Jacksonville Electric Authority

Northside Generating Station(NGS)/ St. Johns River Power Park (SJRPP)/ Separations Technology, LLC (ST) Facility

Facility ID No. 0310045
Duval County

Title V Air Operation Permit Revision

Permit No. 0310045-038-AV

(3rd Revision of Title V Air Operation Permit No. 0310045-020-AV)

Permitting Authority:

State of Florida Department of Environmental Protection
Division of Air Resource Management
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Title V Air Operation Permit Revision
Permit No. 0310045-030-AV

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JEA
21 West Church Street
Jacksonville, Florida 32202

Permit No. 0310045-038-AV
NGS/SJRPP/ST Facility
Facility ID No. 0310045
Title V Air Operation Permit Revision

The purpose of this permit is for the revision of the Title V air operation permit for the above referenced facility is to incorporate Permit No. 0310045-037-AC (PSD-FL-265F) to remove the conditions regarding the mercury Continuous Emission Monitoring System requirements and allow the firing of up to 240 tons per day of biomass for each of the Northside Generating Station Boiler Nos. 1 and 2; and, revise the description of St. Johns River Power Park Units 1 and 2 to allow the operation of one scrubber tower during low load operations. The existing NGS/SJRPP/ST facility is located at 4377 Heckscher Drive, Jacksonville, in Duval County. UTM Coordinates are: Zone 17, 446.90 km East and 3359.150 km North. Latitude is: 30° 21' 52" North; and, Longitude is: 81° 37' 25" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code, (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Effective Date: December 7, 2012
Renewal Application Due Date: May 20, 2013
Expiration Date: December 31, 2013

Executed in Tallahassee, Florida.
(Electronic Signature)

A.A. Linero
2012.12.03
07:45:37 -05'00'

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

JFK/sa/ejs

Subsection A. Facility Description.

The Northside Generating Station (NGS) and St. Johns River Power Park (SJRPP) facilities and the Separations Technology, LLC (ST) facility are considered to be a single air emission "facility" for air permitting purposes.

NGS and SJRPP:

These operations consist of 5 boilers, NGS existing Boiler No. 3, which is a pre-NSPS boiler with a nominal rating of 564 MW and fired by natural gas, landfill gas, No. 6 residual fuel oil, and used oil; Boilers Nos. 1 and 2 and Auxiliary Boiler No. 1 have been permanently shutdown; NGS CFB Boilers Nos. 1 and 2, which are two coal, coal coated with latex, petroleum coke, and landfill gas fired circulating fluidized bed (CFB) boilers; SJRPP Boilers Nos. 1 and 2, which are two fossil fuel-fired steam generators (boilers) fired with pulverized coal, a blend of petroleum coke and coal, natural gas, new No. 2 distillate fuel oil (startup and low-load operation), and "on-specification" used oil; and, four pre-NSPS distillate fuel oil fired combustion turbines with a nominal rating of 52.5 MWs each, NGS Nos. 3, 4, 5 and 6. Emissions from the NGS Boiler No. 3 are uncontrolled. Emissions from the NGS CTs Nos. 3, 4, 5 and 6, are controlled by firing low sulfur fuel oil. Each NGS CFB boiler is equipped with a selective non-catalytic reduction (SNCR) system to reduce nitrogen oxides (NOx) emissions, limestone injection to reduce sulfur dioxide (SO_2) emissions, fabric filter to reduce particulate matter (PM and PM_{10}) emissions, while maximizing combustion efficiency and minimizing NOx formation to limit carbon monoxide (CO) and volatile organic compound (VOC) emissions. Emissions from the SJRPP Boilers Nos. 1 and 2 are controlled with an electrostatic precipitator, a limestone scrubber, and low-NOx burners. Permit No. 0310045-017-AC authorized the installation of selective catalytic reduction (SCR) systems and ammonia injection systems on the existing SJRPP Boiler Nos. 1 and 2; the Department did not require the installation of this equipment nor does the Department require its operation. The SJRPP and NGS facilities also include coal, petroleum coke, limestone and fly ash handling activities, of which various control devices, control strategies, and control techniques are required.

The material handling and storage operations will 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 will employ 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.

ST:

ST has constructed, owns and operates a fly ash processing system on a portion of leased property at the JEA SJRPP facility in Duval County, Florida. The purpose of the equipment is to remove the residual carbon and ammonia from the JEA 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 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 fly ash processing system includes 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 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

ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA 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 SJRPP for recycle.

Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Subsection B. Summary of Emissions Units.

E.U. No.	Brief Description
Regulated Emissions Units	
-003	NGS: Boiler No. 3
-006	NGS: Combustion Turbine No. 3
-007	NGS: Combustion Turbine No. 4
-008	NGS: Combustion Turbine No. 5
-009	NGS: Combustion Turbine No. 6
-016	SJRPP: Boiler No. 1
-017	SJRPP: Boiler No. 2
-022	SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations
-023	SJRPP: Fuel and Limestone Handling and Storage Operations
-024	SJRPP: Cooling Towers (2)
-026	NGS: Circulating Fluidized Bed Boiler No. 2
-027	NGS: Circulating Fluidized Bed Boiler No. 1
-028	NGS: Materials Handling and Storage Operations
-029	NGS: Crusher House/Building Baghouse Exhaust (DC1)
-031	NGS: Fuel Silos Dust Collectors (DC2 and DC3)
-033	NGS: Limestone Dryer/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 Bin Vent
-044	ST: Separator A Filter - Receiver Vent
-045	ST: Separator B Filter - Receiver Vent
-046	ST: Separator Dust Collector Vent
-047	ST: Clean-up Vacuum Vent
-048	ST: Fly Ash Surge Bin Vent
-049	ST: Mineral Additive Storage Bin Vent
-050	ST: Gas-fired Dryer Stack
-051	NGS: Fly Ash Slurry Mix System Vents
-052	NGS: Bed Ash Slurry Mix System Vents
-053	NGS: Bed Ash Surge Hopper Bin Vents

E.U. No.	Brief Description
Unregulated Emissions Units/Activities	
The following Storage Tanks are located at the Northside Generating Station (NGS)	
-010	Bunker C Storage Tanks

-010	Storage Tank: 4,578,000 gallons - Bunker C
-010	Storage Tank: 4,578,000 gallons - Bunker C
-010	Storage Tank: 4,578,000 gallons - Bunker C
-010	Storage Tank: 11,256,000 gallons - Bunker C
-010	Storage Tank: 11,256,000 gallons - Bunker C
-010	Storage Tank: 11,256,000 gallons - Bunker C
-011	Diesel Storage Tanks
-011	Storage Tank #10: 168,000 gallons - Diesel
-011	Storage Tank #11: 4,200,000 gallons - Diesel
-011	Storage Tank #12: 4,200,000 gallons - Diesel
-012	Diesel Storage Tanks
-012	Storage Tank #13: 4,200,000 gallons - Diesel
-012	Storage Tank #14: 4,200,000 gallons - Diesel
-015	Waste Oil Storage Tanks
-015	Storage Tank: 750 gallons - Waste Oil Storage (Unit 1)
-015	Storage Tank: 1,000 gallons - Waste Oil Storage (Unit 2)
-015	Storage Tank: 575 gallons - Waste Oil Storage (Unit 3)
The following Storage Tanks are located at the St. Johns River Power Park (SJRPP)	
-019	Storage Tank: 636,106 gallons - Diesel
-020	Storage Tank: 10,069 gallons - Gasoline
-021	Storage Tank - Emergency Fire Pump: 1,123 gallons - Diesel
-021	Storage Tank - AQCS Emergency Generator Day Tank: 561 gallons - Diesel
-021	Storage Tank - Coal/Limestone Fuel Storage: 10,069 gallons - Diesel
-021	Storage Tank - Ash Landfill Fuel Storage: 10,069 gallons - Diesel
-021	Storage Tank - Power Block Emergency Generator Fuel Storage : 4,015 gallons - Diesel
-021	Storage Tank: 3,000 gallons - Diesel

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received July 3, 2008, this facility is a major source of hazardous air pollutants (HAP). This facility is classified as a PSD major facility. A summary of important applicable regulations is shown in the following table.

Regulation	**E.U. ID No(s).**
Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input	-003
Rule 62-296.702, F.A.C., Reasonably Available Control Technology (RACT) Particulate Matter: Fossil Fuel Steam Generators	-003
Acid Rain, Phase II	-003
Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR)	-003
Rule 62-210.300, F.A.C., Permits Required	-006, -007, -008 & -009
Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR)	-006, -007, -008 & -009
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	-016 & -017
NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978	-016 & -017

Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	-016 & -017
Acid Rain, Phase II and Phase I	-016 & -017
Compliance Assurance Monitoring (CAM)	-016 & -017
Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR)	-016 & -017
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	-023
NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants	-023
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	-023
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	-022
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	-024
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	-026 & -027
NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978	-026 & -027
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	-026 & -027
Acid Rain, Phase II and Phase I	-026 & -027
Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR)	-026 & -027
Compliance Assurance Monitoring (CAM)	-026 & -027
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	-029 & -031
NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants (coal handling at NGS, excluding open storage piles)	-029 & -031
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	-033, -034 & -035
Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants (limestone handling at NGS, except for open storage piles and truck unloading)	-033, -034 & -035
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	See Subsection III.H.
Rule 62-296.711, F.A.C., Reasonable Available Control Technology (RACT) - Materials Handling, Sizing, Screening, Crushing and Grinding Operations	See Subsection III.H.
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	-044 - -050
Rule 62-296.711, F.A.C., Reasonable Available Control Technology - Materials Handling, Sizing, Screening, Crushing and Grinding Operations	-044 - -050
Rule 62-296.712, F.A.C., Reasonable Available Control Technology (RACT) - Miscellaneous Manufacturing Process Operations	-044 - -050

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section V., Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.; and, Jacksonville Environmental Protection Board (JEPB) Rule 2, Part IX]

FW2.1. Not federally enforceable. Odor Nuisance. Pursuant to City of Jacksonville Ordinance Code (JOC) Chapter 376, any facility that causes or contributes to the emission of objectionable odors which results in the City of Jacksonville Environmental Resource Management Department's (ERMD) Environmental Quality Division (EQD) receiving and validating complaints from five (5) or more different households within a 90 day period and can be cited for objectionable odors. [JOC Chapter 376]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. "Nothing is deemed necessary and ordered at this time." [Rule 62-296.320(1)(a), F.A.C.; and, Part X, Rule 2.1001, JEPB]

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1., F.A.C.; and, Part X, Rule 2.1001, JEPB]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: chemical or water application to unpaved roads or unpaved yard areas; paving and maintenance of roads, parking areas and plant grounds; landscaping and planting of vegetation; regular mowing of grass and care of vegetation; limiting access to plant property by unnecessary vehicles; storage of bagged chemical products in weather-tight buildings (except for fertilizer); prompt cleanup of spilled powdered chemical products; confining abrasive blasting where possible; and other techniques, as necessary. Also, for the solid waste disposal area, wetting agents shall be applied as needed. [Rule 62-296.320(4)(c), F.A.C.; PSD-FL-010 and PA 81-13; and, 0310045-003-AC/PSD-FL-265; and, proposed by applicant in Title V air operation permit renewal application received July 3, 2008.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by May 1, 2009 and April 1st of each year, thereafter. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for

download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/Air/permitting/tvfee.htm. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.
d. Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to: Department of Community Affairs, Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9921, Fax: (850) 488-1739.
e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 1515, Lanham-Seabrook, MD 20703-1515, Telephone: (301) 429-5018.

Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.
Send the required annual registration fee using approved forms made payable to: Cashier, Department of Community Affairs, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149
[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

FW10. Clean Air Interstate Rule (CAIR) Applicable Units. This facility contains emissions units that are subject to CAIR. On July 11, 2008, the U.S. Court of Appeals for the District of Columbia recommended vacatur of the Clean Air Interstate Rule. Because of this decision, the applicable CAIR requirements that were identified in the renewal application are not being included in the permit at this time. If, and at such time that, CAIR is ultimately upheld, you must begin complying with the CAIR program requirements contained in the renewal application and the Title V permit must be revised accordingly. [Rules 62-213.440 and 62-296.470, F.A.C.]

Subsection A. Emissions Unit -003

The specific conditions in this section apply to the following emissions unit:

E.U. ID No.	Brief Description
-003	NGS Boiler No. 3

NGS Boiler No. 3 is a fossil fuel-fired steam generator with a nominal nameplate rating of 563.7 megawatts (electric). The emissions unit will be allowed to fire new No. 6 residual fuel oil, natural gas, liquefied petroleum (LP) gas, "on-specification" used oil, landfill gas, and a blend of fuel oil and natural gas and/or landfill gas. The maximum heat inputs are (1) 5033 MMBtu per hour when firing fuel oil; (2) 5260 MMBtu per hour when firing natural gas or natural/landfill gases; or (3) 5033 - 5260 MMBtu per hour when firing a combination of fuel oil and natural gas or natural/landfill gases, respectively. LP gas is used as the igniter fuel when natural gas is not available. Fuel additives, typically of a magnesium oxide, hydroxide or sulfonate, or calcium nitrate origin, are used to enhance combustion and/or control acidity. Pollutant emissions from this emissions unit are uncontrolled. The combustion gases exhaust through a stack of 300 feet. NGS Boiler No. 3 began commercial operation in 1977.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II; Rule 62-296.405(1), F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input; Rule 62-296.702, F.A.C., Reasonably Available Control Technology (RACT) Particulate Matter: Fossil Fuel Steam Generators; AC16-85951; 0310045-012-AC; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

A.1. Permitted Capacity. The maximum operation heat input rates, based on the higher heating value (HHV) of the fuel, are as follows:

E.U. ID No.	MMBtu/hr Heat Input (HHV)	Fuel Type
-003	5260	Natural Gas
	5260	Landfill Gas
	5033	New No. 6 Fuel Oil
	5033	"On-specification" Used Oil
	5033-5260	Fuel Oil and Natural Gas
	5033-5260	Fuel Oil and Natural/Landfill Gases

Note: When a blend of fuel oil and natural and/or landfill gas is fired, the heat input is prorated based on the percent heat input of each fuel. [Rules 62-4.160(2), 62-210.200 (Definitions - Potential to Emit (PTE)); and 62-296.405(1), F.A.C.]

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

A.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation - Fuels. The only fuels allowed to be burned are natural gas, LP gas, landfill gas, new No. 6 fuel oil, "on-specification" used oil, and a blend of fuel oil and natural gas and/or landfill gas. "On-specification" used oil containing any quantifiable levels of polychlorinated biphenyls (PCB) can only be fired when the emissions unit is at normal operating temperatures. LP gas is used as the igniter fuel when natural gas is not available. [Rule 62-213.410, F.A.C.; 40 CFR 271.20(e)(3); AC16-85951; BACT; applicant request dated June 14, 1996; and, 0310045-012-AC]

A.4. Hours of Operation. This emissions unit may operate continuously (8760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions Nos. **A.5.** thru **A.9.,** and **A.11.**, are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions. For Boiler No. 3, visible emissions shall not exceed 40 percent opacity. Emissions units governed by this visible emissions limit shall compliance test for visible emissions annually and as otherwise required by Chapter 62-297, F.A.C. [Rules 62-296.405(1)(a) and 62-296.702(2)(b), F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.6. Visible Emissions – Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.; and, Part III, Rule 2.301, JEPB]

A.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rules 62-296.405(1)(b) and 62-296.702(2)(a), F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.; and, Part III, Rule 2.301, JEPB]

A.9. Sulfur Dioxide. SO_2 emissions shall not exceed 1.98 pounds per million Btu heat input , as measured by applicable compliance methods. Any calculations or methods used to demonstrate compliance shall be based on the total heat input from all fossil fuels, including natural gas, and the sulfur from all fuels fired. [Rules 62-213.440 and 62-296.405(1)(c)1.a., F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.10. Sulfur Dioxide - Sulfur Content. For Boiler No. 3, the sulfur content of the as-fired No. 6 fuel oil shall not exceed 1.8 percent, by weight, if the SO_2 continuous emissions monitor system is temporarily inoperative. [Rule 62-296.405(1)(e)3., F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.11. Nitrogen Oxides (expressed as NO_2). For Boiler No. 3, nitrogen oxides shall not exceed 0.30 lb/MMBtu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(d)1., F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.12. On-Specification Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

a. *On-Specification Used Oil Emissions Limitations.* This emissions unit is permitted to burn on-specification used oil, which contains a Polychlorinated Biphenyl (PCB) concentration of less than 50 parts per million (ppm). On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall

not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. *Quantity Limitation.* This emissions unit is permitted to burn "on-specification" used oil that is generated by the JEA in the production and distribution of electricity, not to exceed 1,000,000 gallons during any calendar year.

c. *PCB Limitation.* Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. *Operational Requirements.* On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

e. *Testing Requirements.* For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

(1) Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications. [40 CFR 279.72(a)]

(2) Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(a) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(b) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(c) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

f. *Recordkeeping Requirements.* The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:
   (1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.
   (2) Results of the analyses of each deposit of used oil, as required by the above conditions.
   (3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.
   [40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

g. *Reporting Requirements.* The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.

