JEA
Brandy Branch Generating Station
Facility ID No. **0310485**
Duval County

Title V Air Operation Permit Revision
DRAFT Permit No.: **0310485-016-AV**

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
City of Jacksonville
Environmental Resource Management Department
Environmental Quality Division
Air Pollution Source Permitting Section
117 West Duval Street, Suite 225
Jacksonville, Florida 32202
Telephone: 904/630-4900
Fax: 904/630-3638

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Table of Contents

Section **Page Number**

Placard Page…….. 1

I. Facility Information……..…..… 2
- A. Facility Description
- B. Summary of Emissions Unit ID Nos. and Brief Descriptions
- C. Relevant Documents

II. Facility-wide Conditions……..… 3

III. Emissions Unit Conditions
- A. Simple-Cycle Combustion Turbine-Electrical Generator..…….……6
- B. Two Combined-Cycle Turbine-Electrical Generators with supplementary-fired HRSGs…….……..…...….20
- C. Fuel Oil Storage Tanks……..…...….37
- D. Water Cooling – One Fresh Water Mechanical Draft Cooling Tower……..…...….38

IV. Acid Rain Part, Phase II…….…..…39

Permittee:
JEA
21 West Church Street, Tower 8
Jacksonville, Florida 32202-3139

DRAFT Permit No.: 0310485-016-AV
SIC Nos. 49, 4911
Project: Revised Title V Air Operation Permit

The subject of this permit is for the revision of the Title V Air Operation Permit to incorporate the terms and conditions of air construction permit (AC), No. 0310485-017-AC/PSD-FL-310(F). Specifically, the AC authorized an increase in the heat input rate to the heat recovery steam generator's (HRSG's) supplementary-fired (natural gas) duct burner from 170 to 200 MMBtu/hr for each combined-cycle combustion turbine-electrical generator, EU-002 and EU-003, at the existing Brandy Branch Generating Station. No physical change is required to achieve this heat input rate increase. The change reflects the installed capacity of the HRSGs's duct burners. Also, each HRSG's duct burner will have a restriction on the hours of operation of 4,500 hours per consecutive 12-months to keep the pollutant emissions to less than significant and to avoid PSD new source review. The facility is located approximately 1 mile N.E. of Baldwin City, Duval County. UTM coordinates are: Zone 17; 408.81 km E; 3354.38 km N. Latitude: 30 degrees, 19 minutes, 14 seconds; Longitude 81 degrees, 56 minutes, 55 seconds.

This Title V air operation permit revision 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 perform the work or 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.

Referenced documents made a part of this permit revision (not attached):

APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)
Figure 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM REPORT (version dated 7/96)
Acid Rain Phase II Part Application dated December 14, 1999, and received on January 3, 2000.
Alternate Sampling Procedures: ASP Number 97-B-01 and ASP 92-0-01

Revision Effective Date: (day 55 of EPA's review date)
Renewal Application Due Date: July 5, 2008
Expiration Date: December 31, 2008

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Joe Kahn, P.E.
Acting Director
Division of Air Resource Management

JK/jfk/bm

Section I. Facility Information

Subsection A. Facility Description

This facility consists of three dual-fuel, nominal 170 megawatt (MW) General Electric model PG7241FA combustion turbine-electrical generators and two one-million gallon capacity fuel oil storage tanks. Two of the combustion turbines (EU-002 and EU-003) are configured for combined cycle mode and one (EU-001) for simple cycle operation. Emissions from the units are controlled by Dry Low NO_X (DLN-2.6) combustors when operating on natural gas, and wet injection when firing fuel oil. For the combined cycle units, SCR's are additionally utilized for further NO_X reductions. Inherently clean fuels and good combustion practices are employed to control all pollutants.

The facility is subject to all applicable provisions of Chapter 403, Florida Statutes, Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 60, 72, 73, and 75. The facility holds ORIS code 7846 under Phase II of the Federal Acid Rain Program.

Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions

E. U. ID No.	Brief Description
001	Simple-Cycle Combustion Turbine-Electrical Generator
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired Heat Recovery Steam Generator (HRSG)
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired HRSG
004	Fuel Oil Storage Tank (one-million gallon)
005	Fuel Oil Storage Tank (one-million gallon)
007	Water Cooling - One Fresh Water Mechanical Draft Cooling Tower

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit ID Nos. on all test report submittals, applications, and other correspondence.

Subsection C. Relevant Documents

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

<u>These documents are provided to the Permittee for information purposes only:</u>
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers.
Appendix H: Permit History.

Statement of Basis.

<u>These documents are on file with the permitting authority:</u>
Title V Permit Application for Revision received June 20, 2006.
Supplementary material received July 27, 2006, via E-mail.
Supplementary material received July 31, 2006, via E-mail.
Letter from Bert Gianazza received August 2, 2006.

Section II. Facility-wide Conditions

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS (version dated 06/23/06), is a part of this permit. {Permitting note: Appendix TV-6, Title V Conditions, is distributed to the Permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2.0. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.; and Jacksonville Environmental Protection Board (JEPB) Rule 2, Part IX]

2.1. Not federally enforceable. Odor Nuisance. Pursuant to 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, can be cited for objectionable odors.
[JOC Chapter 376]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20 percent opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

Risk Management Plan (RMP) Reporting Center
P.O. Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: (301)429-5018

and,

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]

5. [Reserved.]

6. [Reserved.]

7. [Reserved.]

8. General Pollutant Emission Limiting Standards. 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 (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting note: *Nothing was deemed necessary and ordered at this time.*}

[Rule 62-296.320(1)(a), F.A.C.; and, 0310485-005-AV]

9. Not federally enforceable. The Permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility. These precautions include (a) using paved roads, parking areas, and equipment yards, (b) maintenance of paved areas as needed, (c) regular mowing of grass and care of vegetation, and (d) limiting access to plant property by unnecessary vehicles.
[Rule 62-296.320(4)(c)2., F.A.C.; and, Title V Application]

{Permitting note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition 57. of APPENDIX TV-6, TITLE V CONDITIONS)}

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-6, TITLE V CONDITIONS)}

12. The permittee shall submit all compliance related notifications and reports required of this permit to the ERMD-EQD office at the following address:

City of Jacksonville
Environmental Resource Management Department
Environmental Quality Division
Air Pollution Source Permitting Section
117 West Duval Street, Suite 225
Jacksonville, Florida 32202
Telephone: 904/630-4900
Fax: 904/630-3638

13. Any reports, data, notification, certifications, and requests required by the United States Environmental Protection Agency should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides, & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155
Fax: 404/562-9163

14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

15. BACT Determination. In accordance with paragraph (4) of 40 CFR 52.21 (j) and 40 CFR 51.166(j) the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source." This reassessment will also be conducted for this project if there are any increases in heat input limits, hours of operation, oil firing, low or base load operation (e.g. conversion to combined- cycle operation) short-term or annual emission limits, annual fuel heat input limits, changes in methods of operation or similar changes.
[40 CFR 51.166; Rule 62-4.070, F.A.C.; 0310485-001-AC, Specific Condition 7; and, PSD-FL-310]

Section III. Emissions Unit(s) and Conditions.

