TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];

(2) The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
(2) A CAIR NO_x unit shall be subject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
(3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
(4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
(5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_x allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

If a CAIR NO_x source emits NO_x during any control period in excess of the CAIR NO_x emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program.
(2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

Plant Name (from STEP 1) Northside

STEP 3, *Continued*

Liability.

(1) Each CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program.
(2) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x source or the CAIR designated representative of a CAIR NO_x source shall also apply to the owners and operators of such source and of the CAIR NO_x units at the source.
(3) Any provision of the CAIR NO_x Annual Trading Program that applies to a CAIR NO_x unit or the CAIR designated representative of a CAIR NO_x unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO_2 TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall:
  (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
  (ii) [Reserved];
(2) The owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO_2 source and each SO_2 CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96 ,Subpart HHH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO_2 source with the following CAIR SO_2 Emission Requirements.

SO_2 Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO_2 allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO_2 Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.
(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR SO_2 allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO_2 unit.

Excess Emissions Requirements.

If a CAIR SO_2 source emits SO_2 during any control period in excess of the CAIR SO_2 emissions limitation, then:
(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

Plant Name (from STEP 1) Northside

STEP 3, Continued

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO_2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO_2 Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO_2 Trading Program or to demonstrate compliance with the requirements of the CAIR SO_2 Trading Program.

(2) The CAIR designated representative of a CAIR SO_2 source and each CAIR SO_2 unit at the source shall submit the reports required under the CAIR SO_2 Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO_2 source and each CAIR SO_2 unit shall meet the requirements of the CAIR SO_2 Trading Program.
(2) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 source or the CAIR designated representative of a CAIR SO_2 source shall also apply to the owners and operators of such source and of the CAIR SO_2 units at the source.
(3) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 unit or the CAIR designated representative of a CAIR SO_2 unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO_2 Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO_2 source or CAIR SO_2 unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];

(2) The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_x Ozone Season source with the following CAIR NO_x Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x Ozone Season unit.

Plant Name (from STEP 1) Northside

STEP 3, Continued

Excess Emissions Requirements.

If a CAIR NO_x Ozone Season source emits NO_x during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.
(2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.
(2) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.
(3) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: Michael Brost	Title: Vice President, Electric Systems
Company Owner Name: JEA	
Phone: (904) 665-7547	E-mail Address: brosmj@jea.com
Signature	Date 4-28-08

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is: ☐ New ☐ Revised ✓ Renewal

STEP 1

Identify the source by plant name, state, and ORIS or plant code.

Plant name	State	ORIS/Plant Code
Saint Johns River Power Park	Florida	0207

STEP 2
Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO_2 Opt-in unit, enter "yes" in column "b".

For new units or SO_2 Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO_2 Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO_2 Opt-in Units Commence Operation Date	New or SO_2 Opt-in Units Monitor Certification Deadline
1	No	Yes		
2	No	Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

Saint Johns River Power Park
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

(1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
(ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part;
(2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
(i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
(ii) Have an Acid Rain Part.

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

<u>Nitrogen Oxides Requirements.</u> The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

(1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
(2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Saint Johns River Power Park
Plant Name (from STEP 1)

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4
For SO_2 Opt-in units only.

In column "f" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

f	g	h (not required for renewal application)
Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application

Saint Johns River Power Park
Plant Name (from STEP 1)

STEP 5

For SO_2 Opt-in units only.

(Not required for SO_2 Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" (and in column "f").

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO_2 Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO_2 Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO_2 Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO_2 Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

STEP 6

For SO_2 Opt-in units only.

Attach additional requirements, certify and sign.

A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
D. Attach a complete compliance plan for SO_2 under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature	Date

STEP 7

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Michael Brost Name	Vice President, Electric Systems Title
JEA Owner Company Name	
(904) 665-7547 Phone	brosmj@jea.com E-mail address
Signature	5-6-08 Date

United States
Environmental Protection Agency
Acid Rain, CAIR, and CAMR Programs OMB Nos. 2060-0258, 2060-0567, 2060-0570, and 2060-0584

EPA

Certificate of Representation

For more information, see instructions and 40 CFR 72.24; 40 CFR 96.113, 96.213, or 96.313, or a comparable state regulation under the Clean Air Interstate Rule (CAIR) NO_X Annual, SO_2, and NO_X Ozone Season Trading Programs; 40 CFR 97.113, 97.213, or 97.313; or 40 CFR 60.4113, or a comparable state regulation under the Clean Air Mercury Rule (CAMR), as applicable.