[Rule 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

A.13. Excess Emissions From Malfunctions. Excess emissions resulting from malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

A.14. Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in Appendix Q Protocol for Startup and Shutdown. [Rule 62-210.700(1), F.A.C. and Proposed by the Applicant in the Renewal Application]

A.15. Excess Emissions From Startup and Shut Down. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.; and, Part III, Rule 2.301, JEPB]

A.16. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Continuous Emissions Monitoring Requirements

A.17. Sulfur Dioxide.
a. For Boiler No. 3, the permittee elected to monitor emissions using a SO_2 continuous emissions monitoring system (CEMS).
b. The CEMS shall be calibrated, operated and maintained in accordance with the quality assurance requirements of 40 CFR 75, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and

demonstrated based on a 24-hour daily average. A Relative Accuracy Testing Audit (RATA) shall be performed no less than annually.

c. In the event the CEMS becomes temporarily inoperable or interrupted, the fuels and the maximum fuel oil to natural gas firing ratio that can be used is that which was last used to demonstrate compliance prior to the loss of the CEMS, **or** the emissions units shall fuel switch and be fired with a fuel oil containing a maximum sulfur content of 1.8%, by weight, or less.

d. In the event of natural gas disruption and the emissions units have to fire 100% fuel oil, the emissions units shall be fired with a fuel oil containing a maximum sulfur content of 1.8%, by weight, or less.

[Rules 62-213.440, 62-204.800, 62-296.405(1)(c)3., and 62-296.405(1)(f)1.b., F.A.C.]

A.18. Nitrogen Oxides. For Boiler No. 3, compliance with the nitrogen oxides (expressed as NO_2) limit of 0.30 lb/MMBtu shall be demonstrated by the following:

a. Through the use of a CEMS installed, calibrated, operated and maintained in accordance with the quality assurance requirements of 40 CFR 60, Appendix F, and 40 CFR 75, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and demonstrated based on a 30-day rolling average.

b. The performance specifications, location of the monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 CFR 51, Appendix P, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and 40 CFR 60, Appendix B, adopted by reference in Rule 62-204.800, F.A.C.

[Rules 62-296.405(1)(e)4. and 62-296.405(1)(f), F.A.C.; Part X, Rule 2.1001, JEPB; and, 40 CFR 60 & 75]

Test Methods and Procedures

A.19. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 17, 5, 5B, or 5F	Methods for Determining Particulate Matter Emissions
EPA Method 19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
DEP Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

A.20. Annual Compliance Tests. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emission limitations and standards for visible emissions and particulate matter emissions. [Rule 62-297.310(7), F.A.C.]

A.21. Compliance Tests Prior To Renewal. Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE, PM, SO_2 and NO_X. The SO_2 and NO_X RATA test data may be used to demonstrate compliance with the test requirement, provided the testing requirements (notification, procedures & reporting) of Chapter 62-297, F.A.C. are met. [Rule 62-297.310(7)(a)3., F.A.C.]

A.22. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.23. Visible Emissions.
a. For Boiler No. 3, the test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C.
b. The visible emissions test(s) required shall be conducted simultaneously with particulate matter testing and soot blowing and non-soot blowing operating modes.
c. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.405(1)(e)1. & 5., F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.24. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
a. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
b. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
(1) For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
(2) For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.; and, Part XI, Rule 2.1101, JEPB]

A.25. Particulate Matter.
a. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 (with Orsat analysis) or 3A shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
b. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rules 62-213.440, 62-296.405(1)(e)2. & 5., and 62-297.401, F.A.C.; Part X, Rule 2.1001, JEPB; and, Part XI, Rule 2.1101, JEPB]

A.26. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure

shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards.

a. For Boiler No. 3, the permittee shall demonstrate compliance with the 1.98 lbs/MMBtu heat input standard by either using the above referenced EPA test methods, including if used during a RATA for the SO_2 CEMS, or, as an alternate sampling procedure authorized by permit, a sulfur analyses of the as-fired fuel oils and gaseous fuels while compliance testing for particulate matter and visible emissions.
b. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
c. For monitoring purposes and in lieu of fuel sampling and analysis, the permittee shall operate an SO_2 CEMs. A RATA shall be conducted at least annually in accordance with 40 CFR 75.

[Rules 62-213.440, 62-296.405(1)(e)3. & 5., 62-296.405(1)(f)1.b. and 62-297.401, F.A.C.; Part V, Rule 2.501, JEPB; Part X, Rule 2.1001, JEPB; and, Part XI, Rule 2.1101, JEPB]

A.27. Fuel Sampling and Analysis. For Boiler No. 3, the following fuel sampling and analysis protocol shall be used if the permittee opts to demonstrate compliance with the sulfur dioxide standard using an alternate sampling procedure authorized by permit and conducted while performing a compliance test for particulate matter and visible emissions:

a. Determine and record the as-fired fuel sulfur content, percent by weight, (1) for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition, to analyze a representative sample of the blended fuel oil following each fuel delivery, (2) for gaseous fuels using ASTM D 1072-80, or the latest edition (the permittee can default to the maximum sulfur content guaranteed by the supplier).
b. Record hourly fuel totalizer readings with calculated hourly feed rates for each fuel fired, the ratio of fuel oil to gas if co-fired, the density of each fuel, and the percent sulfur content, by weight, of each fuel.
c. The analyses of the No. 6 fuel oil, as received from the supplier, shall include the following:
   (1) Density (ASTM D 1298-80 or the latest edition).
   (2) Calorific heat value in Btu per pound (ASTM D 240-76 or the latest edition).
d. The analyses of the gaseous fuels, as received from the supplier, shall include the following:
   (1) Density (ASTM D1137-53, ASTM D1945-64, or the latest edition).
   (2)Calorific heat value in Btu per cubic foot (ASTM D1137-53, ASTM D1945-64, ASTM D1826-77, or the latest edition).
e. Utilize the above information in a., b., c. and d. to calculate the SO_2 emission rate.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.; and, 40 CFR 60. Appendix A]

A.28. Operating Conditions During Testing - Particulate Matter and Visible Emissions. Compliance tests for particulate matter and visible emissions during soot blowing and steady-state (non-soot blowing) operations shall be conducted at least once, annually, if liquid fuel is fired for more than 400 hours. All visible emissions tests shall be conducted concurrently with the particulate matter emissions tests. Testing shall be conducted as follows:

a. *100% Fuel Oil Firing*. Particulate matter and visible emissions tests during soot blowing and steady-state operations shall be performed on each emissions unit while firing fuel oil containing a sulfur content equal to or less than 1.8%, by weight, except that such test shall not be required to be performed during any federal fiscal year that testing is performed in accordance with Specific Condition **A.28.b**.
b. *Co-firing Fuel Oil with Gases*. If fuel oil containing a sulfur content greater than 1.8%, by weight, is co-fired with gases (i.e., natural gas, landfill gas, LP gas), then particulate matter and visible emissions tests during soot blowing and steady-state operations shall be performed as soon as practicable, but in no event more than 60 days from the day of first firing the higher percent sulfur fuel oil, while co-firing such fuel

oil with the proportion of gas required to maintain SO_2 emissions between 90 to 100% of the SO_2 emissions limitation (1.62 to 1.98 lbs/MMBtu heat input, respectively). Following successful completion of such particulate matter and visible emissions testing, further particulate matter and visible emissions testing shall not be required during the remaining federal fiscal year unless fuel oil is fired containing a sulfur content greater than 0.20%, by weight, above the fuel oil sulfur content percent, by weight, that was fired during the most recent co-firing compliance tests. If fuel oil is co-fired containing a sulfur content greater than 0.20%, by weight, above the fuel oil sulfur content percent, by weight, that was fired during the most recent co-firing compliance tests for particulate matter and visible emissions, then additional particulate matter and visible emissions tests shall be performed as described above and as soon as practicable, but in no event more than 60 days from the day of first firing the higher sulfur percent fuel oil. Following successful completion of such particulate matter and visible emissions testing, further particulate matter and visible emissions testing shall not be required during the remaining federal fiscal year unless fuel oil is fired containing a sulfur content greater than 0.20%, by weight, above the fuel oil sulfur content percent, by weight, that was fired during the most recent co-firing compliance tests. If any additional particulate matter and visible emissions tests are imposed after completion of any required annual compliance tests, then the frequency testing base date shall be reset to 12-months after the date of completion of the last tests.

[Rules 62-4.070(3), 62-213.440, 62-296.405(1)(c)3. and 62-297.310(7)(a)9., F.A.C.; and, Part XI, Rule 2.1101, JEPB]

A.29. Annual VE Testing Not Required. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.; and, Part XI, Rule 2.1101, JEPB]

A.30. Annual And Renewal PM Testing. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; Part XI, Rule 2.1101, JEPB; and, ASP Number 97-B-01.]

A.31. Used Oil Sampling. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch delivered for firing. [Rules 62-4.070 and 62-213.440; and, 40 CFR 279]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

A.32. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions	Every 3 months (quarter)	**A.33.** & **A.34.**
Actual Emissions Reporting	Annually	**A.39.**

[Rule 62-296.405(1)(g), F.A.C.]

A.33. Notification of Excess Emissions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

A.34. Excess Emissions Reports. For each calendar quarter, submit to the ERMD-EQD a written report of emissions in excess of emission limiting standards, as set forth in Rule 62-296.405(1), F.A.C., and any continuous emissions monitoring system outages. The nature and cause of the excess emissions shall be explained. The report shall be submitted within 30 calendar days following the last day of the quarterly period. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.; and, Part X, Rule 2.1001, JEPB]

A.35. Used Oil Records. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in these emissions units. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. [Rule 62-213.440(1)(b)2.b., F.A.C.; and, 40 CFR 279.61 and 761.20(e)]

A.36. Used Oil Annual Report. The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Boiler No. 3 during the calendar year. [Rule 62-213.440(1)(b)2.b., F.A.C.]

A.37. Shut Down Records. When the NGS boiler No. 3 is shut down, it shall be recorded in the boiler's operating log book. [Rule 62-213.440, F.A.C.; and, AC16-85951]

A.38. Fuel Consumption Records. The owner or operator shall create and maintain for each emissions unit hourly records of the amount of each fuel fired, the ratio of fuel oil to gas if co-fired, and the heating value and sulfur content, percent by weight, of each fuel fired. These records must be of sufficient detail to be able to identify when additional particulate matter and visible emissions testing is required pursuant to specific condition **A.29.b.**, and, when applicable, demonstrate compliance with the requirements of Specific Condition **A.27.e**. [Rules 62-4.070(3), 62-213.410, 62-213.440 and 62-296.405(1)(c)3., F.A.C.]

A.39. Actual Emissions Reporting. Based on analysis that compared baseline actual emissions with projected actual emissions, and the project, and pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions:

a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.

b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
   (1) The name, address and telephone number of the owner or operator of the major stationary source;
   (2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;

(3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
(4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

d. For this project, the permittee estimated the following baseline actual emissions: 243 tons/year of carbon monoxide (CO); 1,916 tons/year of nitrogen oxides (NO_X); 6,791 tons/year of sulfur dioxide (SO_2); 232 tons/year of particulate matter (PM), 232 tons/year particulate matter of 10 microns or less (PM_{10}); and 29 tons/year of volatile organic compounds (VOC).

e. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of this permit. For this project, the permittee shall use the following methods in reporting the actual annual emissions for Unit 3:
(1) The permittee shall use data collected from the CEMS to determine and report the actual annual emissions of SO_2 and NO_X.
(2) The permittee shall use the data collected from the required stack tests to determine and report the actual annual emissions of PM/PM_{10}. The permittee shall follow the stack test methods, test procedures and test frequencies specified in the current Title V air operation permit.
(3) Unless otherwise approved by the Department, the permittee shall use the same emissions factors for reporting the actual annual emissions of CO and VOC as used in the application to establish baseline emissions.
(4) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Permit No. 0310045-026-AC, Specific Condition, 3.A.3.]

Miscellaneous

A.40. Operation and Maintenance Plan. For Boiler No. 3, an Operation and Maintenance Plan required under RACT for PM is attached and a part of this permit pursuant to Rule 62-296.700(6), F.A.C. All activities shall be performed as scheduled and recorded data made available to the ERMD-EQD upon request. Records shall be maintained on file for a minimum of five (5) years. Appendix O&M, Operation and Maintenance Plan under RACT for PM, is attached as part of this permit. [Rule 62-296.700(6), F.A.C.; and, Part X, Rule 2.1001, JEPB]

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-006	NGS: Combustion Turbine No. 3
-007	NGS: Combustion Turbine No. 4
-008	NGS: Combustion Turbine No. 5
-009	NGS: Combustion Turbine No. 6

Emission unit numbers -006, -007, -008 and -009 are combustion turbines (CTs) manufactured by General Electric (Model MS 7000) and are designated as CTs No. 3, No. 4, No. 5 and No. 6, respectively. Each CT has a maximum heat input from new No. 2 distillate fuel oil of 901.0 MMBtu (LHV: lower heating value). The No. 2 fuel oil has a maximum sulfur content of 0.5%, by weight. These CTs are used as peaking units during peak demand times, during emergencies, and during controls testing, to run a nominal 56.2 MW generator (each). Emissions from the CTs are uncontrolled. Direct water spray fogger devices were installed in the inlet ducts of each CT to provide adiabatic inlet air cooling that increases turbine output and decreases heat rate. A group of exhaust stacks serve the CTs. CT No. 3 began commercial service in February 1975, No. 4 in January 1975, No. 5 in February 1974, and, No. 6 in December 1974.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR). These emissions units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rates, based on the lower heating value (LHV) of the fuel, are as follows:

E.U. ID No.	MMBtu/hr Heat Input	Fuel Type
-006	901.0 (LHV)	New No. 2 Fuel Oil
-007	901.0 (LHV)	New No. 2 Fuel Oil
-008	901.0 (LHV)	New No. 2 Fuel Oil
-009	901.0 (LHV)	New No. 2 Fuel Oil

The attached Appendix NGS: CT Heat Input Nominal Values is a chart of the Base Load MW vs. Temperature to aid in defining full load for visible emissions testing purposes, since the manufacturer's curves are not available. The heat input numbers are only nominal values. An estimated heat input rate can be calculated from fuel records showing the quantity and the heat content of the fuel fired, and shall be provided upon request. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)).]

B.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation - Fuels. Only new No. 2 distillate fuel oil shall be fired in the combustion turbines. [Rule 62-213.410, F.A.C.]

B.4. Hours of Operation.
a. These CTs may operate continuously, i.e., 8,760 hours/year.
b. Each CT shall not exceed 399 hrs/yr operation while using foggers.
[Rules 62-4.160(2) and 62-210.200(Definitions - PTE), F.A.C.; and, 0310045-006-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition No. **B.5.** is based on the specified averaging time of the applicable test method.

B.5. Visible Emissions. Visible emissions from each combustion turbine shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.]

B.6. Sulfur Dioxide - Sulfur Content. The sulfur content of the new No. 2 distillate fuel oil shall not exceed 0.5 percent, by weight. [Requested in Title V permit application.]

Excess Emissions

B.7. Excess Emissions Allowed. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

B.8. Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in Appendix Q Protocol for Startup and Shutdown. [Rule 62-210.700(1), F.A.C. and Proposed by the Applicant in the Renewal Application]

B.9. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Monitoring of Operations

B.10. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis for each fuel delivery. [Rule 62-213.440, F.A.C.]

Test Methods and Procedures

B.11. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition	Methods for Evaluating Fuel Sulfur Content
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Chapter 62-297, F.A.C.]

B.12. Visible Emissions Testing - Biennial. By this permit, biennial (odd years) emissions compliance testing for visible emissions is required for each emissions unit, but is not required for those emissions units burning No. 2 fuel oil for less than 400 hours during the previous even year or the current odd year in question. [Rules 62-297.310(7)(a)4. & 8., F.A.C.; Part XI, Rule 2.1101, JEPB.]

B.13. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.14. VE Test Method. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; and, Part XI, Rule 2.1101, JEPB]

B.15. Fuel Sulfur Analysis. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. [Rules 62-213.440 and 62-297.440, F.A.C.; and, Part XI, Rule 2.1101, JEPB]

B.16. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

The attached Appendix NGS: CT Heat Input Nominal Values is a chart of the Base Load MW vs. Temperature to aid in defining full load for visible emissions testing purposes, since the manufacturer's curves are not available. The heat input numbers are only nominal values.

[Rules 62-297.310(2), F.A.C.; and, Part XI, Rule 2.1101, JEPB]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

B.17. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**B.18.**

[Rule 62-210.700(6), F.A.C.]

B.18. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the

malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

B.19. Test Reports.
a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the ERMD-EQD on the results of each such test.
b. The required test report shall be filed with the ERMD-EQD as soon as practical but no later than 45 days after the last sampling run of each test is completed.
[Rule 62-297.310(8), F.A.C.; and, Part XI, Rule 2.1101, JEPB]

B.20. Fuel Records. Records of No. 2 fuel oil consumption shall be maintained and made available to the ERMD-EQD upon request. [Rule 62-213.440, F.A.C.]