Subsection A. Simple-Cycle Combustion Turbine-Electrical Generators

E.U. ID No.	Brief Description
001	Simple-Cycle Combustion Turbine-Electrical Generator (nominal 170 megawatt)

This emissions unit is comprised of a nominal 170 MW simple-cycle combustion turbine (General Electric PG7241FA), with a 90-foot exhaust stack. Natural gas is the primary fuel, with low-sulfur distillate fuel oil as the back-up fuel. NO_x emissions are controlled by dry low NO_x (DLN) combustors, and a water injection system for use when firing No. 2 or superior grade distillate fuel oil. The stationary combustion turbine, ducting, and stack is designed so as to not preclude installation of SCR equipment and/or oxidation catalyst equipment in the event of a failure to achieve the NO_x limits given in Specific Conditions **A.10.** and **A.11.**, or the carbon monoxide (CO) limits given in Specific Condition **A.12.** Compliance Assurance Monitoring (CAM) does not apply to this emissions unit. Start-up date was: April 20, 2001.

{Permitting note: This emissions unit is regulated under: Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT); Air Construction Permit No.: 0310485-001-AC/PSD-FL-267 and amendments (A thru D); and, Power Plant Siting Project No.: PA 00-43}

The following conditions apply to the emissions units listed above:

General Requirements

A.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee (ERMD-EQD).
[40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

A.2. Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
[Rules 62-210.650, F.A.C.; and, 0310485-001-AC, Specific Condition 12]

A.3. Concealment. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

A.4. 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, 0310485-001-AC, Specific Condition 11]

Essential Potential to Emit (PTE) Parameters

A.5. Capacity. The maximum heat input rates, based on the lower heating value (LHV) of each fuel at ambient conditions of 59°F temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,623 million Btu per hour (MMBtu/hr) when firing natural gas, nor 1,822 MMBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing.
[Rule 62-210.200(Definitions-Potential Emissions), F.A.C.; and, 0310485-001-AC, Specific Condition 8]

Control Technology

A.6. Consistent with best operation and maintenance practices, the DLN systems shall each be tuned to optimize emissions reductions and shall be maintained to minimize NO_x emissions and CO emissions. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas.
[Rules 62-4.070 and 62-210.650, F.A.C.; and, 0310485-005-AC, Specific Condition 19]

Essential Potential to Emit (PTE) Parameters (cont.)

A.7. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **A.35.**
[Rule 62-297.310(2), F.A.C.]

A.8. Methods of Operation – Fuels. Only pipeline natural gas or maximum 0.05 percent sulfur content, by weight, No. 2 or superior grade of distillate fuel oil shall be fired.

{Permitting note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.}

[Rule 62-210.200(Definitions-Potential Emissions), F.A.C.; 0310485-001-AC, Specific Condition 7; and, 0310485-016-AV]

A.9. Hours of Operation. The stationary gas turbine shall only operate up to 4750 hours during any consecutive twelve-month period, of which 750 hours of operation per combustion turbine may be while firing fuel oil. Additionally, the turbine shall be limited to 16 hours per day of fuel oil firing. See also Specific Condition **B.9.**
[Rule 62-210.200(Definitions-Potential Emissions), F.A.C.; and, 0310485-001-AC, Specific Condition 13]

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **A.10.** through **A.14.** are based on the specified averaging time of the applicable test method.}

A.10. The following table is a summary of the emissions limits. Values for NO_x are corrected to 15% O_2 on a dry basis.

Operational Mode (Fuel)	NO_x (15% O_2)	CO	PM/Visibility (% Opacity)	SO_2/SAM	Technology and Comments
Natural Gas	10.5 ppmvd	15 ppmvd	10	2 grains of sulfur per 100 scf	Dry Low NO_x Burners. Clean fuels, good combustion.
Distillate Fuel Oil	42 ppmvd	20 ppmvd	10	0.05% sulfur content, by wt., No. 2 or superior	Water Injection. Units limited to 750 hrs equivalent full load oil operation (per CT) annually. Clean fuels.

[Rule 62-212.400, F.A.C.; 0310485-001-AC, Specific Condition 20; and, 0310485-016-AV]

A.11. Nitrogen Oxides (NO_x).

- For the sole purpose of Acid Rain reporting, when NO_x monitoring data are not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).
- While firing Natural Gas. The emission rate of NO_x in the exhaust gas shall not exceed 69.3 lbs/hr (at ISO conditions) on a 24 hr block average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO_2 (at ISO conditions) shall not exceed 10.5 ppmvd @ 15% O_2 to be demonstrated by annual stack test. Note: Basis for lbs/hr limit is 10.5 ppmvd @ 15% O_2, full load.
- While firing Fuel Oil. The concentration of NO_x in the exhaust gas shall not exceed 42 ppmvd at 15% O_2 on the basis of a 3 hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_x emissions calculated as NO_2 (at ISO conditions) shall not exceed 42 ppmvd @ 15% O_2 to be demonstrated by stack test.
- After combusting fuel oil for at least 400 hours on any individual combustion turbine (CT), the permittee shall prepare and submit for the DEP's review and acceptance an engineering report regarding the lowest NO_x emission rate that can consistently be achieved when firing distillate oil. This lowest recommended rate shall include a reasonable operating margin, taking into account long-term performance expectations and good operating and maintenance practices. The DEP may revise the NO_x emission rate based upon this report.