FACILITY (SOURCE) INFORMATION

This submission is: ☐ New ✓ Revised (revised submissions must be complete; see instructions)

STEP 1
Provide information for the facility (source).

Facility (Source) Name: Saint Johns River Power	State: FL	Plant Code: 0207
County Name: Duval		
Latitude: 30 degrees, 25 minutes, 01 seconds	Longitude: 81 degrees, 33 minutes, 03 seconds	

STEP 2
Enter requested information for the designated representative.

Name: Michael Brost	Title: Vice President, Electric Systems
Company Name: JEA	
Address: 21 West Church Street, Jacksonville, FL 32202	
Phone Number: (904) 665-7547	Fax Number: (904) 665-4238
E-mail address: brosmj@jea.com	

STEP 3
Enter requested information for the alternate designated representative.

Name: Athena Mann	Title: Vice President, Environmental Services
Company Name: JEA	
Address: 21 West Church Street, Jacksonville, FL 32202	
Phone Number: (904) 665-6252	Fax Number: (904) 665-4238
E-mail address: mannat@jea.com	

Saint Johns River Power
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: Complete one page for each unit located at the facility identified in STEP 1 (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ✓ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category / NAICS Code	Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
1	DB	Source Category: Electric Utility	1	679.6	679.6
		NAICS Code: 221112			
Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 03/22/1987		Check One: Actual ✓ Projected ☐			

Company Name	Owner / Operator
Company Name: JEA	✓ Owner ✓ Operator
Company Name: Florida Power & Light Company	✓ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator
Company Name:	☐ Owner ☐ Operator

Saint Johns River Power
Facility (Source) Name (from Step 1)

UNIT INFORMATION

STEP 4: <u>Complete one page for each unit located at the facility identified in STEP 1</u> (i.e., for each boiler, simple cycle combustion turbine, or combined cycle combustion turbine) Do not list duct burners. Indicate each program to which the unit is subject, and enter all other unit-specific information, including the name of each owner and operator of the unit and the generator ID number and nameplate capacity of each generator served by the unit. If the unit is subject to a program, then the facility (source) is also subject. (For units subject to the NOx Budget Trading Program, a separate "Account Certificate of Representation" form must be submitted to meet requirements under that program.)

Applicable Program(s): ✓ Acid Rain ✓ CAIR NOx Annual ✓ CAIR SO_2 ✓ CAIR NOx Ozone Season ✓ CAMR (Hg Budget Trading) ☐ CAMR (Nontrading)

Unit ID#	Unit Type	Source Category	NAICS Code
2	DB	Electric Utility	221112

Date unit began (or will begin) serving any generator producing electricity for sale (including test generation) (mm/dd/yyyy): 05/27/1988

Check One: Actual ✓ Projected ☐

Generator ID Number (Maximum 8 characters)	Acid Rain Nameplate Capacity (MWe)	CAIR-CAMR Nameplate Capacity (MWe)
2	679.6	679.6

Company Name	Owner	Operator
JEA	✓	✓
Florida Power & Light Company	✓	☐
	☐	☐
	☐	☐
	☐	☐

STEP 5: Read the appropriate certification statements, sign, and date.

Acid Rain Program

I certify that I was selected as the designated representative or alternate designated representative (as applicable) by an agreement binding on the owners and operators of the affected source and each affected unit at the source (i.e., the source and each unit subject to the Acid Rain Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and each affected unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the affected source and each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the designated representative or alternate designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the affected source and each affected unit at the source; and
>
> Allowances, and proceeds of transactions involving allowances, will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of allowances, allowances and proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Interstate Rule (CAIR) NO_X Annual Trading Program

I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative (as applicable), by an agreement binding on the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source (i.e., the source and each unit subject to the CAIR NO_X Annual Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the CAIR NO_X Annual Trading Program on behalf of the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_X unit, or where a utility or industrial customer purchases power from a CAIR NO_X unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the CAIR designated representative or alternate CAIR designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the CAIR NO_X source and each CAIR NO_X unit at the source; and
>
> CAIR NO_X allowances and proceeds of transactions involving CAIR NO_X allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_X allowances by contract, CAIR NO_X allowances and proceeds of transactions involving CAIR NO_X allowances will be deemed to be held or distributed in accordance with the contract.