B.21. Foggers. A log book shall be maintained to show when each CT is using a fogger device and shall provide the beginning and ending times (hour and minute) of its use. [Rule 62-4.070(3), F.A.C.]

Subsection C. Emissions Units -016 & -017

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-016	SJRPP Boiler No. 1
-017	SJRPP Boiler No. 2

SJRPP Boilers Nos. 1 and 2 are fossil fuel-fired steam generators, each having a nominal nameplate rating of 679.6 megawatts (electric). These emissions units are allowed to fire pulverized coal, a blend of petroleum coke and coal, natural gas, new No. 2 distillate fuel oil (startup and low-load operation), and "on-specification" used oil. The maximum heat input to each emissions unit is 6,144 million Btu per hour. SJRPP Boilers Nos. 1 and 2 are dry bottom wall-fired boilers and use an electrostatic precipitator (ESP) to control particulate matter, a wet limestone flue gas desulfurization (FGD) unit to control sulfur dioxide, low NO_X burners and over-fire air to control nitrogen oxides, and good combustion to control carbon monoxide. Each FGD consists of three scrubber towers. During low load operation, one scrubber tower may be utilized to meet sulfur dioxide limits.

SCR and Ammonia Injection Systems

Permit No. 0310045-017-AC authorized the installation of Selective Catalytic Reduction (SCR) systems on SJRPP Boiler Nos. 1 and 2. The permittee elected to install these controls as part of its plan to comply with the Clean Air Interstate Rule (Rule 62-296.470(CAIR), F.A.C.). When operating, the SCR systems decrease nitrogen oxides (NOx) emissions from the SJRPP Boiler Nos. 1 and 2, which allows the plant to meet annual and ozone season NOx CAIR allocations.

Installation of the SCR systems resulted in collateral increases in emissions of sulfuric acid mist (SAM) and particulate matter (PM/PM_{10}). 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. Permit No. 0310045-017-AC required the installation of additional ammonia injection systems on SJRPP Boiler Nos. 1 and 2 to reduce SAM emissions. Ammonia is injected downstream of the SCR reactor and upstream of the existing electrostatic precipitator (ESP). The ammonia reacts with SO_3 to form salts (e.g., ammonium sulfate), which are collected in the ESP. With the additional ammonia injection systems, there shall be no PSD-significant emissions increases due to the installation of SCR systems on SJRPP Boiler Nos. 1 and 2. Under this project, there were no other planned changes in SJRPP Boiler Nos. 1 and 2.

The SCR system/ammonia injection system on SJRPP Boiler No. 1 became operational on July 16, 2009 and the SCR system/ammonia injection system on SJRPP Boiler No. 2 became operational on March 24, 2009.

Each boiler exhausts through its own stack (640 feet above grade). The stack diameter is 22.3 feet, exit temperature is 156 degrees F and the actual stack gas flow rate is 1,800,000 acfm. SJRPP Boiler No. 1 began commercial operation in December 1986. SJRPP Boiler No. 2 began commercial operation in March 1988.

{Permitting notes: These emissions units are regulated under Acid Rain, Phase II and Phase I; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(8)(b)2., F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-010; PSD-FL-010, amendment dated 10/28/1986; PSD-FL-010(A, B, C & D); 0310045-012-AC/PSD-FL-010E; and, 0310045-014-AC/PSD-FL-010F]; Siting's PA 81-13: Conditions of Certification; PA 81-13L; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated May 7, 1981; and, Compliance Assurance Monitoring (CAM), adopted and incorporated in Rule 62-204.800, F.A.C.; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

In addition to the requirements below, these emissions units are also subject to the standards and requirements contained in the Acid Rain Part of this permit (see Section IV).

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rates are as follows:

E.U. ID No.	MMBtu/hr Heat Input
-016	6,144
-017	6,144

[Rules 62-4.160(2), 62-210.200 (Definitions - Potential to Emit (PTE)); PSD-FL-010; Part III, Rule 2.301, JEPB; and, PA 81-13]

C.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

C.3. Methods of Operation.

a. The only fuels allowed to be fired are coal, a coal blend with a maximum of 30 percent petroleum coke (by weight), new No. 2 distillate fuel oil, and "on-specification" used oil.
b. The new No. 2 fuel oil shall be used for startup and low load operation.
c. The maximum weight of petroleum coke burned shall not exceed 150,000 pounds per hour, based on a 30-day rolling average using production information for the amount of coal and petcoke metered from the coal storage bins to the boilers.
d. "On-specification" used oil will be generally fired as a blend with the No. 2 fuel oil. "On-specification" used oil containing PCBs above the detectable level of 2 ppm shall not be used for startup or shutdown. "On-specification" used oil containing PCBs between 2 and 49 ppm can only be fired when the emissions unit is at normal operating temperatures.
e. Either coal, a blend of coal and petroleum coke, or fuel oil shall not be fired in the emissions units unless both electrostatic precipitator and limestone scrubber are operating properly except as provided under 40 CFR 60, Subpart Da.
f. No fraction of the flue gas shall be allowed to bypass the limestone flue gas desulfurization (FGD) system to reheat the gasses exiting from the FGD system, if the bypass will cause overall SO_2 removal efficiency less than 90 percent or as otherwise provided in 40 CFR 60, Subpart Da. The percentage and amount of flue gas bypassing the FGD system shall be documented.
g. If at any time the permittee determines that it is appropriate to use supplemental fuel during periods of startup, shutdown, flame stabilization and low load operation, then No. 2 fuel oil and/or natural gas shall be used for the pulverized coal and petroleum coke-fired Boiler No. 1 or Boiler No. 2. [1]
h. Natural Gas Firing[2]: The permittee is authorized to continuously fire natural gas in SJRPP Boiler No. 1 and 2 during normal operations. For each unit, there are 28 natural gas burners rated at 25 MMBtu/hour per burner. The maximum total heat input to each unit from firing natural gas is 700 MMBtu/hour. {Permitting Note: Natural gas firing shall only achieve approximately 11% of full load operation. Other authorized fuels shall be co-fired with natural gas to achieve full load operation.}

[Rule 62-213.410, F.A.C.; PSD-FL-010; 0310045-014-AC/PSD-FL-010F; PA 81-13L&M; PSD-FL-010(A & B); 40 CFR 761.20(e); [1]0310045-024-AC/PSD-FL-010H; [2]0310045-029-AC/PSD-FL-010I; and, requested by the applicant in the Title V permit application.]

C.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - PTE), F.A.C.; Part III, Rule 2.301, JEPB; PSD-FL-010; and, PA 81-13]

Air Pollution Control Technologies and Measures

C.5. SCR Systems. The permittee shall tune, operate and maintain new SCR systems for SJRPP Boiler Nos. 1 and 2 to reduce emissions of NOx. In general, the SCR systems include the following equipment: ammonia storage; ammonia flow control unit (AFCU); ammonia injection grid (AIG); vanadium pentoxide catalyst; an SCR reactor chamber; an SCR bypass system; and other ancillary equipment. [Rules 62-296.470(CAIR) and 62-210.200(PTE), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.2.]

C.6. Ammonia Injection Systems. The permittee shall tune, operate and maintain new ammonia injection systems on SJRPP Boiler Nos. 1 and 2 to mitigate the formation of SAM due to the increased oxidation of SO_2 to SO_3 across the new SCR reactors. Ammonia is injected downstream of the SCR reactor and upstream of the existing ESP. The control system regulating the amount of ammonia injected to control SAM is integrated into the plant digital control system. The ammonia reacts with SO_3 to form salts (e.g., ammonium sulfate), which are collected in the ESP. With the additional ammonia injection systems, there shall be no PSD-significant emissions increases due to the installation of SCR systems on SJRPP Boiler Nos. 1 and 2. The proposed equipment includes storage tanks, piping, injectors, a control system and other ancillary equipment. The ammonia injection systems shall be operable when the SCR system is initially available for service. [Rule 62-212.400(12), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.3.]

C.7. Circumvention - SCR and Ammonia Injection Systems. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. Operation of the SCR is not required. As necessary, the permittee shall operate the ammonia injection system for SAM emissions control to ensure the project does not result in a PSD-significant emissions increase (7 tons/year) of sulfuric acid mist emissions above baseline actual emissions (1,317 tons/year). [Rules 62-210.650 and 62-212.400(12), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.4.]

C.8. Ammonia Slip. 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. [Rule 62-4.070(3), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.7.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions Nos. **C.9., C.10., C.13.** thru **C.16.,** and **C.18.** thru **C.20.,** are based on the specified averaging time of the applicable test method.

C.9. Appendix SJRPP: Table 6 (Revised) - Part C, SJRPP, is incorporated by reference (attached) for SJRPP Boilers 1 and 2 (EU-016 and EU-017, respectively). [PSD-FL-010, amendment dated October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999.]

C.10. Particulate Matter. No owner or operator shall cause to be discharged into the atmosphere from any emissions unit any gases which contain particulate matter in excess of:

a. 0.03 lb/million Btu heat input derived from the combustion of solid or liquid fuels (coal, a blend of coal and petroleum coke, or fuel oil) and 184 lb/hour[1];
b. 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel (coal or a blend of coal and petroleum coke), and
c. 30 percent of potential combustion concentration (70 percent reduction) when combusting liquid fuel.

d. Particulate matter emissions shall be controlled with an electrostatic precipitator.

[40 CFR 60.42a(a)(1), (2) & (3); PSD-FL-010 and BACT; PA 81-13; PSD-FL-010(A & B); and, [1]PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part A.]

C.11. Ash Content.
a. The maximum ash content of the coal is 18%, by weight.
b. The maximum ash content of the No. 2 fuel oil is 0.01%, by weight.
[PSD-FL-010; and, PA 81-13]

C.12. Visible Emissions. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.42a(b); PA 81-13; and, PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part A.]

C.13. Sulfur Dioxide - Coal Only. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts solid fuel or solid-derived fuel any gases which contain sulfur dioxide in excess of:
a. 1.20 lb/million Btu heat input, maximum two-hour average, and 0.76 lb/MMBtu heat input (90% reduction of the potential combustion concentration), 30-day rolling average and 4,669 lb/hour[1]; or
b. 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/million Btu heat input.
c. 100 percent of the potential combustion concentration (zero percent reduction), when emissions are less than 0.20 lb/million Btu heat input.
d. SO_2 emissions shall be controlled with a lime/limestone flue gas desulfurization system on each boiler.
[40 CFR 60.43a(a)(1), (2) & (3); PSD-FL-010 and BACT; PA 81-13); and, [1]PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part A.]

C.14. Sulfur Dioxide - Coal and Petroleum Coke Blends.
a. When coals with a sulfur content up to or equal to 2%, by weight, are co-fired with petroleum coke, the SO_2 emissions shall not exceed 0.53 lb/MMBtu heat input and a minimum of 79% reduction shall be achieved in the flue gas desulfurization system.
b. When coals with a sulfur content between 2 and 3.63%, by weight, are co-fired with petroleum coke, the SO_2 emission limitation shall be based on the following formula:
SO_2 emission limit (lb/MMBtu) = (0.2 x C/100) + 0.4
where: C = percent of coal co-fired on a heat input basis.
Please note that C is on a heat input basis and not on a weight input basis, so appropriate conversions should be used.
c. When coals with a sulfur content greater than 3.63%, by weight, are co-fired with petroleum coke, the SO_2 emissions shall not exceed the following formula:
SO_2 (lb/MMBtu) = (0.1653 x C x S – 0.4 x C + 40) x 1/100
where: C = percent of coal co-fired on a heat input basis; and,
S = weight percent sulfur in coal.
d. The maximum SO_2 emission rate when co-firing petroleum coke and coal shall not exceed 0.676 lb/MMBtu heat input.
e. Compliance with the SO_2 emissions limit shall be based on a 30-day rolling average for those days when petroleum coke is fired. Any use of petroleum coke during a 24-hour period shall be considered 1 day of the 30-day rolling average. The 30-day rolling average shall be calculated according to the Standards of Performance for New Stationary Sources (NSPS) codified in 40 CFR 60, Subpart Da, except as noted above.
[PSD-FL-010; PSD-FL-010(A & B); 0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

C.15. Sulfur Dioxide - Liquid Fuel Only. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility which combusts liquid fuel any gases which contain sulfur dioxide in excess of:

a. 340 ng/J (0.80 lb/million Btu) heat input and 90 percent reduction, or
b. 100 percent of the potential combustion concentration (zero percent reduction), when emissions are less than 86 ng/J (0.20 lb/million Btu) heat input.

[40 CFR 60.43a(b)(1) & (2)]

C.16. Sulfur Dioxide. Compliance with the emission limitation and percent reduction requirements are both determined on a 30-day rolling average basis. [40 CFR 60.43a(g); PSD-FL-010; and, PA 81-13]

C.17. Sulfur Dioxide - Sulfur Content.

a. The maximum coal sulfur content shall not exceed 4.0 percent, by weight.
b. The maximum sulfur content of the petroleum coke - coal blend shall not exceed 4 percent, by weight.
c. The maximum sulfur content of the No. 2 fuel oil is 0.76%, by weight.

[PSD-FL-010; PA 81-13; PSD-FL-010(A & B); 0310045-014-AC/PSD-FL-010F; and, PA 81-13L]

C.18. Sulfur Dioxide. When fuel oil and coal (or a blend of coal and petroleum coke) are combusted simultaneously, the applicable standard is determined by proration using the following formulas:

a. If emissions of SO_2 to the atmosphere are greater than 260 ng/J (0.60 lb/MMBtu) heat input:
   $PS_{SO2} = (340X + 520Y)/100$ and
   $\%P_S = 10$
b. If emissions of SO_2 to the atmosphere are equal to or less than 260 ng/J (0.60 lb/MMBtu) heat input:
   $PS_{SO2} = (340X + 520Y)/100$ and
   $\%P_S = (10X + 30Y)/100$
   where:
   PS_{SO2} = the prorated standard for sulfur dioxide when combusting fuel oil and coal (or a blend of coal and petroleum coke) simultaneously (ng/J heat input).
   $\%P_S$ = percentage of potential SO_2 emissions allowed.
   X = the percentage of total heat input derived from the combustion of fuel oil (excluding solid-derived fuels).
   Y = the percentage of total heat input derived from the combustion of coal or a blend of coal and petroleum coke (including solid-derived fuels).

[40 CFR 60.43a(h)(1) & (2)]

C.19.1. Nitrogen Oxides. No owner or operator subject to the provisions of 40 CFR 60, Subpart Da, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides in excess of the following emission limits, based on a 30-day rolling average.

a. NOx emissions limits.
   (1) Coal or coal-petroleum coke blend: 0.60 lb/million Btu (260 ng/J) heat input and 3,686 lb/hour[1];
   (2) Fuel oil: 130 ng/J (0.30 lb/million Btu) heat input.
b. NOx reduction requirement.
   (1) Solid fuels: 65 percent reduction of potential combustion concentration;
   (2) Liquid fuels: 30 percent reduction of potential combustion concentration.

[40 CFR 60.44a(a)(1) & (2); and, [1]PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part A.]

C.19.2. Nitrogen Oxides (NOx). No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility (emissions unit) any gases that contain NOx

(expressed as NO_2) in excess of the following emission limit, based on a 30-day rolling average basis, and NOx reduction requirement:
(1) 0.20 lb/million Btu [40 CFR 60.44Da(a)(1)], and
(2) 25 percent reduction [40 CFR 60.44Da(a)(2)]. Compliance with the NOx emission limitation under 40 CFR 60.44Da(a)(1) constitutes compliance with the percent reduction requirements under §60.44Da(a)(2). [40 CFR 60.48Da(b)]
[0310045-029-AC/PSD-FL-010I]

C.20.1. Nitrogen Oxides. When fuel oil and coal (or a blend of coal and petroleum coke) are combusted simultaneously, the applicable standard is determined by proration using the following formula:

$PS_{NOX} = (130X + 260Y)/100$

where:

PS_{NOX} is the prorated standard for nitrogen oxides when combusting coal (or a blend of coal and petroleum coke) and fuel oil simultaneously (ng/J heat input).
X = the percentage of total heat input derived from the combustion of fuel oil.
Y = the percentage of total heat input derived from the combustion of coal or a blend of coal and petroleum coke.