[Rule 62-212.400, F.A.C.; and, 0310485-001-AC, Specific Condition 21]

A.12. Carbon Monoxide (CO). The concentration of CO in the exhaust gas when firing natural gas shall not exceed 15 ppmvd when firing natural gas and 20 ppmvd when firing fuel oil as measured by EPA Method 10. CO emissions shall not exceed 48.0 lbs/hr (when firing natural gas) and 65.0 lbs/hr (when firing fuel oil) as indicated by EPA Method 10.
[Rule 62-212.400, F.A.C.; 0310485-001-AC, Specific Condition 22; and, 0310485-016-AV]

A.13. Sulfur Dioxide (SO_2) and Sulfuric Acid Mist (SAM). SO_2 and SAM emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 2 grains per 100 standard cubic feet) and 0.05% sulfur content, by weight, fuel oil. Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedule in Specific Conditions **A.24.** and **A.25.** will

demonstrate compliance with the applicable NSPS SO_2 emissions limitations from the combustion turbine.
[40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.; BACT; and, 0310485-004-AC, Specific Condition 23 (as revised in permit modification letter dated 4/12/01)]

A.14. Visible emissions (VE). VE emissions shall not exceed 10 percent opacity when firing natural gas or No. 2 or superior grade of fuel oil. Particulate matter emissions shall not exceed 9.0 lbs/hr (front catch) while firing natural gas and 17.0 lbs/hr (front catch) while firing fuel oil as indicated by opacity.
[Rule 62-296.320(4)(b), F.A.C.; and 0310485-001-AC, Specific Condition 24.]

Excess Emissions

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

A.15. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period for other reasons, unless specifically authorized by the DEP for longer duration. Operation below 50% output while firing fuel oil (and below 62 gross megawatts while firing natural gas) shall be limited to 2 hours per unit cycle (breaker closed to breaker open). Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C.
[Rule 62-210.700(1), F.A.C.; and, 0310485-001-AC, Specific Condition 26]

A.16. Excess Emissions Report. If excess emissions occur due to malfunction, the owner or operator shall notify the 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 request 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.
[Rules 62-4.130 and 62-210.700(6), F.A.C; and, 0310485-001-AC, Specific Condition 27]

A.17. 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.]

Monitoring Requirements

A.18. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A.19. Continuous Monitoring System. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from the CT unit. Periods when NO_x emissions are above the standards as listed in Specific Condition **A.11.**, shall be reported to the ERMD-EQD office pursuant to Rule 62-4.160(8), F.A.C. Following the format of 40 CFR 60.7, periods of startup, shutdown and malfunction shall be monitored, recorded, and reported as excess emissions when emission levels exceed the standards listed in Specific Condition **A.11.**, except as noted in Specific Condition **A.31.**
[Rule 62-204.800, F.A.C.; 40 CFR 60.7; and, 0310485-001-AC, Specific Condition 41]

A.20. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within $\pm$5.0 percent and shall be approved by the Administrator.
[40 CFR 60.334(a)]

A.21. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG, shall monitor sulfur content of the fuel being fired in the turbine. Please see Specific Conditions **A.24.** and **A.25.**
[40 CFR 60.334(b); and, 0310485-012-AC]

A.22. CEMS in lieu of Water to Fuel Ratio. The NO_x CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG. The calibration of the water/fuel-monitoring device required in 40 CFR 60.335(c)(2) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from the ERMD-EQD office, the CEMS emission rates for NO_x shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.
[0310485-001-AC, Specific Condition 42]

A.23. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60.7(a)(5) or 40 CFR 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F, or 40 CFR 75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the ERMD-EQD office no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62.
[0310485-001-AC, Specific Condition 43]

A.24. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the JEA's Brandy Branch Generating Station, an analysis which reports the sulfur content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
[0310485-001-AC, Specific Condition 44; and, 0310485-012-AC]

A.25. Natural Gas Monitoring Schedule. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334(b)(2):

- The permittee shall apply for an Acid Rain permit in compliance with the deadlines specified in 40 CFR 72.30. See Section IV, Acid Rain Part of this permit.
- The permittee shall submit a monitoring plan, certified by signature of the Designated Representative that commits to using a primary fuel of pipeline-supplied natural gas (sulfur content less than 2 gr/100 scf pursuant of 40 CFR 75.11(d)(2)). See Specific Condition **A.13.**
- Each unit shall be monitored for SO_2 emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
- JEA shall notify the DEP and the ERMD-EQD of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 standard cubic feet of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.

{Permitting note: Due to amendments to 40 CFR 60, Subpart GG, monitoring of the total sulfur content of the gaseous fuel combusted is not required if pipeline-supplied natural gas is used.}

[0310485-001-AC, Specific Condition 45; and, 40 CFR 60.334(h)(3)]

A.26. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.; and, 0310485-001-AC, Specific Condition 46]

Test Methods and Procedures

A.27. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the DEP if required to determine the nitrogen content of the fuel being fired.
[40 CFR 60.335(a)]

A.28. For purposes of demonstrating compliance with NSPS - 40 CFR 60, Subpart GG, the monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO_x standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
[40 CFR 60.335(c)(2)]

A.29. Compliance with the allowable emission limiting standards shall be determined annually by using the following reference methods as described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.
[0310485-001-AC, Specific Condition 28]

A.30. *Annual* compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on each unit as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources".
- EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources".
- EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" (or RATA test data) shall be used to demonstrate compliance with the short-term NO_x BACT limits.

[0310485-001-AC, Specific Condition 29]

A.31. Continuous compliance with the NO_x emission limits. Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 24-hr block average (DLN technology while burning gas) or a 3-hr average (SCR technology or while burning oil). For the 24-hr block average (lb/hr) emissions may be determined via EPA Method 19 or equivalent EPA approved methods. Based on CEMS data, a separate compliance determination is conducted at the end of each operating day (or 3-hr period when applicable) and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day (or 3-hr period when applicable). 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 applicable NO_x standard. These excess emissions periods shall be reported as required in Specific Conditions **A.15.** and **A.16.** A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart.
[Rules 62-4.070 and 62-210.700, F.A.C.; 40 CFR 75; and, 031485-001-AC, Specific Condition 30]

A.32. Compliance with the SO_2 and PM/PM_{10} emission limits. Notwithstanding the requirements of Rule 62-297.310(7), F.A.C., the use of pipeline natural gas and maximum 0.05 percent sulfur (by weight) No. 2 or superior grade distillate fuel oil, is the method for determining compliance for SO_2 and PM_{10}. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard and the 0.05% sulfur limit, fuel oil analysis using ASTM D2880-941 or D4294-90 (or equivalent latest version) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent latest version) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75, Appendix D, may be utilized. The applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e).
[0310485-001-AC, Specific Condition 31]

A.33. Compliance with the CO emission limit. Annual compliance testing for CO may be conducted concurrently with the annual RATA testing for NO_x required pursuant to 40 CFR 75 (required for gas only).
[0310485-001-AC, Specific Condition 32]

A.34. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
1. 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.
2. 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:

a. 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.

b. 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.]