Saint Johns River Power
Facility (Source) Name (from Step 1)

Clean Air Interstate Rule (CAIR) SO_2 Trading Program

I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative (as applicable), by an agreement binding on the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source (i.e., the source and each unit subject to the SO_2 Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the CAIR SO_2 Trading Program, on behalf of the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR SO_2 unit, or where a utility or industrial customer purchases power from a CAIR SO_2 unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the CAIR designated representative or alternate CAIR designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the CAIR SO_2 source and each CAIR SO_2 unit at the source; and
>
> CAIR SO_2 allowances and proceeds of transactions involving CAIR SO_2 allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR SO_2 allowances by contract, CAIR SO_2 allowances and proceeds of transactions involving CAIR SO_2 allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Interstate Rule (CAIR) NO_X Ozone Season Trading Program

I certify that I was selected as the CAIR designated representative or alternate CAIR designated representative (as applicable), by an agreement binding on the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source (i.e., the source and each unit subject to the CAIR NO_X Ozone Season Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all necessary authority to carry out my duties and responsibilities under the CAIR NO_X Ozone Season Trading Program on behalf of the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a CAIR NO_X Ozone Season unit, or where a utility or industrial customer purchases power from a CAIR NO_X Ozone Season unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the CAIR designated representative or alternate CAIR designated representative (as applicable) and of the agreement by which I was selected to each owner and operator of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit; and
>
> CAIR NO_X Ozone Season allowances and proceeds of transactions involving CAIR NO_X Ozone Season allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of CAIR NO_X Ozone Season allowances by contract, CAIR NO_X Ozone Season allowances and proceeds of transactions involving CAIR NO_X Ozone Season allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Mercury Rule (CAMR) Hg Budget Trading Program

I certify that I was selected as the Hg designated representative or alternate Hg designated representative, as applicable, by an agreement binding on the owners and operators of the source and each Hg Budget unit at the source (i.e., the source and each unit subject to the CAMR Hg Budget Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all the necessary authority to carry out my duties and responsibilities under the Hg Budget Trading Program on behalf of the owners and operators of the source and of each Hg Budget unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the source and of each Hg Budget unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, a Hg Budget unit, or where a utility or industrial customer purchases power from a Hg Budget unit under a life-of-the-unit, firm power contractual arrangement, I certify that:

> I have given a written notice of my selection as the Hg designated representative or alternate Hg designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each Hg Budget unit at the source; and
>
> Hg allowances and proceeds of transactions involving Hg allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of Hg allowances by contract, Hg allowances and proceeds of transactions involving Hg allowances will be deemed to be held or distributed in accordance with the contract.

Clean Air Mercury Rule (CAMR) Program Other Than the Hg Budget Trading Program

I certify that I was selected as the Hg designated representative or alternate Hg designated representative, as applicable, by an agreement binding on the owners and operators of the source and each electric generating unit (EGU) (as defined at 40 CFR 60.24(h)(8)) at the source (i.e., the source and each unit subject to a CAMR Program other than the Hg Budget Trading Program, as indicated in "Applicable Program(s)" in Step 4).

I certify that I have all the necessary authority to carry out my duties and responsibilities under a State Plan approved by the Administrator as meeting the requirements of 40 CFR 60.24(h) on behalf of the owners and operators of the source and of each EGU at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the source and of each EGU at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an EGU, or where a utility or industrial customer purchases power from an EGU under a life-of-the-unit, firm power contractual arrangement, I certify that I have given a written notice of my selection as the Hg designated representative or alternate Hg designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the source and of each EGU at the source.

Saint Johns River Power
Facility (Source) Name (from Step 1)

General

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Signature (Designated Representative)	Date 7-25-07
Signature (Alternate Designated Representative)	Date 07-24-07

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_X Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is: ☐ New ☑ Revised

STEP 1
Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name	State	ORIS Code
St. Johns River Power	FL	207

STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

	ID# 1	ID# 2	ID#	ID#	ID#	ID#
	Type DBW	Type DBW	Type	Type	Type	Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	☐	☐	☐	☐	☐	☐
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	☐	☐	☐	☐	☐	☐
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan).	☐	☐	☐	☐	☐	☐
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	☑	☑	☐	☐	☐	☐
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	☐	☐	☐	☐	☐	☐
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	☐	☐	☐	☐	☐	☐
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	☐	☐	☐	☐	☐	☑
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	☐	☐	☐	☐	☐	☐
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	☐	☐	☐	☐	☐	☐
(j) NO_x Averaging Plan (include NO_x Averaging form)	☐	☐	☐	☐	☐	☐
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	☐	☐	☐	☐	☐	☐
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO_x Averaging (check the NO_x Averaging Plan box and include NO_x Averaging form)	☐	☐	☐	☐	☐	☐

St. Johns River Power
Plant Name (from Step 1)

STEP 2, cont'd.