[40 CFR 60.44a(c); and, PSD-FL-010]

C.20.2. Nitrogen Oxides (NOx). When two or more fuels are combusted simultaneously, the applicable standard is determined by proration using the following formula:

$E_{NOX} = (0.20w + 0.30x + 0.60z)/100$

Where:

E_{NOX} = Applicable standard for NO_X when multiple fuels are combusted simultaneously (lb/MMBtu of heat input);
w = Percentage of total heat input derived from the combustion of fuels subject to the standard of 0.20 lb/MMBtu of heat input for authorized gaseous fuels;
x = Percentage of total heat input derived from the combustion of fuels subject to the standard of 0.30 lb/MMBtu of heat input for authorized liquid fuels;
z = Percentage of total heat input derived from the combustion of fuels subject to the standard of 0.60 lb/MMBtu of heat input for authorized bituminous coal or a blend of bituminous coal with petcoke. [40 CFR 60.44Da(c)]

[0310045-029-AC/PSD-FL-010I]

C.21. On-Specification Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

a. *On-Specification Used Oil Emissions Limitations.* This emissions unit is permitted to burn on-specification used oil, which contains a Polychlorinated Biphenyl (PCB) concentration of less than 50 parts per million (ppm). On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. *Quantity Limitation.* This emissions unit is permitted to burn "on-specification" used oil that is generated by the JEA in the production and distribution of electricity, not to exceed 1,000,000 gallons during any calendar year.

c. *PCB Limitation.* Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.

d. *Operational Requirements.* On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.

e. *Testing Requirements.* For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

(1) Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications. [40 CFR 279.72(a)]

(2) Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

(a) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

(b) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.

(c) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.

[40 CFR 761.20(e)(2)]

When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

f. *Recordkeeping Requirements*. The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:
   (1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.
   (2) Results of the analyses of each deposit of used oil, as required by the above conditions.
   (3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.

   [40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

g. *Reporting Requirement*. The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.

[Rule 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

C.22. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. See Appendix Q: Protocol for Startup and Shutdown.

Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in Appendix Q Protocol for Startup and Shutdown. [Rule 62-210.700(1), F.A.C. and Proposed by the Applicant in the Renewal Application]

[Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

C.23. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Monitoring of Operations

C.24. Compliance Assurance Monitoring (CAM) Requirements. The emissions units are subject to the CAM requirements contained in the attached Appendix CAM: SJRPP Boilers Nos. 1 and 2. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Compliance Provisions

C.25. Compliance with PM. Compliance with the particulate matter emission limitation under 40 CFR 60.42a(a)(1) constitutes compliance with the percent reduction requirements for particulate matter under 40 CFR 60.42a(a)(2) and (3). [40 CFR 60.46a(a)]

C.26. Compliance With NO_X. Compliance with the nitrogen oxides emission limitation under 40 CFR 60.44a(a)(1) constitutes compliance with the percent reduction requirements under 40 CFR 60.44a(a)(2). [40 CFR 60.46a(b)]

C.27. NSPS Excess Emissions. The particulate matter emission standards under 40 CFR 60.42a and the nitrogen oxide standards under 40 CFR 60.44a apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standards under 40 CFR 60.43a apply 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. [40 CFR 60.46a(c)]

C.28. NSPS Excess Emissions During Emergency Conditions. During emergency conditions in the principle company, an affected facility with a malfunctioning flue gas desulfurization system may be operated if sulfur dioxide emissions are minimized by:

a. Operating all operable flue gas desulfurization modules, and bringing back into operation any malfunctioned module as soon as repairs are completed.
b. Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation.

[40 CFR 60.46a(d)(1) & (2)]

C.29. Compliance Averages. Compliance with the sulfur dioxide emission limitations and the percentage reduction requirements under 40 CFR 60.43a and the nitrogen oxides emissions limitations under 40 CFR 60.44a is based on the average emission rate for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards. [40 CFR 60.46a(e)]

C.30. Compliance Determinations. Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO_2 and NO_X for the 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction (NO_X only), or emergency conditions (SO_2 only). Compliance with the percentage reduction requirement for SO_2 is determined based on the average inlet and average outlet SO_2 emissions rates for the 30 successive boiler operating days. [40 CFR 60.46a(g)]

C.31. Insufficient Data. If the owner or operator has not obtained the minimum quantity of emission data as required under 40 CFR 60.47a, compliance of the affected facility with the emission requirements under 40 CFR 60.43a and 60.44a for the day on which the 30-day period ends may be determined by the Administrator following the applicable procedures in section 7 of Method 19. [40 CFR 60.46a(h)]

Continuous Monitoring Requirements

C.32. Opacity. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharges to the atmosphere. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator). [40 CFR 60.47a(a)]

C.33. Sulfur Dioxide. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions

as follows: Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device. [40 CFR 60.47a(b)(1)]

C.34. Nitrogen Oxides. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere. [40 CFR 60.47a(c)]

C.35. O_2 and CO_2. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. [40 CFR 60.47a(d)]

C.36. Requirement to Operate CEMS. The continuous monitoring systems are operated and data recorded during all periods of operation at the affected facility including periods of startup, shutdown, malfunction, or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. [40 CFR 60.47a(e)]

C.37. Minimum Data Requirement. The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in 40 CFR 60.47a(h). [40 CFR 60.47a(f)]

C.38. One-hour Averages. The 1-hour averages required under 40 CFR 60.13(h) are expressed in ng/J (lb/million Btu) heat input and used to calculate the average emission rates under 40 CFR 60.46a. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate the 1-hour averages. [40 CFR 60.47a(g)]

C.39. Supplemental Data. When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in 40 CFR 60.47a(f), the owner or operator shall use the reference methods and procedures as specified in this paragraph. Acceptable alternative methods are given in 40 CFR 60.47a(j).

a. Method 6 shall be used to determine the SO_2 concentration at the same location as the SO_2 monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.
b. Method 7 shall be used to determine the NOx concentration at the same location as the NO_X monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.
c. The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O_2 or CO_2 concentration at the same location as the O_2 or CO_2 monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.
d. The procedures in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million Btu) heat input.

[40 CFR 60.47a(h)(1), (2), (3) & (4)]

C.40. Monitoring System Performance Evaluations. The owner or operator shall use methods and procedures in this paragraph to conduct monitoring system performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d). Acceptable alternative methods and procedures are given in 40 CFR 60.47a(j).

a. Methods 6, 7, and 3B, as applicable, shall be used to determine O_2, SO_2, and NO_X concentrations.
b. SO_2 or NO_X (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N_2, as applicable) under Performance Specification 2 of appendix B of 40 CFR 60.
c. For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides firing solid fuel is 1,000 ppm.
d. For affected facilities burning fossil fuel, alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

[40 CFR 60.47a(i)(1), (2), (3), & (5)]

C.41. Reference Method Alternatives. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.47a.
a. For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under 40 CFR 60.47a(i), the conditions under 40 CFR 60.46(d)(1) apply; these conditions do not apply under 40 CFR 60.47a(h).
b. For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time is 1 hour.
c. For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
d. For Method 3B, Method 3A may be used.

[40 CFR 60.47a(j)]

Test Methods and Procedures

C.42. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 17, 5, 5B, or 5F	Methods for Determining Particulate Matter Emissions
EPA Methods 6, 6A, 6B, or 6C	Methods for Determining Sulfur Dioxide Emissions
EPA Method 7, Method 7A, 7C, 7D, or 7E	Determination of Nitrogen Oxide Emissions
EPA Method 8 or EPA Conditional Test Method (CTM-013)[1]	Determination of Sulfuric Acid Mist Emissions CTM-013 may be used in lieu of EPA Method 8
EPA Method 19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
EPA Method 9	Visual Determination of the Opacity of Emissions
EPA Conditional Test Method	Determination of Ammonia Emissions (used to demonstrate

Method(s)	Description of Method(s) and Comment(s)
(CTM-027), or EPA Method 320	compliance with the ammonia slip limit)[2]

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C; [1]DEP Order No. 09-I-AP, issued 06/22/09; and, [2]Permit No. 0310045-017-AC, specific condition 3.11.]

C.43. Annual Compliance Tests. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emission limitations and standards for particulate matter, nitrogen oxides, sulfur dioxide, and visible emissions. The NO_X and SO_2 RATA test data may be used to demonstrate compliance with the annual test requirement, provided the testing requirements (notification, procedures & reporting) of Chapter 62-297, F.A.C. are met. [Rule 62-297.310(7), F.A.C.; and, PA 81-13]

C.44. Annual Tests - Ammonia Injection for SAM Emissions Control and SAM Emission Rates. During each federal fiscal year, the permittee shall conduct performance tests to determine the SAM emission rates and adjust the ammonia injection rates as necessary. At least six representative 1-hour test runs shall be conducted on either SJRPP Boiler Nos. 1 and 2. Annual performance tests shall be alternated between the boilers such that testing is conducted on a boiler at least twice during each 5-year period. Within 45 days following the last test run conducted, the permittee shall provide a report summarizing the emissions tests conducted, the results of the tests, the catalyst oxidation rate, how the automated control system was adjusted, and the updated algorithm used for the automated control system or the updated series of related performance curves. [Rules 62-4.070(3) and 62-212.300(1)(e), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.9.]

C.45. Compliance Tests Prior To Renewal. Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE, PM, SO_2 and NO_X. [Rule 62-297.310(7)(a)3., F.A.C.]

C.46. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

C.47. Required Test Methods. In conducting performance tests, the owner or operator shall use as reference methods and procedures the methods in Appendix A of 40 CFR 60 or the methods and procedures as specified in 40 CFR 60.48a, except as provided in 40 CFR 60.8(b). 40 CFR 60.8(f) does not apply to this section for SO_2 and NOx. Acceptable alternative methods are given in 40 CFR 60.48a(e). [40 CFR 60.48a(a)]

C.48. Particulate Matter. The owner or operator shall determine compliance with the particulate matter standard as follows:

a. The dry basis F factor (O_2) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
b. For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after wet FGD systems.
   (1) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160 ± 14 °C (320 ± 25 °F).
   (2) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same transverse points as, the particulate run. If the

particulate run has more than 12 transverse points, the O_2 transverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 transverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 concentrations at each transverse point.

c. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

[40 CFR 60.48a(b)(1), (2) & (3)]

C.49. Sulfur Dioxide. The owner or operator shall determine compliance with the sulfur dioxide standards as follows:

a. The percent of potential SO_2 emissions ($\%P_S$) to the atmosphere shall be computed using the following equation:

$$\%P_S = [(100 - \%R_F)(100 - \%R_S)]/100$$

where:

$\%P_S$ = percent of potential SO_2 emissions, percent.
$\%R_F$ = percent reduction from fuel pretreatment, percent.
$\%R_S$ = percent reduction by SO_2 control system, percent.

b. The procedures in Method 19 may be used to determine percent reduction ($\%R_F$) of sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and fly ash interactions. This determination is optional.

c. The procedures in Method 19 shall be used to determine the percent SO_2 reduction ($\%R_S$) of any SO_2 control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as fired" fuel analysis for 30 consecutive boiler operating days.

d. The appropriate procedures in Method 19 shall be used to determine the emission rate.

e. The continuous monitoring system in 40 CFR 60.47a(b) and (d) shall be used to determine the concentrations of SO_2 and CO_2 or O_2.

[40 CFR 60.48a(c)(1), (2), (3), (4) & (5)]

C.50. Nitrogen Oxides. The owner or operator shall determine compliance with the NO_X standard as follows:

a. The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_X.

b. The continuous monitoring system in 40 CFR 60.47a(c) and (d) shall be used to determine the concentrations of NO_X and CO_2 or O_2.

[40 CFR 60.48a(d)(1) & (2)]

C.51. Alternative Test Methods. The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.48a:

a. For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack temperature at the sampling location does not exceed the average temperature of 160 °C (320 °F). Procedures 2.1 and 2.3 of Method 5B in 40 CFR 60, Appendix A may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.

b. The F_C factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of 40 CFR 60.46(d)(1). The CO_2 shall be determined in the same manner as the O_2 concentration.

[40 CFR 60.48a(e)(1) & (2)]

C.52. Used Oil Compliance Requirements. Compliance with the "on-specification" used oil requirements will be determined as follows:

a. Analysis of a sample collected from each batch delivered for firing; or,
b. The new batch delivery is from a collection site that has an acceptable analysis already on file with the facility and the analytical results are assumed by the facility for the batch.
c. For quantification purposes, the highest concentration of each constituent as determined by any analysis is assumed to be the concentration of the constituent of the blended used oil.

[Rules 62-4.070 and 62-213.440(1)(b)2.b., F.A.C.; Part V, Rule 2.501, JEPB; and, 40 CFR 279]

C.53. If the permittee wants the CEMs RATA tests for SO_2 and NO_X to be considered as formal compliance tests, then the permittee must satisfy all of the requirements (i.e., prior notification, submittal requirements, etc.) of Rule 62-297.310, F.A.C. [Rules 62-297.310(7) and 62-213.440, F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

C.54. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	C.73.
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**C.**64**.**
Stack monitoring, fuel usage and fuel analysis data	Every 3 months (quarter)	**C.**69**.**

[40 CFR 60 Subpart A; and, Rule 62-210.700(6), F.A.C.]

C.55. Performance Test Data. For sulfur dioxide, nitrogen oxides, and particulate matter emissions, the performance test data from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator. [40 CFR 60.49a(a)]

C.56. SO_2 and NO_X Reporting. For sulfur dioxide and nitrogen oxides the following information is reported to the Administrator for each 24-hour period.
a. Calendar date.
b. The average sulfur dioxide and nitrogen oxides emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standards; and, description of corrective actions taken.
c. Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
d. Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and, description of corrective actions taken.
e. Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_X only), emergency conditions (SO_2 only), or other reasons, and justification for excluding data other than startup, shutdown, malfunction, or emergency conditions.
f. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

g. Identification of the times when hourly averages have been obtained based on manual sampling methods.
h. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
i. Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

[40 CFR 60.49a(b)(1), (2), (3), (4), (5), (6), (7), (8) & (9)]

C.57. Additional Reporting Requirements. If the required quantity of emission data as required by 40 CFR 60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of 40 CFR 60.46a(h) is reported to the Administrator for that 30-day period:

a. The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable.
b. The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable.
c. The lower confidence limit for the mean outlet emission rate (E_o^*) and the upper confidence limit for the mean inlet emission rate (E_i^*) as applicable.
d. The applicable potential combustion concentration.
e. The ratio of the upper confidence limit for the mean outlet emission rate (E_o^*) and the allowable emission rate (E_{std}) as applicable.

[40 CFR 60.49a(c)(1), (2), (3), (4) & (5)]

C.58. Control System Malfunction Notification. If any standards under 40 CFR 60.43a are exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

a. Indicating if emergency conditions existed and requirements under 40 CFR 60.46a(d) were met during each period, and
b. Listing the following information:
   (1) Time periods the emergency condition existed;
   (2) Electrical output and demand on the owner or operator's electric utility system and the affected facility;
   (3) Amount of power purchased from interconnected neighboring utility companies during the emergency period;
   (4) Percent reduction in emissions achieved;
   (5) Atmospheric emission rate (ng/J) of the pollutant discharged; and
   (6) Actions taken to correct control system malfunction.

[40 CFR 60.49a(d)(1) & (2)]

C.59. Fuel Pretreatment Credit. If fuel pretreatment credit toward the sulfur dioxide emission standard under 40 CFR 60.43a is claimed, the owner or operator of the affected facility shall submit a signed statement:

a. Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of 40 CFR 60.48a and Method 19 (appendix A); and
b. Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

[40 CFR 60.49a(e)(1) & (2)]

C.60. Missing CEMS Data. For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability.

Operations of the control system and the affected facility during periods of data unavailability are to be compared with operation of the control system and the affected facility before and following the period of data unavailability. [40 CFR 60.49a(f)]

C.61. CEMS and Compliance Notification. The owner or operator of the affected facility shall submit a signed statement indicating whether:

a. The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.
b. The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.
c. The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.
d. Compliance with the standards has or has not been achieved during the reporting period.

[40 CFR 60.49a(g)(1), (2), (3) & (4)]

C.62. Opacity Excess Emissions Reports. For the purposes of the reports required under 40 CFR 60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under 40 CFR 60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter. [40 CFR 60.49a(h)]

C.63. Quarterly Report Submission. The owner or operator of an affected facility shall submit the written reports required under 40 CFR 60.49(a) and 40 CFR 60, Subpart A, to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. [40 CFR 60.49a(i)]

C.64. Quarterly Excess Emissions Reports. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

C.65. Used Oil Records. Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in these emissions units; or, hourly if fired unblended. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. [Rule 62-213.440(1)(b)2.b., F.A.C.; Part V, Rule 2.501, JEPB; and, 40 CFR 279.61 and 761.20(e)]

C.66. Used Oil Reporting. The permittee shall include in the "Annual Operating Report (AOR) for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Boilers Nos. 1 and 2 and the auxiliary boilers during the calendar year. [Rule 62-213.440(1)(b)2.b., F.A.C.; and, Part V, Rule 2.501, JEPB]

C.67.1. Fuel Consumption Records. The owner or operator shall maintain, for each emissions unit, a daily log of the amounts and types of fuels fired and copies of fuel analyses containing information on the sulfur and ash content, percent by weight, and heating values. [Rule 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; and, PSD-FL-010 and PA 81-13]

C.67.2. Natural Gas Firing Records. The permittee shall maintain sufficient records to document the firing of natural gas. [Permit No. 0310045-029-AC/PSD-FL-010I]

C.68. Reporting and Recordkeeping.

a. Documentation verifying that the coal and petroleum coke fuel blends combusted in Boilers Nos. 1 and 2 have not exceeded the 30 percent maximum petroleum coke by weight limit shall be maintained and made available upon request by the Department or the ERMD-EQD. [Rule 62-213.440, F.A.C.; Part V, Rule 2.501, JEPB; 0310045-014-AC/PSD-FL-010F; and, PA81-13L]

b. The permittee shall maintain and submit to the Department and ERMD-EQD on an annual basis for a period of five years from the date the emissions unit is co-fired with petroleum coke above 20%, by weight, information demonstrating in accordance with 40 CFR 52.21(b)(21)(v) and 40 CFR 52.21(b)(33) that the operational changes did not result in emissions increases of nitrogen oxides, carbon monoxide, sulfur dioxide, sulfuric acid mist, volatile organic compounds, and particulate matter. [0310045-014-AC/PSD-FL-010F; and, PA81-13L]

C.69. Reporting and Recordkeeping. Stack monitoring, fuel usage and fuel analysis data shall be reported to the ERMD-EQD on a quarterly basis in accordance with 40 CFR 60.7. [PA81-13]

C.70. Operational Data - SCR and Ammonia Injection Systems. For each unit, the permittee shall continuously monitor and record the ammonia injection rate for SAM emissions control and the hours of SCR bypass. [Rule 62-4.070(3), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.13.]