A.35. Operating Rate During Testing. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Rule 62-204.800 F.A.C.
[Rules 62-297.310(2) & (2)(b), F.A.C.; and, 0310485-001-AC, Specific Condition 34]

A.36. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities. (See attachment.)
[Rule 62-297.310(6), F.A.C.]

A.37. Frequency of Compliance Tests. The following provisions apply only to the combustion turbine system and only for the pollutants listed in Specific Conditions **A.10.** through **A.14.** for which compliance testing is required.

(a) Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the DEP shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions (VE);

b. Carbon monoxide (CO).

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the ERMD-EQD at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the ERMD-EQD, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a DEP rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the ERMD-EQD.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the DEP, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a baghouse or specifying a fuel analysis for sulfur dioxide emissions, the DEP shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; and, 0310485-001-AC, Specific Condition 36]

A.38. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if

the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

A.39. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

A.40. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
a. (not applicable)
b. (not applicable)
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

Reporting and Recordkeeping Requirements

A.41. Records. All measurements, records, and other data required to be maintained by JEA shall be recorded in a permanent form and 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.
[0310485-001-AC, Specific Condition 38]

A.42. Emission Compliance Stack Test Reports. A test report indicating the results of the required compliance tests shall be filed as per Specific Condition **A.51.** The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the ERMD-EQD to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.
[0310485-001-AC, Specific Condition 39]

A.43. Special Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records related to fuel usage:
(1) Hours of operation by fuel type shall be submitted with the Annual Operation Report (AOR) for the prior year.
(2) Hours of operation shall be kept for each consecutive 12-month period by fuel type.
(3) Daily hours of fuel oil operation shall be kept during any day in which fuel oil is fired.
[0310485-001-AC, Specific Condition 40]

A.44. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, the permittee 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.]

A.45. Test Reports - General Requirements.
(a) The owner or operator 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.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the ERMD-EQD to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the DEP or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

A.46. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
[40 CFR 60.7(c)(1), (2), (3), and (4)]

A.47. The summary report form shall contain the information and be in the format shown in FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.
[40 CFR 60.7(d)(1) and (2)]

A.48. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).
[40 CFR 60.7(e)]

A.49. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

A.50. Test Notification. The permittee shall notify the ERMD-EQD, in writing, at least 15 days prior to the date on which each formal annual compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted.
[Rule 62-297.310(7)(a)9., F.A.C.; 40 CFR 60.11; and, 0310485-001-AC, Specific Condition 35]

A.51. Test Results. Compliance test results shall be submitted to the ERMD-EQD no later than 45 days after completion of the last test run.
[Rule 62-297.310(8), F.A.C.; and 0310485-001-AC, Specific Condition 37]

Section III. Emissions Unit(s) and Conditions.

Subsection B. Combined-Cycle Combustion Turbine-Electrical Generators

E.U. ID No.	Brief Description
002	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners
003	Combined-Cycle Combustion Turbine-Electrical Generator with supplementary-fired (natural gas) HRSG Duct Burners

Each emissions unit is comprised of a nominal 170 MW (General Electric PG7241 FA) stationary combustion turbine-electrical generator equipped with an evaporative cooler, a supplementary-fired (natural gas) heat recovery steam generator (HRSG) duct burner, an associated 190-foot stack, and a selective catalytic reduction (SCR) unit for reducing NOx emissions, including ancillary equipment and ammonia storage; in addition, the emission units share one nominal 200 MW steam electrical generator and one freshwater cooling tower. For the CTs, natural gas is the primary fuel, with low-sulfur distillate fuel oil as the back-up fuel. Compliance Assurance Monitoring (CAM) does not apply to these emissions units. Initial startup was 11/27/2004 for both EUs -002 and -003.

{Permitting note: These emissions units are regulated under: Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD); Best Available Control Technology (BACT); PSD-FL-310 and amendments (A thru F); and, Power Plant Siting Project No.: PA 00-43}

The following conditions apply to the emissions units listed above:

General Requirements

B.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee (ERMD-EQD).
[40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

B.2. Circumvention. The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
[Rule 62-210.650, F.A.C.; and, PSD-FL-310]

B.3. Concealment. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

B.4. 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, PSD-FL-310]

Essential Potential to Emit (PTE) Parameters

B.5. Capacities.

a. Combustion Turbine Capacity. The maximum heat input rates, based on the higher heating value (HHV) of the fuel to this Unit shall not exceed 1,911 million Btu per hour (MMBtu/hr) when firing natural gas nor 2060 MMBtu/hr for oil firing. This maximum heat input rate will vary depending upon turbine inlet conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the ERMD-EQD within 45 days of completing the initial compliance testing.
[Design; Rule 62-210.200(Definitions-Potential Emissions), F.A.C.; and, 0310485-003-AC/PSD-FL-310]

b. HRSG equipped with Duct Burners. The maximum heat input rate of each natural gas-fired HRSG duct burner shall not exceed 200 MMBtu/hr (HHV).
[Rule 62-210.200(Definitions-Potential Emissions), F.A.C.; 0310485-006-AC/PSD-FL-310(A); and, 0310485-017-AC/PSD-FL-310(F)]

c. Emissions Unit Operating Rate Limitation After Testing. See Specific Condition **B.35.**
[Rule 62-297.310(2), F.A.C.; and, 0310485-016-AV]

Control Technology

B.6. Dry Low NO_x (DLN) combustors shall be installed on each stationary combustion turbine and the permittee shall install a selective catalytic reduction system to comply with the NO_x and ammonia limits listed in this permit. Wet injection shall additionally be installed on each stationary combustion turbine for use during fuel oil firing, in conjunction with the SCR.
[Design; Rules 62-4.070 and 62-212.400, F.A.C.; and, 0310485-003-AC/PSD-FL-310]

B.7. Neither EU-002 nor EU-003 may be operated without the use of the SCR system except during periods of startup and shutdown in accordance with the manufacturer's requirements.
[Rule 62-297.310(2), F.A.C.; and, 0310485-003-AC/PSD-FL-310]

Essential Potential to Emit (PTE) Parameters (cont.)