	ID# 1 Type DBW	ID# 2 Type DBW	ID# Type	ID# Type	ID# Type	ID# Type
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	☐	☐	☐	☐	☐	☐
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	☐	☐	☐	☐	☐	☐
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	☐	☐	☐	☐	☐	☐
(p) Repowering extension plan approved or under review	☐	☐	☐	☐	☐	☐

STEP 3
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.
Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name ATHENA T. MANN	
Signature A T Mann	Date 04/22/2008

Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

This submission is: ✓ New ☐ Revised ☐ Renewal

STEP 1

Identify the source by plant name and ORIS or EIA plant code

Plant Name: Saint Johns River Power Park	State: Florida	ORIS or EIA Plant Code: 0207

STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO_X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO_2) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO_X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
1	X	X	X		
2	X	X	X		

Plant Name (from STEP 1) Saint Johns River Power Park

STEP 3

Read the standard requirements.

CAIR NO_x ANNUAL TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_x source and each CAIR NO_x unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_x source with the following CAIR NO_x Emissions Requirements.

NO_x Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
(2) A CAIR NO_x unit shall be subject to the requirements under paragraph (1) of the NO_x Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
(3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Requirements, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
(4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
(5) A CAIR NO_x allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_x allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x unit.

Excess Emissions Requirements.

If a CAIR NO_x source emits NO_x during any control period in excess of the CAIR NO_x emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_x unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_x Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program
(2) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

Plant Name (from STEP 1) Saint Johns River Power Park

STEP 3, Continued

Liability.

(1) Each CAIR NO_X source and each CAIR NO_X unit shall meet the requirements of the CAIR NO_X Annual Trading Program.
(2) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X source or the CAIR designated representative of a CAIR NO_X source shall also apply to the owners and operators of such source and of the CAIR NO_X units at the source.
(3) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X unit or the CAIR designated representative of a CAIR NO_X unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source or CAIR NO_X unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO_2 TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall:
   (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
   (ii) [Reserved];
(2) The owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO_2 source and each SO_2 CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96 ,Subpart HHH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO_2 source with the following CAIR SO_2 Emission Requirements.

SO_2 Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO_2 allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO_2 Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.
(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR SO_2 allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO_2 unit.

Excess Emissions Requirements.

If a CAIR SO_2 source emits SO_2 during any control period in excess of the CAIR SO_2 emissions limitation, then:
(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

Plant Name (from STEP 1) Saint Johns River Power Park

STEP 3, Continued

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO_2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO_2 Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO_2 Trading Program or to demonstrate compliance with the requirements of the CAIR SO_2 Trading Program.

(2) The CAIR designated representative of a CAIR SO_2 source and each CAIR SO_2 unit at the source shall submit the reports required under the CAIR SO_2 Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO_2 source and each CAIR SO_2 unit shall meet the requirements of the CAIR SO_2 Trading Program.
(2) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 source or the CAIR designated representative of a CAIR SO_2 source shall also apply to the owners and operators of such source and of the CAIR SO_2 units at the source.
(3) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 unit or the CAIR designated representative of a CAIR SO_2 unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO_2 Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO_2 source or CAIR SO_2 unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR NO_x Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_x Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_x Ozone Season source with the following CAIR NO_x Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_x emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
(3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_x Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
(4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
(5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of NO_x in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_x Ozone Season unit.

Plant Name (from STEP 1) Saint Johns River Power Park

STEP 3, Continued

Excess Emissions Requirements.

If a CAIR NO_X Ozone Season source emits NO_X during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Ozone Season Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Ozone Season Trading Program.
(2) The CAIR designated representative of a CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall submit the reports required under the CAIR NO_X Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall meet the requirements of the CAIR NO_X Ozone Season Trading Program.
(2) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season source or the CAIR designated representative of a CAIR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_X Ozone Season units at the source.
(3) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season unit or the CAIR designated representative of a CAIR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_X Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X Ozone Season source or CAIR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: Michael Brost	Title: Vice President, Electric Systems
Company Owner Name: JEA	
Phone: (904) 665-7547	E-mail Address: brosmj@jea.com
Signature	Date 4-28-08