C.71. Test Reports - SCR and Ammonia Injection Systems. For each sulfuric acid mist test run, the test report shall indicate the ammonia injection rate for SAM emissions control, unit load, unit heat input rate, and total secondary power input to the electrostatic precipitator. [Rule 62-297.310(8), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.12.]

Miscellaneous

C.72. Stack Height. The height of each boiler's exhaust stack for SJRPP Boiler No. 1 and No. 2 shall not be less than 640 feet above grade. [PSD-FL-010 and PA81-13]

C.73. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

C.74. NSPS Requirements - Subpart Da. Except as otherwise provided in this permit, the combustion turbine shall comply with all applicable provisions of 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted by reference in Rule 62-204.800(8)(b)2., F.A.C., except that the Secretary is not the Administrator for purposes

of 40 CFR 60.47a. These emissions units shall comply with **Appendix 40 CFR 60 Subpart Da** included with this permit. [Rule 62-204.800(8)(b)2., F.A.C.]

C.75. Reference Method Alternatives. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified: The emission rate (E) of particulate matter, SO_2 and NOx may be determined by using the Fc factor, provided that the following procedure is used:

a. The emission rate (E) shall be computed using the following equation:
$E = C\ F_c\ (100 / \%\ CO_2)$
where:
E = emission rate of pollutant, ng/J (lb/million Btu).
C = concentration of pollutant, ng/dscm (lb/dscf).
% CO_2 = carbon dioxide concentration, percent dry basis.
F_c = factor as determined in appropriate sections of Method 19.

b. If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., $F_{oa} = 0.209\ (F_{da} / F_{ca})$, then the following procedure shall be followed:
(1) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
(2) When F_o is less than 0.97 F_{oa} and when the average difference ($\overline{d}$) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
(3) When F_o is greater than 1.03 F_{oa} and when $\overline{d}$ is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

[40 CFR 60.46(d)(1)]

Source Obligation - SCR and Ammonia Injection Systems

C.76. Source Obligation - SCR and Ammonia Injection Systems. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by increasing its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction has not yet commenced on the source or modification. [Rule 62-212.400(12)(c), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 2.1.]

C.77. Annual PM/PM_{10} and SAM Emissions Projections - SCR and Ammonia Injection Systems. For the project under Permit No. 0310045-017-AC, the permittee projected that actual annual emissions due to the project would not exceed the PM/PM_{10} annual emissions (322 + 14 = 336 tons/year); and would not exceed the SAM annual emissions (1,317 + 6 = 1,323 tons/year). The permittee shall demonstrate this by compiling and submitting the reports required by this permit. For the purposes of this reporting, all PM emissions are considered to be PM_{10} emissions. [Rules 62-212.300 and 62-210.370, F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.5.]

C.78. Ammonia Injection for SAM Emissions Control - SCR and Ammonia Injection Systems. On an annual basis, the permittee must demonstrate that SAM emissions as a result of the project under Permit No. 0310045-017-AC do not exceed 1,323 tons per year. 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 is used to adjust the ammonia flow rate for the given set of operating conditions based on the most recent performance test results. [Rules 62-4.070(3) and 62-212.300(1)(e), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.6.]

C.79. Annual PM/PM_{10} and SAM Emissions Reports - SCR and Ammonia Injection Systems. In accordance with Rule 62-212.300(1)(e), F.A.C., the permittee shall comply with the following monitoring, reporting and recordkeeping provisions:

a. The permittee shall monitor the PM/PM_{10} and SAM emissions using the most reliable information available. On a calendar year basis, the permittee shall calculate and maintain a record of the annual emissions (tons per year) for a period of 5 years after completing construction on each unit's control system *{Permitting note: The control system on SJRPP Boiler No. 1 became operational on July 16, 2009 and the control system on SJRPP Boiler No. 2 became operational on March 24, 2009, therefore, the 5-year period for both boilers is effective for calendar year (CY) 2010 emissions through CY 2014 emissions}*. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.
b. Within 60 days after each calendar year following completion of construction on each new control system, the permittee shall report to the Compliance Authority the annual emissions for each unit for the preceding calendar year. The report shall contain the following:
    a. Name, address and telephone number of the owner or operator of the major stationary source;
    b. Annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
    c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
    d. Any other information that the owner or operator wishes to include in the report.
c. The information required to be documented and maintained shall be submitted to the Compliance Authority, where it will be available for review to the general public.

[Rule 62-212.300(1)(e), F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.14.]

C.80. PM/PM_{10} and SAM Emissions Computation and Reporting - SCR and Ammonia Injection Systems. The permittee shall compute PM/PM_{10} and SAM emissions in accordance with the following requirements.

a. For each year of reporting required, emissions shall be computed based on the controlled and uncontrolled emissions factors determined during the required annual emissions test. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
b. With appropriate supporting test data, multiple emission factors may be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
c. The permittee shall compute emissions by multiplying the appropriate controlled or uncontrolled emission factor by the annual heat input rate for the period over which the emissions are computed. The uncontrolled emissions factor shall be used if the minimum ammonia injection rate established for the latest test is not met.
d. The permittee shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the Department or Compliance Authority for any regulatory purpose.

[Rule 62-210.370, F.A.C.; and, Permit No. 0310045-017-AC, specific condition 3.15.]

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-023	SJRPP: Fuel and Limestone Handling and Storage Operations

-023a	Rotary Railcar Dumper Building
-023b	Conveyor C-3 Tunnel Ventilation (6,400 cfm)
-023b	Conveyor C-3 Tunnel Ventilation (6,400 cfm)
-023b	Conveyor C-3 Tunnel Ventilation (21,600 cfm)
-023c	Shiphold Operations
-023d	Ship Unloader Hopper and Spillage Collector Transfers
-023d	Ship Unloader Hopper to Transfer CT-1, Spillage Conveyor
-023e	Fuel Transfer Building (DC-2)
-023e	Transfer Stations Nos. 1 thru 7
-023e	Transfer Point 9GC-04 to 9GC-05
-023f	Stacker/Reclaimer (Stacker Mode)
-023f	Stacker
-023f	Reclaimer
-023g	Emergency Reclaim Hoppers - Load Out
-023j	Limestone Truck Loadout & Transfer
-023k	Limestone Storage Pile #1 - Existing
-023k	Limestone Storage Pile #2 - Fuel Yard
-023k	Limestone Loadout
-023k	Coal Pile
-023k	Petroleum Coke Pile
-023l	Limestone Reclaim Hopper with Fabric Filter (3DC-01)
-023l	Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)
-023l	Quick Lime Silo with Fabric Filter (used for water treatment)
-023l	Fuel Handling Building with Fabric Filter (DC-3)
-023l	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)
-023l	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)

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 are generated from limestone handling and storage systems. The emissions units/points are as depicted in Table 6 (Revised) – 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 shall be used for compliance purposes.

{Permitting notes: This emissions unit/points 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)(b)31., F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) New Source Review: PSD-FL-010, and as amended (A) thru (E); Rule 62-212.400(6), F.A.C., 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).}

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; Part III, Rule 2.301, JEPB; and, PSD-FL-010]

D.2. Air Quality Control Systems (AQCS). The permittee shall maintain and continue to use the AQCS established in Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions. [Rules 62-4.070(3) and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; 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]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Condition Nos. **D.3.** and **D.4.** are based on the specified averaging time of the applicable test method.

D.3. The emissions unit/points are subject to the included Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations. [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended 10/28/1986; PSD-FL-010C, clerked July 29, 1999; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

D.4. Visible Emissions. Visible emissions (VE) shall be used for compliance purposes and shall not exceed the following opacity limits as established in Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations:

E.U. ID No.	Brief Description	VE Limit (% opacity)
-023	SJRPP: Fuel and Limestone Handling and Storage Operations	
-023a	Rotary Railcar Dumper Building	10
-023b	Conveyor C-3 Tunnel Ventilation (6,400 cfm)	5
-023b	Conveyor C-3 Tunnel Ventilation (6,400 cfm)	5
-023b	Conveyor C-3 Tunnel Ventilation (21,600 cfm)	5
-023c	Shiphold Operations	10
-023d	Ship Unloader Hopper and Spillage Collector Transfers	10
-023d	Ship Unloader Hopper to Transfer CT-1, Spillage Conveyor	10
-023e	Fuel Transfer Building (DC-2)	10

-023e	Transfer Stations Nos. 1 thru 7	5
-023e	Transfer Point 9GC-04 to 9GC-05	5
-023f	Stacker/Reclaimer (Stacker Mode)	10
-023f	Stacker	10
-023f	Reclaimer	10
-023g	Emergency Reclaim Hoppers - Load Out	10
-023j	Limestone Truck Loadout & Transfer	10
-023k	Limestone Storage Pile #1 - Existing	10
-023k	Limestone Storage Pile #2 - Fuel Yard	10
-023k	Limestone Loadout	10
-023k	Coal Pile	10
-023k	Petroleum Coke Pile	10
-023l	Limestone Reclaim Hopper with Fabric Filter (3DC-01)	5
-023l	Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)	5
-023l	Quick Lime Silo with Fabric Filter (used for water treatment)	5
-023l	Fuel Handling Building with Fabric Filter (DC-3)	5
-023l	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)	5
-023l	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)	5

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part B; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

D.5. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

D.6. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Test Methods and Procedures

D.7. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Chapter 62-297, F.A.C.]

D.8. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), the following emission~~s~~ units/points shall be tested to demonstrate compliance with the emission limitations and standards for visible emissions:

E.U. ID No.	Brief Description
-023l	Limestone Reclaim Hopper with Fabric Filter (3DC-01)
-023l	Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)
-023l	Fuel Handling Building with Fabric Filter (DC-3)
-023l	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)
-023l	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)

The testing frequency for each emissions unit/point was established by the PSD permit, PSD-FL-010G. [Rule 62-297.310(7), F.A.C.; and, PSD-FL-010G, Table 6 (Revised) - Part B.]

D.9. Compliance Tests Prior To Renewal. Prior to permit renewal, a VE compliance test shall be performed for the following emission units/points:

E.U. ID No.	Brief Description
-023b	Conveyor C-3 Tunnel Ventilation (6,400 cfm)
-023b	Conveyor C-3 Tunnel Ventilation (21,600 cfm)
-023b	Conveyor C-3 Tunnel Ventilation (21,600 cfm)
-023l	Limestone Reclaim Hopper with Fabric Filter (3DC-01)
-023l	Limestone Silos with Fabric Filters (2: 1DC-01 and 2DC-01)
-023l	Quick Lime Silo with Fabric Filter (used for water treatment)
-023l	Fuel Handling Building with Fabric Filter (DC-3)
-023l	Unit #1 Fuel Storage Bins with Fabric Filter (DC-4)
-023l	Unit #2 Fuel Storage Bins with Fabric Filter (DC-5)

The testing frequency for each emissions unit/point was established by the PSD permit, PSD-FL-010G. [Rule 62-297.310(7)(a)3., F.A.C.; and, PSD-FL-010G, Table 6 (Revised) - Part B.]

D.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

D.11. Visible Emissions. Visible emissions tests shall be performed for the affected emissions points in Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations for compliance purposes, in accordance with the testing frequency established in the table, and while using EPA Method 9, 40 CFR 60 , Appendix A, and Chapter 62-297, F.A.C. [PSD-FL-010; PA 81-13; Part V, Rule 2.501, JEPB; and, 0310045-015-AC/PSD-FL-010G.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

D.12. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**D.13.**

[Rule 62-210.700(6), F.A.C.]

D.13. Malfunction Notification. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

D.14. Test Reports.

a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the ERMD-EQD on the results of each such test.
b. The required test report shall be filed with the ERMD-EQD as soon as practical but no later than 45 days after the last sampling run of each test is completed.

[Rule 62-297.310(8), F.A.C.; Part XI, Rule 2.1101, JEPB]

Miscellaneous Requirements.

D.15. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

D.16. NSPS Requirements - Subpart Y. Except as otherwise provided in this permit, this emissions unit/points shall comply with all applicable provisions of 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b)31., F.A.C. This emissions unit/points shall comply with **Appendix 40 CFR 60 Subpart Y** included with this permit. [Rule 62-204.800(8)(b)2., F.A.C.]

Subsection E. Emissions Unit -022

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-022	SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations

-022a	Gypsum Dewatering Building
-022a	Gypsum Storage Enclosure
-022j	Gypsum Truck Loadout
-022j	Fly Ash Loadout for Silo 1A (metal structure)
-022j	Fly Ash Loadout for Silo 1B (metal structure)
-022j	Fly Ash Loadout for Silo 2A (metal structure)
-022j	Fly Ash Loadout for Silo 2B (metal structure)
-022k	Solid Waste Disposal Area
-022l	Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)
-022l	Non-Saleable Fly Ash Silo Unit 1 with Fabric Filter (concrete structure)
-022l	Non-Saleable Fly Ash Silo Unit 2 with Fabric Filter (concrete structure)
-022m	Wet Fly Ash Loadout 1A/1B
-022m	Bottom Ash Loadout 1A/1B
-022m	Wet Fly Ash Loadout 2A/2B
-022m	Bottom Ash Loadout 2A/2B
-022n	Unpaved Road, By-Product Transport

Fugitive particulate matter emissions are generated from bottom ash, fly ash and gypsum materials handling and storage operations. This emissions unit/points are as depicted in Appendix SJRPP: Table 6 (Revised) - 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 shall be used for compliance purposes.

{Permitting notes: This emissions unit/points are regulated under Rule 62-212.400(5), 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).}

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; Part III, Rule 2.301, JEPB]

E.2. Air Quality Control Systems (AQCS). The permittee shall maintain and continue to use the AQCS established in Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations, to minimize particulate matter emissions. [Rules 62-4.070(3) and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; 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]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition Nos. **E.3.** and **E.4.** are based on the specified averaging time of the applicable test method.

E.3. This emissions unit/points are subject to Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations, and it is attached. [PSD-FL-010; BACT; PA81-13; 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]

E.4. Visible Emissions. Visible emissions (VE) shall be used for compliance purposes and shall not exceed the following opacity limits as established in Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations:

E.U. ID No.	Brief Description	VE Limit (% opacity)
-022	SJRPP: Bottom Ash, Fly Ash and Gypsum Handling and Storage Operations	
-022a	Gypsum Dewatering Building	5
-022a	Gypsum Storage Enclosure	5
-022j	Gypsum Truck Loadout	5
-022j	Fly Ash Loadout for Silo 1A (metal structure)	10
-022j	Fly Ash Loadout for Silo 1B (metal structure)	10
-022j	Fly Ash Loadout for Silo 2A (metal structure)	10
-022j	Fly Ash Loadout for Silo 2B (metal structure)	10
-022k	Solid Waste Disposal Area	10
-022l	Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)	5
-022l	Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)	5
-022l	Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)	5
-022l	Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)	5
-022l	Non-Saleable Fly Ash Silo Unit 1 with Fabric Filter (concrete structure)	5
-022l	Non-Saleable Fly Ash Silo Unit 2 with Fabric Filter (concrete structure)	5
-022m	Wet Fly Ash Loadout 1A/1B	10
-022m	Bottom Ash Loadout 1A/1B	10
-022m	Wet Fly Ash Loadout 2A/2B	10
-022m	Bottom Ash Loadout 2A/2B	10

-022n	Unpaved Road, By-Product Transport	10

[PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part B; 0310045-012-AC/PSD-FL-010E; and, 0310045-015-AC/PSD-FL-010G]

Excess Emissions

E.5. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.; and, Part III, Rule 2.301, JEPB]

E.6. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.; and, Part III, Rule 2.301, JEPB]

Test Methods and Procedures

E.7. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

E.8. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), the following emissions units/points shall be tested to demonstrate compliance with the emission limitations and standards for visible emissions:

E.U. ID No.	Brief Description
-022l	Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)
-022l	Non-Saleable Fly Ash Silo Unit 1 with Fabric Filter (concrete structure)
-022l	Non-Saleable Fly Ash Silo Unit 2 with Fabric Filter (concrete structure)

The testing frequency for each emissions unit/point was established by the PSD permit, PSD-FL-010G. [Rule 62-297.310(7), F.A.C.; and, PSD-FL-010G, Table 6 (Revised) - Part B.]