B.8. Allowable Fuels. The facility is authorized to burn any combination of natural gas (2.0 grains sulfur/100 scf), low sulfur fuel oil (0.05% sulfur content, by weight) and lower sulfur fuel oil (0.0065% sulfur content, by weight). The combinations of these fuels are subject to the hour limitations and recordkeeping requirements set forth in this permit. Unless otherwise authorized by this permit, CT operation below 65 gross megawatts shall be limited to 2 hours during each calendar day.
[Rule 62-210.200(Definitions-Potential Emissions), F.A.C.; PSD-FL-310; and, 0310485-016-AV]

B.9. Hours of Operation. Except for the HRSG duct burners, the emission units are authorized to operate 8760 hours per year while firing natural gas (2.0 grains sulfur/100 scf). The combined cycle units are authorized to operate up to a combined maximum of 576 actual plus "equivalent hours" per consecutive 12-month period while firing 0.05% sulfur content, by weight, fuel oil **OR** a combined

maximum of 1478 actual plus "equivalent hours" while firing 0.0065% sulfur content, by weight, fuel oil per consecutive 12-month period, whichever occurs first. The simple cycle unit is authorized to operate up to a maximum of 750 actual plus "equivalent hours" per consecutive 12-month period, while firing either 0.05% or 0.0065% sulfur content, by weight, fuel oil, whichever occurs first. Tracking of "equivalent hours" shall conform with and be recorded as defined within this permit. Additionally, the following requirements shall apply:

(1) In the event that any of the 3 emission units (simple or combined cycle) fires No. 2 distillate fuel oil (0.05% sulfur content, by weight) during a calendar day, that unit shall be limited to 16 hours of daily operation on any fuel. Additionally, the other 2 units shall not be fired on any of the allowable fuels for that calendar day.

(2) In the event that the simple cycle unit fires lower sulfur oil (0.0065% sulfur content, by weight) during any calendar day, but for 8 hours or less, the combined cycle units may fire any combination of lower sulfur oil (0.0065% sulfur content, by weight) or natural gas (2 grains/100 scf) during that calendar day.

(3) In the event that the simple cycle unit fires lower sulfur fuel oil (0.0065% sulfur content, by weight) for more than 8 hours during a calendar day, it shall be allowed 24 hours of daily operation while the combined cycle units shall not be fired on any fuel for the calendar day.

{Permitting note: The limitation of this specific condition is more stringent than the NSPS sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.}

(4) <u>HRSG Duct Burners</u>. Each HRSG duct burner operation shall not exceed 4500 hours per consecutive 12-months. (See Specific Condition **B.43.(6)**)

[Rules 62-210.200(Definitions-Potential Emissions) and 62-212.400(12), F.A.C.; 0310485-007-AC/PSD-FL-310(B); and, 0310485-017-AC/PSD-FL-310(F)]

<u>Emission Limitations and Standards</u>

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **B.11.** and **B.12.** are based on the specified averaging time of the applicable test method.}

B.10. The following table is a summary of the emissions limits. Values for NO_x are corrected to 15% O_2 on a dry basis.

Operational Mode (Fuel)	NO_x (15%O2)	CO	PM/Visibility (% Opacity)	SO_2/SAM	Technology and Comments
Natural Gas	3.5 ppmvd	14 ppmvd	10	2 grains of sulfur per 100 scf	Dry Low NO_x Burners and SCR. Clean fuels, good combustion.
Distillate Fuel Oil	15 ppmvd	14 ppmvd	10	0.05% sulfur content, by wt., No. 2 or superior	Water Injection and SCR. Units limited on hours of fuel oil operation annually. Clean fuels.

[Rule 62-212.400, F.A.C.; PSD-FL-310; and, 0310485-016-AV]

B.11. Nitrogen Oxides (NO_x).

- The concentration of NO_x in the stack exhaust gas, with the combustion turbine operating on natural gas and the duct burner on, shall not exceed 3.5 ppmvd @ 15% O_2 on a 3-hr block average. The concentration of NO_x in the stack exhaust gas, with the combustion turbine operating on fuel oil (duct burner firing not permitted), shall not exceed 15.0 ppmvd @ 15% O_2 on a 3-hr block average. Compliance shall be determined by the continuous emission monitor (CEMS).

[BACT; Rule 62-212.400, F.A.C.; and, PSD-FL-310]

- The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 5.0 ppmvd @ 15% O_2 while firing natural gas, nor 9 ppmvd @ 15% O_2 while firing oil.

[BACT; Rules 62-212.400 and 62-4.070, F.A.C.; and, PSD-FL-310]

B.12. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC).
a. Emissions of CO in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on any fuel (with duct burners on or off) shall not exceed 14 ppmvd @ 15% O_2, on a 24-hr block average to be demonstrated by CEMS;
b. Emissions of VOC in the stack exhaust gas (base load at ISO conditions) with the combustion turbine operating on gas shall not exceed 6.81 lbs/hour (4.0 lbs/hour with duct burners off) and with the combustion turbine operating on oil shall not exceed 7.68 lbs/hr, to be demonstrated by initial stack test using EPA Method 18, 25 or 25A; and,
c. Thereafter, continuous monitoring of CO shall represent a surrogate for VOC emissions and provide assurance that the emission rates of the BACT Determination are being met.
[BACT; Rule 62-212.400, F.A.C.; and, PSD-FL-310]

B.13. Sulfur Dioxide (SO_2) and Sulfuric Acid Mist (SAM). SO_2 and SAM emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 2 grains per 100 standard cubic foot) and a limited amount of 0.05% sulfur content, by weight, fuel oil (or superior). Compliance with this requirement will demonstrate compliance with the applicable NSPS SO_2 emissions limitations from the combustion turbines as well as the duct burners.
[BACT; 40 CFR 60 Subpart GG; Rules 62-4.070, 62-212.400 and 62-204.800(7), F.A.C.; PSD-FL-310; and, 0310485-016-AV]

B.14. PM/PM_{10} and Visible emissions (VE).
a. PM/PM_{10} emissions from each combustion turbine and HRSG train shall not exceed 22.02 lbs/hr at 100% output firing natural gas with the duct burner on and 62.1 lbs/hr at 100% output firing fuel oil - to be demonstrated by opacity.
b. VE emissions shall not exceed 10 percent opacity from the stack in use.
[BACT; Rules 62-4.070, 62-212.400 and 62-204.800(7), F.A.C.; and, PSD-FL-310]

Excess Emissions

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

B.15. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any calendar day except during start-up, shutdown or during DLN Tuning as described in the alternate NO_x and CO emissions standards below. A startup of any type is defined as being complete upon the first 3-hour block NO_x average of 3.5 ppmvd or less (15 ppmvd or less for oil firing). Operation below 50% output per

turbine shall otherwise be limited to 2 hours in any 24-hour period except for periods of startup, shutdown or DLN Tuning.
[Rules 62-212.400(2)(d) and (e), F.A.C.]