E.9. Compliance Tests Prior To Renewal. Prior to permit renewal, a VE compliance test shall be performed for the following emission units/points:

E.U. ID No.	Brief Description

-022l	Saleable Fly Ash Silo 1A with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 1B with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 2A with Fabric Filter (concrete structure)
-022l	Saleable Fly Ash Silo 2B with Fabric Filter (concrete structure)
-022l	Non-Saleable Fly Ash Silo Unit 1 with Fabric Filter (concrete structure)
-022l	Non-Saleable Fly Ash Silo Unit 2 with Fabric Filter (concrete structure)

The testing frequency for each emissions unit/point was established by the PSD permit, PSD-FL-010G. [Rule 62-297.310(7)(a)3., F.A.C.; and, PSD-FL-010G, Table 6 (Revised) - Part B.]

E.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

E.11. Visible Emissions. Visible emissions tests shall be performed for the affected emissions points in Appendix SJRPP: Table 6 (Revised) - Part B, SJRPP: Materials Handling and Storage Operations for compliance purposes, in accordance with the testing frequency established in the table, and while using EPA Method 9, 40 CFR 60, Appendix A, and Chapter 62-297, F.A.C. [PSD-FL-010; PA 81-13; Part V, Rule 2.501, JEPB; and, 0310045-015-AC/PSD-FL-010G]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

E.12. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**E.13.**

[Rule 62-210.700(6), F.A.C.]

E.13. Malfunction Notification. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.; and, Part III, Rule 2.301, JEPB]

E.14. Test Reports.

a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the ERMD-EQD on the results of each such test.
b. The required test report shall be filed with the ERMD-EQD as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]

Subsection F. Emissions Unit -024

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-024	SJRPP: Cooling Towers (2)

Fugitive particulate matter emissions from the two cooling towers are controlled with drift eliminators. No mass testing requirement shall be imposed due to the physical layout.

{Permitting note: This emissions unit is regulated under Rule 62-212.400(5), PSD NSR Review (see PSD-FL-010 issued March 12, 1982, and amended October 28, 1986); PSD-FL-010C, clerked July 29, 1999.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

F.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; Part III, Rule 2.301, JEPB; PSD-FL-010 and PA 81-13]

F.2. Controls. The permittee shall maintain and continue to use drift elimination to minimize particulate matter emissions. [Rules 62-4.070 and 62-212.400(6), F.A.C.; Part IV, Rule 2.401, JEPB; PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Specific Condition Nos. **F.3.** and **F.4.** is based on the specified averaging time of the applicable test method.

F.3. This emissions unit/points are subject to Appendix SJRPP: Table 6 (Revised) - Part A, SJRPP, amended July 29, 1999, and it is attached. [PSD-FL-010; BACT; PA 81-13; PSD-FL-010, amended October 28, 1986; and, PSD-FL-010C, clerked July 29, 1999]

F.4. Particulate Matter. Particulate matter emissions from each cooling tower shall not exceed 67 lbs/hr[1]. No mass testing requirement shall be imposed due to the physical layout. [PSD-FL-010; PA 81-13; and, [1]PSD-FL-010C (clerked July 29, 1999), Table 6 (Revised) - Part A.]

Test Methods and Procedures

F.5. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. {Permitting note: No mass testing is required, however, special compliance testing could be required.} [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-026	NGS Circulating Fluidized Bed Boiler No. 2
-027	NGS Circulating Fluidized Bed Boiler No. 1

These emissions units are two coal, coal coated with latex, petroleum coke, biomass, and landfill gas fired circulating fluidized bed (CFB) boilers. These boilers are connected to the existing steam turbines of the retired Boilers Nos. 1 and 2 (297.5 MW each) as part of the repowering project authorized under air construction permit, No. 0310045-003-AC/PSD-FL-265. A dual-flued 495-foot stack was added to the facility for Repowered Units 1 and 2, along with solid fuel delivery and storage facilities, limestone preparation and storage facilities (including three limestone dryers), a lime silo, aqueous ammonia storage, polishing scrubbers, precipitators or baghouses, ash removal and storage facilities, and an electrical substation. The stack diameter is 15 feet, exit temperature is 144 degrees F and the actual stack gas flow rate is 700,000 acfm.

JEA is allowed to burn 195 standard cubic feet per minute (scfm) of landfill gas in the CFB Boiler Nos. 1 and 2 (total). The 195 scfm of landfill gas is equivalent to a heat input of 6 MMBtu/hr. The landfill gas is being generated from the adjacent North Landfill (Facility ID No. 0310340) operated by the City of Jacksonville which is located directly north of the JEA NGS/SJRPP/ST power plant at 11405 Island Drive in Duval County. The maximum sulfur content, as H_2S, of the landfill gas is expected to be 48.2 parts per million volume dry (ppmvd). The natural gas presently being combusted in the CFB boilers typically contains 34 ppmvd of H_2S.

Each NGS CFB boiler is equipped with a selective non-catalytic reduction (SNCR) system to reduce NO_X emissions, limestone injection to reduce SO_2 emissions, fabric filter to reduce particulate matter (PM & PM_{10}) emissions, while maximizing combustion efficiency and minimizing NO_X formation to limit CO and VOC emissions.

CFB boiler Nos. 1 and 2 began operation in February 2002 and May 2002, respectively.

{Permitting notes: The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(8)(b)2., F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-265; PSD-FL-265(A, B & C)]; and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Compliance Assurance Monitoring (CAM), adopted and incorporated in Rule 62-204.800, F.A.C.; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

Essential Potential to Emit (PTE) Parameters

G.1.1. Permitted Capacity. The maximum operation heat input rates are as follows:

E.U. ID No.	MMBtu/hr Heat Input	Fuel Type
-026	2,764	Natural Gas, No. 2 Fuel Oil, Coal, Biomass and Petroleum Coke
-027	2,764	Natural Gas, No. 2 Fuel Oil, Coal, Biomass and Petroleum Coke

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. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C; 0310045-003-AC/PSD-FL-265; and, 0310045-037-AC/PSD-FL-265F.]

G.1.2. Permitted Capacity. The maximum landfill gas firing rate for the CFB Boiler Nos. 1 and 2 is as follows:

E.U. ID No.	scf/hr
-026 and -027	11,700 (total)

Landfill gas may be burned in combination with other authorized fuels provided the maximum heat input to each boiler is not exceeded. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; and, Application No. 0310045-027-AC.]

{Permitting notes: 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.}

G.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

G.3. Methods of Operation. Only coal, coal treated with a latex binder, petroleum coke, No. 2 fuel oil (maximum sulfur content of 0.05 percent, by weight), up to 240 tons per day of biomass in each unit, and natural gas, shall be fired in Units 1 and 2. {Permitting note: Fuel additives, such as naturally occurring clays containing kaolinite or montmorillonite, along with olivine, bauxite or granite in the form of a raw material and/or as a component of coal bottom ash may be used to prevent agglomeration of the bed material in the boilers. The Department and the Compliance Authority shall be notified in writing if a new source or type of fuel additive is desired to be evaluated for approval.} [Rule 62-213.410, F.A.C.; 0310045-003-AC/PSD-FL-265; 0310045-012-AC; and, 0310045-037-AC/PSD-FL-265F.]

G.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - PTE), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

Air Pollution Control Technology

G.5.1. Sulfur Dioxide, Acid Gases and Metals Control. Sulfur dioxide (SO_2) and acid gases shall be controlled by the injection of limestone into the CFB boiler beds. Residual sulfur dioxide, acid gases and metals shall be further controlled by the use of add-on air quality control systems for Units 1 and 2. The add-on air quality control systems installed by JEA and approved by the Department are spray dryer absorber (SDA) systems (one for Unit 1 and one for Unit 2) and fabric filters (one for Unit 1 and one for Unit 2). During periods when an SDA is non-operational due to malfunction, maintenance or repair, limestone injection to the associated CFB boiler shall be increased to the extent needed to ensure that the SO_2 emission limits in Specific Condition No. **G.8.** for Units 1 and 2 of 0.2 lb/mmBtu, 24-hr block average, and 0.15 lb/mmBtu, 30-day rolling average are achievable. Non-operation of the SDA is limited to a maximum of 12 hours per month per unit (12-month rolling average). [Applicant Request; and 0310045-022-AC/PSD-FL-265E, specific condition 9.]

G.5.2. Sulfur Dioxide (SO_2). The permittee shall inject limestone into the CFB boiler beds or use the spray dryer absorber as necessary to maintain SO_2 emissions within permit limits as recorded by the continuous emissions monitoring system (CEMS) at all times. [Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.; and, Permit No. 0310045-027-AC.]

G.6. Oxides of Nitrogen Control. A selective non-catalytic reduction (SNCR) system designed to meet a limit of 0.09 lb/MMBtu, 30-day rolling average, shall be used for control of oxides of nitrogen (NO_X) emissions. [Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.7. Particulate Matter Control. Particulate matter (PM and PM_{10}) shall be controlled by the use of high efficiency, add-on air quality control devices (either fabric filters or electrostatic precipitators) that are designed to meet a limit of 0.011 lb/MMBtu. [Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions Nos. **G.8.** thru **G.18.** are based on the specified averaging time of the applicable test method.

G.8. Best Available Control Technology. The following Table 1 is a summary of the BACT determinations by the Department and other limits requested by the applicant, as noted:

Table 1: Emission Limits for CFB Units 1 and 2

Pollutant	Emission Limits - Per Unit
Visible emissions	10 percent opacity, 6-minute block average
SO_2 [2]	0.2 lb/MMBtu, 24-hour block average [2, 3] 0.15 lb/MMBtu, 30-day rolling average [2]
NO_X [1]	0.09 lb/MMBtu, 30-day rolling average [4]
PM/PM_{10} [1]	0.011 lb/MMBtu, 3-hour average [1]
CO [1]	350 lbs/hour, 24-hour block average [1,3]
VOCs [1]	14 lbs/hour, 3-hour average [1]
Pb [2]	0.07 lb/hour, 3-hour average [2]
H_2SO_4 [2]	1.1 lbs/hour, 3-hour average [2]
HF [1]	0.43 lb/hour, 3-hour average [1]
Hg [1]	0.03 lb/hour, 6-hour average [1]

[1] BACT determination.

[2] Requested by applicant.

[3] 24-hour block averages are calculated from midnight to midnight.

[4] Equivalent to approximately 0.8-0.9 lb/MW-hr (gross energy output).

[Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.9. Visible Emissions. Visible emissions shall not exceed 10 percent opacity, 6-minute block average, excluding periods of startup, shutdown, and malfunction. [Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.10. Sulfur Dioxide.

a. Sulfur dioxide (SO_2) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.20 lb/MMBtu (24-hour block average) nor 0.15 lb/MMBtu (30-day rolling average).
b. Sulfur dioxide from CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 combined shall not exceed 12,284 tons during any consecutive 12-month period on a rolling basis.

[Applicant Request; and, 0310045-003-AC/PSD-FL-265]

G.11. Oxides of Nitrogen.
a. Oxides of nitrogen (NO_X) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.09 lb/MMBtu on a 30-day rolling average basis.
b. Oxides of nitrogen emissions from CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 combined shall not exceed 3,600 tons during any consecutive 12-month period on a rolling basis.
[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.12. Particulate Matter (PM and PM_{10}).
a. Particulate matter (PM) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.011 lb/MMBtu (3-hour average).
b. Particulate matter-10 microns or smaller (PM_{10}) emissions from CFB Boilers Nos. 1 and 2 shall not exceed 0.011 lb/MMBtu (3-hour average).
c. Stack emissions of particulate matter (PM) from CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 combined shall not exceed 881 tons during any consecutive 12-month period on a rolling basis.
[Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.13. Carbon Monoxide. Carbon monoxide (CO) emissions shall not exceed 350 lbs/hour, 24-hour block average, nor 1533 tons per year from either CFB Boiler No. 1 or No. 2. [Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.14. Volatile Organic Compounds. Volatile organic compound (VOC) emissions shall not exceed 14 lbs/hour (3-hour average), nor 61.5 tons per year from either CFB Boiler No. 1 or No. 2. [Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.15. Lead. Lead (Pb) emissions shall not exceed 0.07 lb/hour (3-hour average), from either CFB Boiler No. 1 or No. 2. [Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.16. Sulfuric Acid Mist. Sulfuric acid mist (H_2SO_4) emissions shall not exceed 1.1 lbs/hour (3-hour average), from either CFB Boiler No. 1 or No. 2. [Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.17. Hydrogen Fluoride. Hydrogen fluoride (HF) emissions shall not exceed 0.43 lb/hour (3-hour average), from either CFB Boiler No. 1 or No. 2. [Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.18. Mercury. Mercury (Hg) emissions shall not exceed 0.03 lb/hour (6-hour average), from either CFB Boiler No. 1 or No. 2. [Applicant Request; Rule 62-212.400, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.

G.19. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed the limitations established in Specific Condition **G.22.** [Rule 62-210.700(1), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

G.20. Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in Appendix Q

Protocol for Startup and Shutdown. [Rule 62-210.700(1), F.A.C. and Proposed by the Applicant in the Renewal Application]

G.21. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

G.22. Excess Emissions - Authorized Emissions.

(1) Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours in any calendar month per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal). Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

a. *Startup.* The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
b. *Shutdown.* The cessation of the operation of an emissions unit for any purpose.
c. *Malfunction.* Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

See 40 CFR 60.7 and Rule 62-210.700(6), F.A.C. for reporting of excess emissions. [Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; and, 0310045-015-AC/PSD-FL-265C]

(2) Notwithstanding other emission limits and standards established by this permit, excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided (1) that best operational practices are adhered to and (2) the duration of excess emissions shall be minimized but not exceed sixty (60) hours during any 30 consecutive calendar days per emissions unit (CFBs Units Nos. 1 and 2). The permittee shall keep operational records necessary to demonstrate compliance with this restriction. Emissions data collected during periods of startup, shutdown, and malfunction shall be included when determining compliance with annual emission limits. The CFB Units shall not be started up at the same time. The permittee shall update the written procedure summarizing the current best operational practices to be followed every 5 years (at operating permit renewal). Pursuant to Rule 62-210.200, F.A.C., Definitions, the following are defined:

a. *Startup.* The commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
b. *Shutdown.* The cessation of the operation of an emissions unit for any purpose.
c. *Malfunction.* Any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

See 40 CFR 60.7 and Rule 62-210.700(6), F.A.C. for reporting of excess emissions. [Rules 62-210.200, 62-210.700(1) & (5), F.A.C.; and, 0310045-015-AC/PSD-FL-265C; and, applicant requested]

Monitoring of Operations

G.23. Compliance Assurance Monitoring (CAM) Requirements. These emissions units are subject to the CAM requirements contained in the attached Appendix CAM: NGS CFB Boilers Nos. 1 and 2. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Monitoring Requirements

G.24. Continuous Emissions Monitoring Systems. The permittee shall install, calibrate, operate, and maintain Continuous Emission Monitoring Systems (CEMS) in the stack to measure and record the sulfur dioxide, oxides of nitrogen, carbon monoxide and visible emissions from CFB Boilers Nos. 1 and 2. An emission level above a BACT limit, considering the 6-minute, 24-hour and 30-day rolling average periods, as applicable, shall be reported to the ERMD-EQD pursuant to Rule 62-4.160(8), F.A.C. The continuous emission monitoring systems shall comply with the certification, performance specifications, and quality assurance, and other applicable requirements of 40 CFR Part 75 and 40 CFR Part 60 (Appendix B), as indicated above. Periods of startup, shutdown, and malfunction shall be monitored, recorded, and reported as excess emissions when emission levels exceed the limits in Table 1 of Specific Condition No. **G.8.** following the format of 40 CFR 60.7 (As revised, 64 Fed Reg. 7458 (Feb. 12, 1999)). {Permitting note: 40 CFR 75 does not address RATA requirements for CO CEMS. The required annual RATA testing for the CO CEMS shall be performed instead as required by 40 CFR 60 Appendix B.} [0310045-037-AC/PSD-FL-265F, specific condition 50.(a).]

Compliance Determination - Test Methods and Procedures

G.25. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 5, 5B, 8 17 or 29	Methods for Determining Particulate Matter Emissions
EPA Methods 201 or 201A	Methods for Determining PM_{10} Emissions
EPA Methods 6, 6A, 6B, or 6C	Methods for Determining Sulfur Dioxide Emissions
Method 7, Method 7A, 7C, 7D, or 7E	Determination of Nitrogen Oxide Emissions
EPA Method 19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

G.26. Annual Compliance Tests. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emission limitations and standards for PM_{10}, nitrogen oxides, sulfur dioxide, carbon monoxide and visible emissions. The NO_X, SO_2 and CO RATA test data used may be used to demonstrate compliance with the annual test requirement, provided the testing requirements (notification, procedures & reporting) of Chapter 62-297, F.A.C. are met. [Rule 62-297.310(7), F.A.C.]

G.27. Compliance Tests Prior To Renewal. Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE, PM, CO, VOC, NO_X and SO_2. [Rule 62-297.310(7)(a)3., F.A.C.]

G.28. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

G.29. Performance Tests and CEMS Certifications. Annual compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C., on CFB Boilers Nos. 1 and 2 while firing either coal or petroleum coke as indicated below. No stack tests are required if continuous emissions monitoring systems are used to demonstrate compliance pending EPA approval, otherwise initial performance tests shall be conducted as described above. Certification tests (or performance evaluations, as applicable) for all Continuous Emissions Monitoring System (CEMS) required by this permit must be completed within 60 days after achieving the maximum production rate at which each unit will be operated but not later than 90 days of initial operation, and prior to the initial stack tests for that Unit. No methods other than the ones identified below may be used for compliance testing unless prior DEP or the ERMD-EQD approval is received in writing. DEP or the ERMD-EQD may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated. [0310045-003-AC/PSD-FL-265]

G.30. Visible Emissions (Opacity). Compliance with the visible emissions limit in Specific Condition **G.9.** shall be demonstrated with continuous opacity monitors installed, certified, operated, and maintained in accordance with 40 CFR Part 75, based on 6-minute block averages and excluding periods of startup, shutdown, and malfunction. [0310045-003-AC/PSD-FL-265]

G.31. Sulfur Dioxide.

a. Compliance with sulfur dioxide (SO_2) emissions limits in Specific Condition **G.10.a.** shall be demonstrated with Continuous Emissions Monitoring Systems (CEMS) installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on 24-hour block and 30-day rolling averages, as applicable, and excluding periods of startup, shutdown, and malfunction. Emissions recorded in parts per million shall be converted to lb/MMBtu using an appropriate F-factor for purposes of determining compliance with the emission limits in Specific Condition **G.10.a**.
b. Compliance with the annual SO_2 emission limit in Specific Condition **G.10.b.** shall be determined based on SO_2 data from the CEMS. Emissions during periods of startup, shutdown, and malfunction shall be considered in determining the total annual emissions.
c. At least three (3) hours of data are required to establish a 24-hour average for CEMS data.

[Applicant's request; 0310045-012-AC/PSD-FL-265B; and, 0310045-015-AC/PSD-FL-265C]

G.32. Oxides of Nitrogen.

a. Compliance with the oxides of nitrogen (NOx) emissions limit in Specific Condition **G.11.a.** shall be demonstrated with a CEMS installed, certified, operated and maintained in accordance with 40 CFR Part 75, based on a 30-day rolling average and excluding periods of startup, shutdown and malfunction. The 30-day rolling averages will be determined based on hourly values calculated in accordance with Appendix F of 40 CFR Part 75.
b. Compliance with the annual NO_X emissions limit in Specific Condition **G.11.b.** shall be determined by summing the products of hourly NO_X emission rate and heat input rate data from the CEMS. Emissions during periods of startup, shutdown, and malfunction shall be considered in determining the total emissions.

[Applicant's request; and, 0310045-015-AC/PSD-FL-265C]

G.33. Particulate Matter.

a. Annual compliance tests shall be performed on CFB Boilers Nos. 1 and 2 using EPA Methods 201 or 201A, to determine compliance with the particulate matter-10 microns or smaller (PM_{10}) limits in Specific Condition **G.12.b.** while firing petroleum coke. If petroleum coke has been fired for less than 400 hours during the previous federal fiscal year, the annual testing may be performed while firing coal.

b. Compliance with the annual particulate matter (PM) emissions limit in Specific Condition **G.12.c.** shall be determined using the following formula. This formula shall be used for each fuel consumed by each of CFB Boilers Nos. 1 and 2 and existing Boiler No. 3, and the resulting PM emissions summed to obtain a 12-month total for CFB Boilers Nos. 1 and 2 and existing Boiler No. 3.

PM Emissions = (Fuel Usage[a]) x (Emission Factor[b]) x unit conversion factors
Where:

[a] The "Fuel Usage" shall be measured by calibrated fuel flow meters (±5 percent accuracy) and recorded daily when a unit is operated.

[b] An "Emissions Factor" of [(9.19 x weight percent sulfur content) + 3.22] pounds per thousand gallons (lbs/10^3 gal) shall be used for fuel oil burned in existing Boiler No. 3. The weight percent sulfur content shall be determined based on an analysis of a representative sample of the fuel oil being consumed. The analysis shall be performed using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition. An "Emissions Factor" of 5 pounds per million cubic feet (lb/MCF) shall be used for natural gas burned in existing Boiler No. 3. For Repowered Units 1 and 2, the "Emissions Factor" shall be based on particulate matter stack test results using EPA Methods 5, 5B, 8, 17, or 29 for the individual units, and shall apply to the quantities of fuel consumed in the individual units during the period immediately following the stack tests for the respective units until subsequent stack tests are completed.

[0310045-003-AC/PSD-FL-265]

G.34. Carbon Monoxide.

a. Compliance with the short-term carbon monoxide (CO) limit in Specific Condition **G.13.** shall be demonstrated with CEMS installed, calibrated, operated, and maintained in accordance with 40 CFR Part 60, Appendix B based on a 24-hour block average and excluding periods of startup, shutdown, and malfunction.

b. Compliance with the annual CO limit in Specific Condition **G.13.** shall be demonstrated by summing the products of hourly CO emission rate and heat input rate data from the CEMS. Emissions during periods of startup, shutdown, and malfunction shall be considered in determining the total emissions.

[0310045-003-AC/PSD-FL-265]

G.35. Valid Data. For the continuous monitoring systems required under Specific Conditions **G.31.a.**, **G.32.a.**, and **G.34.a.**, the permittee shall determine compliance based on CEMS data at the end of each operating day (midnight to midnight), new 24-hour block and 30-day average emission rates shall be calculated from the arithmetic average of all valid hourly emission rates during the previous 24-hours or 30 operating days, as appropriate. Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction as defined in Rule 62-210.200, F.A.C., where emissions exceed the standards in Table 1 (See Specific Condition **G.8.**). These excess emission periods shall be reported as required in 40 CFR 60.7. A valid hourly emission rate shall be calculated for each hour in which at least two concentrations are obtained at least fifteen (15) minutes apart. [0310045-003-AC/PSD-FL-265]

G.36. Volatile Organic Compounds. Compliance tests shall be performed on Units 1 and 2 using EPA Method 18, 25, or 25A to determine compliance with the volatile organic compound (VOC) emission limit in Specific Condition **G.14.** while firing petroleum coke. Compliance testing shall be conducted once within every five (5) years thereafter while firing petroleum coke or coal. Compliance with the CO limits based on CEMS data shall be used as surrogates to indicate compliance with the VOC limits. [0310045-003-AC/PSD-FL-265]

G.37. Lead. Initial compliance tests only shall be performed on Unit 2 using EPA Method 12 or 29 to determine compliance with the lead emission limit in Specific Condition **G.15.** while firing coal and while firing petroleum coke. An additional compliance test shall be conducted once every five years at permit renewal on one of the units while firing petroleum coke or coal or any mix of the two fuels and with the SDA down for maintenance. On July 28, 2009, a compliance test for lead was conducted on approximately 80 percent pet coke and 20 percent coal with the SDA down for maintenance. Subsequently, if the normal fuel mix to the CFB boilers is changed to 25 percent (or greater) coal for a period of more than 15 days, and the SDA requires scheduled maintenance, then an additional compliance test shall be conducted at a typical fuel mix within 60 days after the change is made and while the SDA is down for maintenance. [Rule 62-4.070(3), F.A.C.; and 0310045-022-AC/PSD-FL-265E, specific condition 37.]

G.38. Sulfuric Acid Mist. Initial compliance tests only shall be performed on Unit 2 using EPA Method 8 to determine compliance with the sulfuric acid mist emission limit in Specific Condition **G.16.** while firing petroleum coke and while firing coal. In addition, compliance with the SO_2 limits based on CEMS data shall be used as a surrogate to indicate compliance with the sulfuric acid mist limit. [0310045-003-AC/PSD-FL-265]

G.39. Hydrogen Fluoride. Initial compliance tests only shall be performed on CFB Boiler No. 2 using EPA Method 13A or 13B to determine compliance with the hydrogen fluoride emission limit in Specific Condition **G.17.** while firing coal and while firing petroleum coke. [0310045-003-AC/PSD-FL-265]

G.40. Mercury. Initial compliance tests only shall be performed on CFB Boiler No. 2 using EPA Methods 29, 101, or 101A to determine compliance with the mercury emission limit in Specific Condition **G.18.** while firing coal and while firing petroleum coke. [0310045-003-AC/PSD-FL-265]

G.41. Distillate No. 2 Fuel Oil - Sulfur Content. Vendor or other fuel sampling and analysis data (using applicable ASTM methods) shall be used to determine that the sulfur content of the No. 2 fuel oil used in CFB Boilers Nos. 1 and 2 does not exceed 0.05%, by weight. [Rule 62-210.200, Definitions - PTE, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.42. 5-Year Emissions Monitoring - PSD Avoidance Requirements:

a. Monitoring. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. The change (proposed project) shall not increase the design capacity of any emissions unit or its potential to emit that PSD pollutant. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.

- The Department identified the following PSD pollutants that could increase from this project: **NOx, PM** and **VOC**.
- The permittee shall use the same calculation methodology for emissions before and after the completed project under Permit No. 0310045-037-AC.

[Rule 62-212.300(1)(e)1., F.A.C.]

b. Reporting. The permittee shall report to the Department by March 1st based on the records required to be generated under subparagraph 62-212.300(1)(e)1., F.A.C., setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

(1) The name, address and telephone number of the owner or operator of the major stationary source;
(2) The specific dates for commencement of the project and completion of the project;
(3) The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
(3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference;
(4) Any other information that the owner or operator wishes to include in the report;
(5) The baseline actual emissions to which the annual emissions were compared to; and,
(6) For the Department identified PSD pollutants: a statement indicating whether or not the applicable PSD significant emission rates (SERs) defined in Rule 62-210.200, F.A.C., were exceeded, specifically, 40 TPY for NOx, 25 TPY for PM, and 40 TPY for VOC. If and when a PSD SER is exceeded, the permittee shall submit a PSD permit application with a BACT analysis or if the permittee determines that a PSD permit application with a BACT analysis is not required, the permittee shall provide specific citations as to why the project is exempt from a PSD permit application with a BACT analysis.

[Rule 62-212.300(1)(e)2., F.A.C.; and, Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

c. Recordkeeping. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1. and 2., F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
[Rule 62-212.300(1)(e)3., F.A.C.]

d. Source Obligation. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
[Rule 62-212.400(12)(c), F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

G.43. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**G.49.**
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**G.44.**

[40 CFR 60 Subpart A; and, Rule 62-210.700(6), F.A.C.]

G.44. Plant Operation - Problems. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, JEA shall notify the ERMD-EQD as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification

shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.45. Excess Emissions Report.

a. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD.
b. If excess emissions occur due to malfunctions for a period of more than two hours, the owner or operator shall notify ERMD-EQD within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may require a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A.

[0310045-003-AC/PSD-FL-265; and, Rule 62-210.700(6), F.A.C.]

G.46. Records. All measurements, records, and other data required to be maintained by JEA shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and ERMD-EQD representatives upon request. [Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.; and, 0310045-003-AC/PSD-FL-265]

G.47. Certification Testing of Monitors. As required under the federal Acid Rain Program, the Acid Rain Monitoring Plan for NGS shall be revised to address the new Continuous Emissions Monitoring Systems (CEMS) for sulfur dioxide, oxides of nitrogen, and visible emissions (opacity) for Repowered NGS Units 1 and 2. The permittee shall provide a copy of this revised plan, as well as model and serial numbers for each of the monitors, to ERMD-EQD within 45 days after completion of all certification tests. In addition, the permittee shall provide notification that the carbon monoxide CEMS meet the performance specifications in 40 CFR Part 60, Appendix B (as applicable), and also provide model and serial numbers to ERMD-EQD within 45 days after completion of the performance specification tests. [0310045-003-AC/PSD-FL-265]

G.48. Quarterly Compliance Reports for Annual Limits. The permittee shall provide reports quarterly to the ERMD-EQD certifying compliance with the 12-month rolling limits on SO_2, NO_X and PM (TSP) for NGS CFB Boilers Nos. 1 and 2 and existing Boiler No. 3 set forth in Specific Conditions **G.10.b.**, **G.11.b.**, and **G.12.c**. The reports shall be submitted within 45 days after the last day of each calendar quarter. [0310045-003-AC/PSD-FL-265]

General Operation Requirements

G.49. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

Miscellaneous

G.50. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

G.51. NSPS Requirements - Subpart Da. Except as otherwise provided in this permit, the combustion turbine shall comply with all applicable provisions of 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted by reference in Rule 62-204.800(8)(b)2., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.47a. These emissions units shall comply with **Appendix 40 CFR 60 Subpart Da** included with this permit. [Rule 62-204.800(8)(b)2., F.A.C.]

G.52. Engineering Study to increase the Reliability and Availability of the SDA System. The permittee shall provide an engineering study by December 31, 2010 to the Department and EQD detailing opportunities to increase the reliability and availability of the SDA system. The study will address potential improvements in preventive and predictive maintenance, and potential equipment and system modifications (including opportunities for redundancy) which will result in minimizing the amount of time the SDA is off-line during CFB operation. The engineering study shall also include the cost estimates associated with potential equipment/system modifications (including opportunities for redundancy) and the cost effectiveness of the associated emissions reductions. [Rule 62-4.070(3), F.A.C.; and 0310045-022-AC/PSD-FL-265E, specific condition 49.]

G.53. Compliance Plan. Permit Number 0310045-027-AC authorized the combustion of landfill gas in the CFB Boiler Nos. 1 and 2.

a. Operation of the emissions units beyond the time frames established by the AC permit is allowed, provided the Department has received and verified properly signed and sealed certification statements from the Responsible Official (R.O.) and a licensed Florida Professional Engineer (P.E.) stating that: 1) the construction and modifications of the emissions units were completed in accordance with the AC permit; and, 2) compliance with the terms and conditions contained within the AC permit have properly been demonstrated prior to the expiration date of the AC permit.

b. The P.E. and R.O. certification statements from DEP Form No. 62-210.900(1) shall be used and must be submitted to the Department within 105 days after achieving the maximum rate at which the emissions units will be operated, but no later than 180 days after initially burning landfill gas in the boilers.

[Rules 62-213.440(2), and 62-213.420(1)(a)5., F.A.C.]

G.54. Source Obligation. A relaxation of the specific terms and conditions of this permit, as established by Permit No. 0310045-027-AC, may subject the facility to a BACT determination. Specifically, an increase in the quantity of landfill gas burned and/or the H_2S content of the landfill gas could trigger a BACT determination. {See Rule 62-212.400(12)(a) - (c), F.A.C.} Any request to change the specific terms and conditions of Permit No. 0310045-027-AC must be submitted to the Bureau of Air Regulation in the Division of Air Resource Management of the Florida Department of Environmental Protection. [Rule 62-212.400(12)(a) - (c) (Source Obligation), F.A.C.; and, Permit No. 0310045-027-AC, specific condition 3.A.1.]

Landfill Gas - Miscellaneous Requirements

G.55. Fuel Consumption Records. The permittee shall maintain, for each boiler, a daily log of the amount of landfill gas fired. [Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.; and, Permit No. 0310045-027-AC.]

G.56. Test Reports. For each test run, the report shall also indicate the quantity of landfill gas burned. [Rule 62-297.310(8), F.A.C.; and, Permit No. 0310045-027-AC.]

G.57. Annual Operating Report (AOR). The permittee shall submit the quantity of landfill gas combusted in each boiler with the AOR. [Rules 62-4.070(1) and (3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.; and, Permit No. 0310045-027-AC.]

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
-028	NGS: Materials Handling and Storage Operations

-028	Belt Conveyor No. 1
-028a	Vessel Hold, Vessel Unloader and Spillage Conveyor
-028c	Transfer Building 1
-028d	Transfer Building 5 and limestone loadout chute
-028g	Transfer Building 2
-028h	Fuel Storage Domes A & B (includes fuel stackers/reclaimers)
-028i	Transfer Building 3
-028o	Plant Transfer Building
-028p	Limestone Storage Pile and Limestone Reclaim Hoppers
-028q	Transfer Building 4
-028v	Transfer Building 6

-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

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 fly and bed ash silos (E.U. ID No. -037 and E.U. ID No. -038) have the capability to unload into either trucks or rail cars

{Permitting notes: Emission Unit ID Nos. -029 & -031 are regulated under 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants (coal handling at NGS, excluding open storage piles), adopted and incorporated by reference in Rule 62-204.800(8)(b)31., F.A.C. Emission Unit ID Nos. -033, -034 & -035 are regulated under Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants (limestone handling at NGS, except for open storage piles and truck unloading), adopted and incorporated by reference in Rule 62-204.800(8)(b)64., F.A.C.