A. Alternate NO_x and CO Emissions Standards:

1. During any calendar day, in which at least one hour of startup, shutdown or DLN tuning session has occurred, the following alternate emission limits shall apply to each combined cycle combustion turbine:
   a. An alternate NO_x limit of 3000 lbs shall apply if natural gas is the exclusively fired fuel;
   b. An alternate NO_x limit of 8880 lbs shall apply if any fuel oil is fired; and,
   c. An alternate CO limit of 4200 lbs shall apply when firing either natural gas or fuel oil.

2. Annual excess emissions from DLN tuning sessions from both combined cycle combustion turbines shall meet the following emission limits on an annual basis for a period of two years from the date of October 1, 2005, in order to demonstrate that the operational change did not result in a significant net emissions increase and to avoid PSD regulations:
   a. NO_x excess emissions shall be limited to less than 40 tons per year.
   b. CO excess emissions shall be limited to less than 100 tons per year.

[Rules 62-212.400(2)(d) and (e), F.A.C.]

B. Startup, Shutdown and DLN Tuning:

1. DLN Tuning: At least one business day prior to performing any tuning session, the permittee shall provide the ERMD-EQD's Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be by letter, facsimile transmittal, or electronic mail. Once the tuning session is completed, the ERMD-EQD's Compliance Authority shall be notified in a like manner, within one business day. Within 15 days of completion of the tuning session, the excluded CEMS data shall be forwarded to the ERMD-EQD's Compliance Authority. CEMS data shall not be excluded from any Acid Rain reporting requirements.

2. Data collected during periods covered by the alternate emissions standard provisions of Specific Condition **B.15.A.** may be excluded from the compliance determination calculation requirements of Specific Conditions **B.11.** and **B.12.**

[Design; and, Rule 62-4.070(3), F.A.C.]

B.16. Excess Emissions Report. If excess emissions occur due to malfunction, the owner or operator shall notify the 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 ERMD-EQD may request 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. Following this format, 40 CFR 60.7, and using the monitoring methods listed in this permit, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Conditions **B.10.** through **B.14.**
[Rules 62-4.130 and 62-210.700(6), F.A.C.]

If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the ERMD-EQD as soon as possible, but at least within (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.]

B.17. 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.]

Monitoring Requirements

B.18. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

B.19. Continuous Monitoring System. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the emissions of NO_x and CO from these emissions units, and the carbon dioxide (CO_2) content of the flue gas at the location where NO_x and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEM system shall be used to demonstrate compliance with the emission limits for NO_x and CO established in this permit. Compliance with the emission limits for NOx shall be based on a 3-hour block average. The 3-hour block average shall be calculated from 3 consecutive hourly average emission rate values. Compliance with the emission limits for CO shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 consecutive hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop an algorithm based on fuel characteristics and stack CO_2 (or O_2) measurements to calculate the moisture content in the exhaust gas to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.

The NO_x monitor shall be certified and operated in accordance with the following requirements. The NO_x monitor shall be certified pursuant to 40 CFR 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. For purposes of determining compliance with the emission limits specified within this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 3 or 24-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_x monitor shall be performed using EPA

Method 20 or 7E, Appendix A, 40 CFR 60. The NO_x monitor shall be a dual range monitor. The span values for the NO_x monitor will be determined in accordance with section 2.1.2 in Appendix A, 40 CFR 75.

The CO monitor and CO_2 monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specifications 4 and 4A. The CO_2 monitor shall be certified and maintained pursuant to 40 CFR 75. Quality assurance procedures for the CO monitor shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to EQD and the Department's Northeast District office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, Appendix A, 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall not be greater than 20 ppm, and the span for the upper range shall be set as appropriate to reflect the level of CO emissions seen during unit startup. The RATA tests required for the CO_2 monitor shall be performed using EPA Method 3A or 3B, Appendix A, 40 CFR 60.

NO_x, CO and CO_2 emissions data shall be recorded by the CEM system during episodes of DLN Tuning, startup, shutdown and malfunction. Periods of data excluded for malfunctions shall not exceed two hours in any calendar day. All periods of data excluded for any startup, shutdown, DLN Tuning or malfunction episode shall be consecutive for each episode. Periods of data excluded for start-up, shutdown or DLN Tuning are subject to the alternate NO_x and CO emissions standard. The owner or operator shall minimize the duration of data attributed to DLN Tuning, startup, shutdown and malfunctions, to the extent practicable. Data recorded during DLN Tuning, startup, shutdown or malfunction events shall not be excluded if the DLN Tuning, startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented.

Best operational practices shall be used to minimize hourly emissions that occur during episodes of DLN Tuning, startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to EQD office and the Department's Northeast District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.

Upon request from the ERMD-EQD, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332. JEA shall be permitted to utilize O_2 as a diluent (rather than CO_2), but shall notify the ERMD-EQD of this change prior to CEMS installation.