Some of these emissions units are regulated under Rule 212.400(5), F.A.C., Prevention of Significant Deterioration [PSD; PSD-FL-265; 0310045-007-AC/PSD-FL-265A; and, 0310045-012-AC/PSD-FL-265B]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Rule 62-296.711,

F.A.C., Reasonable Available Control Technology (RACT) - Materials Handling, Sizing, Screening, Crushing and Grinding Operations.}

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity.

a. Throughput Rates. The materials handling and usage rates for coal, coal coated with latex, petroleum coke, and limestone at NGS shall not exceed the following (for NGS CFB Boilers Nos. 1 and 2 combined), assuming a moisture content of 5.5% or less:

Handling/Usage Rate

Material	Tons Per Year
Coal/Coal coated with latex/Petroleum Coke	2.42 million
Limestone	1.45 million

b. Heat Input Rates. The maximum heat input rates to the three limestone dryers shall not exceed 57.9 MMBtu/hr, for all three units combined. These rates 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.

[Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; 0310045-003-AC/PSD-FL-265; and, 0310045-012-AC/PSD-FL-265B]

H.2. Hours of Operation. The Materials Processing Operations are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - PTE), F.A.C.; Part III, Rule 2.301, JEPB]

H.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

H.4. Method of Operation.

a. *Material Processing Operations.* 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. Except for the Belt Conveyor 1, all conveyors are enclosed.

b. *Fuels.* Limestone Dryers (3)(EU -033). Each limestone dryer is allowed to fire distillate fuel oil and Natural/Landfill Gases. The distillate fuel oil has a maximum sulfur content limit of 0.05%, by weight.

[Rule 62-213.410, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions Nos. **H.5., H.6.** and **H.7.** are based on the specified averaging time of the applicable test method.

H.5. <intentionally left blank>

H.6. Particulate Matter. The maximum particulate matter emissions from the following operations shall not exceed 0.01 grains per dry standard cubic foot:

a. Limestone dryers - each (3) (EU-033)

b. Limestone prep building dust collectors (EU-034)
c. Limestone silos bin vent filters (EU-035)
[0310045-003-AC/PSD-FL-265; and, 0310045-012-AC/PSD-FL-265B]

H.7. Visible Emissions. The materials processing sources at NGS shall be regulated as follows, and the emission limits and standards shall apply upon completion of the initial compliance tests for each of the emissions units or activities.

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).
[0310045-003-AC/PSD-FL-265; 0310045-007-AC/PSD-FL-265A; and, 0310045-012-AC/PSD-FL-265B)]

H.8. Distillate Fuel Oil Sulfur Content. The maximum sulfur content of the distillate No. 2 fuel oil that is allowed to be fired in each of the three (3) limestone dryers (EU-033) is 0.05%, by weight. [0310045-003-AC/PSD-FL-265]

Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

H.9. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered

to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

H.10. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

H.11. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Method 5	Methods for Determining Particulate Matter Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions
EPA Method 22	Visual Determination of Fugitive Emissions from Material Sources

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

H.12. Annual Compliance Tests. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), this emissions unit/points shall be tested to demonstrate compliance with the emission limitations and standards for visible emissions. The testing frequency is established in the table in specific condition **H.19.** [Rule 62-297.310(7), F.A.C.]

H.13. Compliance Tests Prior To Renewal. Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE. The testing frequency is established in the table in specific condition H.19. [Rule 62-297.310(7)(a)3., F.A.C.]

H.14. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

H.15. Limestone Dryers (3): Distillate No. 2 Fuel Oil - Sulfur Content. Vendor or other fuel sampling and analysis data (using applicable ASTM methods) shall be used to determine that the sulfur content of the No. 2 fuel oil used in the three (3) limestone dryers does not exceed 0.05%, by weight. [Rule 62-210.200 (Definitions - PTE), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.16. Limestone Dryers (3) - Visible Emissions (EU-033). Compliance with the visible emissions limit in Specific Condition **H.7.** for the limestone dryers (each) shall be demonstrated using EPA Method 9 initially and once within every five years thereafter. The limestone dryers shall fire fuel oil during the initial compliance tests. In subsequent years, the testing shall be conducted annually if fuel oil has been fired for more than 400 hours during the previous federal fiscal year; otherwise, the testing shall be conducted once within every five years, even if the testing is conducted while firing natural gas. [0310045-003-AC/PSD-FL-265]

H.17. Limestone Dryers (3) - Particulate Matter (EU-033). Initial compliance tests only shall be performed on the limestone dryers (3) to determine compliance with the particulate matter limit in Specific Condition **H.6.** using EPA Method 5. [0310045-003-AC/PSD-FL-265]

H.18. Particulate Matter. Initial compliance tests only shall be performed on the limestone prep building dust collectors (EU-034) and the limestone silos bin vent filters (EU-035) to determine compliance with their particulate matter limit specified in Specific Condition **H.6.** using EPA Method 5, 40 CFR 60, Appendix A. The minimum sample volume shall be 30 dry standard cubic feet. [0310045-003-AC/PSD-FL-265; 40 CFR 60, Appendix A; and, Rule 62-296.711(3)(b), F.A.C.]

H.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 &/or PC
Fuel Silos Dust Collectors - Baghouse Exhaust (EU-031)	9	IVE - 3 hr RVE - 30 min	I & R	C &/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; 0310045-021-AC/PSD-FL-265D; 40 CFR 60.11(b); 40 CFR 60, Appendix A; 0310045-021-AC; and 0310045-015-AC/PSD-FL-010G.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

H.20. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**H.22.**

[40 CFR 60 Subpart A; and, Rule 62-210.700(6), F.A.C.]

H.21. Plant Operation - Problems. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, JEA shall notify the ERMD-EQD as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.22. Excess Emissions Report. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.]

If excess emissions occur due to malfunctions for a period of more than two hours, the owner or operator shall notify ERMD-EQD within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may require a written summary report of the incident. For EUs -029, -031, -033, -034 and -035, and pursuant to the Standards of Performance for New Stationary Sources at 40 CFR 60, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A.
[0310045-003-AC/PSD-FL-265]

H.23. Records. All measurements, records, and other data required to be maintained by JEA shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and the ERMD-EQD representatives upon request. [Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.; and, 0310045-003-AC/PSD-FL-265]

General Operation Requirements

H.24. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control

devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.; and, 0310045-003-AC/PSD-FL-265]

H.25. NSPS Requirements - Subpart A. Emission Unit Nos. -029, -031, -033, -034 & -035 shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting requirements,

adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

H.26. NSPS Requirements - Subpart Y. Except as otherwise provided in this permit, this emissions unit/points (Emission Unit Nos. -029 & -031) shall comply with all applicable provisions of 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants (coal handling at NGS, excluding open storage piles), adopted and incorporated by reference in Rule 62-204.800(8)(b)31., F.A.C. This emissions unit/points shall comply with **Appendix 40 CFR 60 Subpart Y** included with this permit. [Rule 62-204.800(8)(b)2., F.A.C.]

H.27. NSPS Requirements - Subpart OOO. Except as otherwise provided in this permit, these emissions units/points (Emission Unit Nos. -033, -034 & -035) shall comply with all applicable provisions of 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants (limestone handling at NGS, except for open storage piles and truck unloading), adopted and incorporated by reference in Rule 62-204.800(8)(b)64., F.A.C. These emissions units/points shall comply with **Appendix 40 CFR 60 Subpart OOO** included with this permit. [Rule 62-204.800(8)(b)64., F.A.C.]

Subsection I. Emissions Unit -044 - -050

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief 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

Separations Technology, LLC (ST) has constructed, owns and operates a fly ash processing system on a portion of leased property at the JEA 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 include a 255,000 ton reduction in the fly ash currently sent to landfill by the JEA 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 fly ash processing system includes 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 SJRPP fly ash storage silos for eventual disposal at the onsite landfill or transported offsite.

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 ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA 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 SJRPP for recycle.

{Permitting notes: 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 62-296.711, 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 (RACT) -Miscellaneous Manufacturing Process Operations.}

Essential Potential to Emit (PTE) Parameters

I.1. Equipment Design Capacity. The equipment design of the fly ash processing operation is based on a maximum fly ash delivery rate from JEA SJRPP of 300,000 tons per year. [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

I.2. Hours of Operation. The operations are allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200 (Definitions - PTE), F.A.C.; 0310001-002-AC/PSD-FL-010(D)]

I.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

I.4. Method of Operation.

a. Fly Ash Processing Operations. The operation processes fly ash from the JEA SJRPP facility. 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 ammonia removal technology (patent pending). In addition to residual carbon, the fly ash at the JEA 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 SJRPP for recycle.
b. Fuel: For the boiler, the only fuel allowed to be fired is natural gas.
[Rule 62-213.410, F.A.C.; and, 0310001-002-AC/PSD-FL-010(D)]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions Nos. **I.5.** and **I.6.** are based on the specified averaging time of the applicable test method.

I.5. Particulate Matter. The maximum particulate matter emissions from the following operations shall not exceed:
a. 0.015 grains per dry standard cubic foot:
(1) Separator A Filter - Receiver Vent (EU-044)
(2) Separator B Filter - Receiver Vent (EU-045)
(3) Separator Dust Collector Vent (EU-046)
(4) Clean-up Vacuum Vent (-047)
(5) Fly Ash Surge Bin Vent (-048)
(6) Mineral Additive Storage Bin Vent (-049)
b. 1.60 lbs/hr:
(1) Gas-Fired Dryer Stack (EU-050)
c. Visible Emissions. Visible emissions less than or equal to 5 percent opacity shall be considered in compliance with the particulate matter emissions limits established above.
[0310001-002-AC/PSD-FL-010(D)]

I.6. Visible Emissions.
a. Visible emissions shall not exceed 5 percent opacity for EU-044 thru EU-050.
b. Annual compliance certification shall be conducted to measure opacity.
[0310001-002-AC/PSD-FL-010(D)]

Excess Emissions

The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.

I.7. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

I.8. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Test Methods

I.9. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions

The above methods are described in Chapter 62-297, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.]

I.10. Annual Compliance Tests. Unless otherwise specified by this permit, during each federal fiscal year (October 1st to September 30th), this emissions unit/points shall be tested to demonstrate compliance with the emission limitations and standards for visible emissions. [Rule 62-297.310(7), F.A.C.]

I.11. Compliance Tests Prior To Renewal. Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE. [Rule 62-297.310(7)(a)3., F.A.C.]

I.12. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

I.13. Visible Emissions (VE). Annual compliance certification shall be conducted using EPA Method 9 tests to measure opacity. [0310001-002-AC/PSD-FL-010(D); and, 40 CFR 60, Appendix A; and, Rules 62-296.711(3)(a) and 62-296.712(3)(a), F.A.C.]

Recordkeeping and Reporting Requirements

See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements.

I.14. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Quarterly Excess Emissions, if requested by the ERMD-EQD	Every 3 months (quarter)	**I.16.**

[Rule 62-210.700(6), F.A.C.]

I.15. Plant Operation - Problems. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, ST shall notify the ERMD-EQD as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]

I.16. Excess Emissions Report. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the ERMD-EQD in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the ERMD-EQD. [Rule 62-210.700(6), F.A.C.]

I.17. Records. All measurements, records, and other data required to be maintained by ST shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP and the ERMD-EQD representatives upon request. [Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.]

Operated by: JEA
Plant Name: Northside Generating Station and St. Johns River Power Park (NGS/SJRPP)
ORIS code: 0667: Northside Generating Station
0207: St. Johns River Power Park

Subsection A. This Subsection addresses Acid Rain, Phase II SO_2.

The emissions units listed below are regulated under Phase II of the federal Acid Rain Program.

E.U. ID No.	Brief Description
-001	NGS Boiler No. 1 (retired/dismantled)
-002	NGS Boiler No. 2 (retired/dismantled)
-003	NGS Boiler No. 3
-016	SJRPP Boiler No. 1
-017	SJRPP Boiler No. 2
-026	NGS Circulating Fluidized Bed Boiler No. 2A (297.5 MW)
-027	NGS Circulating Fluidized Bed Boiler No. 1A (297.5 MW)

A.1. The Acid Rain Part applications submitted for this facility, as approved by the Department, are a part of this permit. The owners and operators of these acid rain units must comply with the standard requirements and special provisions set forth in the applications listed below:

a. NGS. DEP Form No. 62-210.900(1)(a) - Form, Effective: 3/16/08, received on July 3, 2008, and signed by the Designated Representative on May 6, 2008, which is included at the end of this section.

b. SJRPP. DEP Form No. 62-210.900(1)(a) - Form, Effective: 3/16/08, received on July 3, 2008, and signed by the Designated Representative on May 6, 2008, which is included at the end of this section.

[Chapter 62-213, F.A.C.; and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO_2) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID No.	Year	2009	2010	2011	2012	2013
-003 [1]	3	SO_2 allowances, under Table 2 or 3 of 40 CFR Part 73	11124*	6658*	6658*	6658*	6658*
-026 [1]	2A	SO_2 allowances, under Table 2 or 3 of 40 CFR Part 73	6268*	1048*	1048*	1048*	1048*
-027 [1]	1A	SO_2 allowances, under Table 2 or 3 of 40 CFR Part 73	6222*	4897*	4897*	4897*	4897*
-016 [2]	1	SO_2 allowances, under Table 2 or 3 of 40 CFR Part 73	11582*	11605*	11605*	11605*	11605*
-017 [2]	2	SO_2 allowances, under Table 2 or 3 of 40 CFR Part 73	11370*	11395*	11395*	11395*	11395*

[1] Northside Generating Station.
[2] St. Johns River Power Park.

* The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2, 3, or 4 of 40 CFR 73.

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
c. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rules 62-213.440(1)(c)1.,2. & 3., F.A.C.]

A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts. [Rule 62-213.413, F.A.C.]

A.5. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator. [40 CFR 70.6(a)(1)(ii); and Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

A.6. Comments, notes, and justifications: None.

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.

Northside	Florida	0667
Plant name	State	ORIS/Plant Code

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		

DEP Form No. 62-210.900(1)(a) – Form
Effective: 3/16/08

1

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

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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

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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.

Saint Johns River Power Park Plant name	Florida State	0207 ORIS/Plant Code

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		

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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.

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,

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

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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	Date 5-6-08

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Subsection B. This subsection addresses Acid Rain, Phase II NO_X.

{Permitting note: The U.S. EPA issued Acid Rain Phase I permit(s)}

The emissions units listed below are regulated under Acid Rain Part, Phase II NO_X, for:

JEA
St. Johns River Power Park
Facility ID No. 0310045
ORIS Code: 0207

E.U. ID No.	Brief Description
-016	SJRPP Boiler No. 1
-017	SJRPP Boiler No. 2

B.1. The Acid Rain Phase II NO_X Compliance Plan application(s) submitted for this facility, as approved by the Department, are a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:

a. Phase II NO_X Compliance Plan, EPA Form 7610-28 (12-03), dated April 22, 2008, which is included at the end of this section.

[Chapter 62-213 and Rule 62-214.320, F.A.C.]

B.2. Nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID No.	NO_X limit [1]
-016	1	The Florida Department of Environmental Protection approves a NO_X compliance plan for this unit. The compliance plan is effective for calendar year 2009 through calendar year 2013. This unit's applicable emission limitation for each year of the plan, is 0.46 lb/MMBtu from 40 CFR 76.7(a)(2) for dry bottom wall-fired boilers. In addition to the described NO_X compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and the requirements covering excess emissions.
-017	2	The Florida Department of Environmental Protection approves a NO_X compliance plan for this unit. The compliance plan is effective for calendar year 2009 through calendar year 2013. This unit's applicable emission limitation for each year of the plan, is 0.46 lb/MMBtu from 40 CFR 76.7(a)(2) for dry bottom wall-fired boilers. In addition to the described NOx compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_X compliance plan and the requirements covering excess emissions.

[1] Based on the Phase II NO_X Compliance Plan, EPA Form 7610-28 (12-03), dated April 22, 2008.

B.3. Comments, notes, and justifications: none.

EPA

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Compliance Plan

Page 1 of 2

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 / Type DBW	ID# 2 / Type DBW	ID# / Type	ID# / Type	ID# / Type	ID# / 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)	☐	☐	☐	☐	☐	☐

EPA Form 7610-28 (12-03)

St. Johns River Power
Plant Name (from Step 1)

NO_x Compliance - Page 2
Page 2 of 2

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

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SECTION V. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 2, 1997).
Appendix C, Common Conditions.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix 40 CFR 60, Subpart A - General Provisions.
Appendix 40 CFR 60, Subpart Da.
Appendix 40 CFR 60, Subpart Y.
Appendix 40 CFR 60, Subpart OOO.
Appendix NGS, CT Heat Input Nominal Values: Heat Load MW vs. Temperature.
Appendix O&M, Operation and Maintenance Plan under RACT for PM.
Appendix Q: Protocol for Startup and Shutdown.
Appendix RR, Facility-wide Reporting Requirements.
Appendix SJRPP, Table 6 (Revised): Parts A and B.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

REFERENCED ATTACHMENTS

The Following Attachments Are Included for Applicant Convenience:

Table H, Permit History.