[Permitting note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures]

[Rule 62-204.800; 40 CFR 60.7; and, PSD-FL-310]

B.20. Subpart Db Monitoring and Recordkeeping Requirements. The permittee shall comply with all applicable requirements of the Subpart.
[40 CFR 60, Subpart Db; and, PSD-FL-310]

B.21. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG, shall monitor sulfur content of the fuel being fired in the turbine. Please see Specific Conditions **B.24.** and **B.25.**
[40 CFR 60.334(b)]

B.22. CEMS in lieu of Water to Fuel Ratio. The NO_x CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1997 version). The calibration of the water/fuel-monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from the ERMD-EQD, the CEMS emission rates for NO_x shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.
[PSD-FL-310]

B.23. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications, and 40 CFR 60.7(a)(5) or 40 CFR 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. Data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the ERMD-EQD no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62.
[PSD-FL-310]

B.24. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 or superior grade fuel oil received at the JEA's Brandy Branch Power Plant, an analysis which reports the sulfur content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).
[PSD-FL-310]

B.25. Fuel Monitoring Schedule. An optional SO_2 Emissions Data Protocol (without additional EPA approvals) for Gas-Fired and Oil-Fired Units pursuant to 40 CFR 75, Appendix D, for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334(b)(2) provided the following requirements are met:

- The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
- The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to the sole use of pipeline supplied natural gas [sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)] for the CT's.
- Each unit shall be monitored for SO_2 emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

[PSD-FL-310]

B.26. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

B.27. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.
[40 CFR 60.335(a)]

B.28. For purposes of demonstrating compliance with NSPS - 40 CFR 60, Subpart GG, the monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO_x standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.
[40 CFR 60.335(c)(2)]

B.29. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate for each fuel, but not later than 180 days of initial operation of the unit, and annually thereafter as indicated in this permit, by using the following reference methods (see Specific Condition **B.30.**) as described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.
[40 CFR 60.8]

B.30. Initial (I) performance tests shall be performed by the deadlines in Specific Condition **B.29.** Initial tests shall also be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or change of combustors, if specifically requested by the ERMD-EQD on a case-by-case basis. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on these units as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. Where initial tests only are indicated, these tests shall be repeated prior to renewal of each operation permit.

- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
- EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A). This testing may be conducted during the NO_X RATA tests, which includes loads that are less than permitted capacity.

- EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.
- Method CTM-027 for ammonia slip during oil firing (I) and natural gas firing (I, A).

The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O_2) at the measured lbs/hr NO_x emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the ERMD-EQD's request, according to Specific Condition **B.51.**
[PSD-FL-310]

B.31. Continuous compliance with the CO and NO_x emission limits. Continuous compliance with the CO and NO_x emission limits shall be demonstrated by the CEM system on the specified hour average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each period and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous period. Specific Condition **B.19.** further describes the CEM system requirements. Excess emissions periods shall be reported as required in Specific Condition **B.16.** Since CEMS are used for compliance, testing at four separate loads is not required for demonstrating initial compliance under 40 CFR 60.335(c)(3), consistent with recent EPA guidance.
[Rules 62-4.070 and 62-210.700, F.A.C.; 40 CFR 75; and, BACT]

B.32. Compliance with the SO_2 and PM/PM_{10} emission limits. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75, Appendix D, may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e).
[PSD-FL-310]

B.33. Compliance with CO emission limit. Annual RATA testing for the CO and NO_x CEMS shall be required pursuant to 40 CFR 75.
[PSD-FL-310]

B.34. Compliance with the VOC emission limit. An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit will be employed as a surrogate and no annual testing is required.
[PSD-FL-310]

B.35. Operating Rate During Testing. Unless otherwise specified, testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is

allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Test procedures shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Rule 62-204.800 F.A.C.
[Rules 62-297.310(2) & (2)(b), F.A.C.; and, PSD-FL-310]

B.36. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities. The permittee shall design these units to accommodate adequate testing and sampling locations for compliance with the applicable emission limits (per each unit) listed in Specific Conditions **B.10.** through **B.14.** (See attachment)
[Rule 62-297.310(6), F.A.C.]

B.37. Frequency of Compliance Tests. The following provisions apply only to the pollutants listed in Specific Conditions **B.10.** through **B.14.** for which compliance testing is required.
(a) Compliance Testing.

1. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the DEP shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    a. Did not operate; or
    b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
2. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted.
3. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
4. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
5. The ERMD-EQD shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests (unless waived by the affected agency).

(b) Special Compliance Tests. The ERMD-EQD may request a special compliance test pursuant to Rule 62-297.310(7), 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.
(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the DEP, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a baghouse or specifying a fuel analysis for sulfur dioxide emissions, the DEP shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
[Rule 62-297.310(7), F.A.C.; SIP approved; and, PSD-FL-310]

B.38. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

B.39. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

B.40. Selective Catalytic Reduction System (SCR) Compliance Procedures. An annual stack emission test for nitrogen oxides and ammonia from the CT/HRSG pair shall be simultaneously conducted while firing natural gas and operating with the duct burner on as defined in Specific Condition **B.11**. The ammonia injection rate necessary to comply with the NO_x standard shall be established and reported during each annual performance test.

- The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods, as dictated by manufacturer's guidelines and in accordance with this permit.
- The permittee shall install and operate an ammonia flow meter to continuously measure and record the ammonia injection rate to the SCR system of the CT/HRSG set. It shall be maintained and calibrated according to the manufacturer’s specifications.
- During the stack test, the permittee (at each tested load condition) shall determine and report the ammonia flow rate required to meet the emissions limitations. During NO_x CEM downtimes or malfunctions, the permittee shall operate at the ammonia flow rate, which was established during the last stack test.

- Ammonia emissions shall be calculated continuously using inlet and outlet NO_x concentrations from the SCR system and ammonia flow supplied to the SCR system. The calculated ammonia slip shall be used as an indicator of ammonia slip, and to assist in determining appropriate injection rates, but not as the method of determining compliance. A calculated ammonia slip above the permitted value shall result in JEA taking appropriate and timely action, and documenting each event from its occurrence to its resolution. The calculation procedure shall be provided with the CEM monitoring plan required by 40 CFR 75. The following calculation represents one means by which the permittee may demonstrate compliance with this condition:

  Ammonia slip @ 15% O_2 = (A-(B x C/1,000,000)) x (1,000,000/B) x D, where:
  A = ammonia injection rate (lbs/hr)/17 (lbs/lb-mol)
  B = dry gas exhaust flow rate (lbs/hr)/29 (lbs/lb-mol)
  C = change in measured NO_X (ppmv @ 15% O_2) across catalyst
  D = correction factor, derived annually during compliance testing by comparing actual to tested ammonia slip

  The calculation along with each newly determined correction factor shall be submitted with each annual compliance test. Calibration data ("as found" and "as left") shall be provided for each measurement device utilized to make the ammonia emission measurement and submitted with each annual compliance test.

Upon specific request by the local compliance authority (ERMD-EQD) or the DEP, a special re-test shall occur as described in the previous conditions concerning annual test requirements, in order to demonstrate that all NO_x and ammonia slip related permit limits can be complied with.
[PSD-FL-310]

Reporting and Recordkeeping Requirements

B.41. Records. All measurements, records, and other data required to be maintained by JEA shall be recorded in a permanent form and 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 the ERMD-EQD representatives upon request.
[PSD-FL-310]

B.42. Compliance Test Reports. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the ERMD-EQD to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.
[PSD-FL-310]

B.43. Special Recordkeeping Requirements. The owner or operator shall obtain, make, and keep the following records:
(1) Hours of operation for each combustion turbine by fuel type shall be submitted with the Annual Operation Report (AOR) for the prior year.
(2) Hours of operation for each combustion turbine shall be kept for each consecutive 12-month period by fuel type.
(3) Daily hours of fuel oil and natural gas operation shall be kept for each combustion turbine during any day in which fuel oil is fired.
(4) Daily hours of operation when the CT is being fired and the SCR is not in service, along with support documentation demonstrating that the unit was in a DLN Tuning, startup or shutdown condition.

(5) Daily (as-fired) sulfur content of fuel oil shall be kept for each combustion turbine during any day in which fuel oil is fired.
(6) Hours of operation for each HRSG duct burner shall be kept for each consecutive 12-month period while firing natural gas. (See Specific Condition **B.9.(4)**)
[PSD-FL-310; and, 0310485-017-AC/PSD-FL-310(F)]

B.44. Recordkeeping Requirements and Fuel Switching:
Upon prior written notification, JEA may switch between firing 0.05% or 0.0065% sulfur content, by weight, fuel oil on a calendar day basis (i.e. switching is not authorized within any calendar day). A record shall be made every day for each emission unit documenting: the fuel type actually used, the number of actual hours of firing each fuel type, and (for the hours when any oil is fired) the "equivalent hours" for the fuel oil which was not fired. The following shall be used to determine the "equivalent hours": each actual hour of combustion of 0.05% sulfur content, by weight, distillate oil shall equate to 2.6 "equivalent hours" of lower sulfur oil (0.0065% sulfur content, by weight) combustion and each actual hour of firing lower sulfur oil (0.0065% sulfur content, by weight) shall equate to 0.39 "equivalent hours" of 0.05% sulfur content, by weight, fuel oil combustion.

At the end of each calendar month, the total number of "equivalent hours" plus actual hours shall be determined. A running total shall be maintained in order to ensure compliance with Specific Condition **14.B.**, above.
[0310485-007-AC/PSD-FL-310(B); Rule 62-210.700(6), F.A.C.; and, 0310485-016-AV]

B.45. Test Reports - General Requirements.
(a) The owner or operator 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.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the ERMD-EQD to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the DEP or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

B.46. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
[40 CFR 60.7(c)(1), (2), (3), and (4)]

B.47. The summary report form shall contain the information and be in the format shown in FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.
[40 CFR 60.7(d)(1) and (2)]

B.48. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).
[40 CFR 60.7(e)]

B.49. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); and Rule 62-213.440(1)(b)2.b., F.A.C.]

B.50. Test Notification. The ERMD-EQD shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests (unless waived by the affected agency).
[Rule 62-297.310(7)(a)9., F.A.C.; 40 CFR 60.11; and, PSD-FL-310]

B.51. Test Results. Compliance test results shall be submitted to the ERMD-EQD no later than 45 days after completion of the last test run.
[Rule 62-297.310(8), F.A.C.; and, PSD-FL-310]

Section III. Emissions Unit(s) and Conditions.

Subsection C. Fuel Oil Storage Tanks

E.U. ID No.	Brief Description
004	Fuel Oil Storage Tank (one-million gallon)
005	Fuel Oil Storage Tank (one-million gallon)

Emissions units -004 and -005 are two one-million (1,000,000) gallon capacity No. 2 distillate fuel oil storage tanks. The tanks are of a vertical fixed-roof design. The emissions points are breather valves on the dome roofs, located at 40 feet above ground level. The start-up date was April 16, 2001.

{Permitting note: These emissions units are not subject to the provisions of 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800(7)(b), F.A.C.; and, PSD-FL-267 (0310485-001-AC)}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(Definitions-PTE), F.A.C.]

Recordkeeping Requirements

C.2. The permittee shall maintain records on site for storage vessels identification numbers 004 and 005 to include the date of construction, the material storage capacity, and type of material stored for the life of these storage vessels.
[40 CFR 60.116b(b)]

Section III. Emissions Unit(s) and Conditions.

Subsection D. Cooling Tower

E.U. ID No.	Brief Description
007	Water Cooling - One Fresh Water Mechanical Draft Cooling Tower

Emissions Unit -007 is not subject to a NESHAP because chromium-based chemical treatment is not used.

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-PTE), F.A.C.]

Recordkeeping Requirements

D.2. Drift eliminators shall be installed on the cooling tower to reduce PM/PM_{10} emissions. A certification following installation (and prior to startup) shall be submitted that the drift eliminators were installed and that the installation is capable of meeting 0.002-gallons/100 gallons recirculation water flow rate.
[PSD-FL-310]

Section IV. Acid Rain Part, Phase II.

Brandy Branch Generating Station
Operated by: JEA
ORIS code: 7846

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

E.U. ID No.	Description
001	Simple-Cycle Combustion Turbine-Electrical Generator (nominal 170 megawatt)
002	Combined-Cycle Combustion Turbine-Electrical Generator with duct burner
003	Combined-Cycle Combustion Turbine-Electrical Generator with duct burner

1. The Acid Rain Phase II Part application submitted for this facility, as approved by the Department, is 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 application listed below:

a. DEP Form No. 62-210.900(1)(a), version 07/01/95, received January 3, 2000.

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

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

E.U. ID No.	EPA ID #	Year	2004	2005	2006	2007	2008
001	**001**	SO_2 allowances to be determined by U.S. EPA.	0	0	0	0	0
002	**002**	SO_2 allowances to be determined by U.S. EPA.	0	0	0	0	0
003	**003**	SO_2 allowances to be determined by U.S. EPA.	0	0	0	0	0

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.]

4. 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(Definitions-Applicable Requirements), F.A.C.]

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