

# City of Gainesville Gainesville Regional Utilities

Facility ID No. 0010006  
Alachua County

## **Title V Air Operation Permit Revision**

Permit No. 0010006-019-AV  
(Revision of Title V Air Operation Permit No. 0010006-010-AV)



### **Permitting Authority:**

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
Office of Permitting and Compliance  
2600 Blair Stone Road  
Mail Station #5505  
Tallahassee, Florida 32399-2400  
Telephone: (850) 488-0114  
Fax: (850) 921-9533

### **Compliance Authority:**

State of Florida  
Department of Environmental Protection  
Northeast District Office  
7825 Baymeadows Way, Suite B-200  
Jacksonville, FL 32256-7590  
Telephone: (904) 807-3300  
Fax: (904) 448-4363

## Title V Air Operation Permit Revision

Permit No. 0010006-019-AV

### Table of Contents

<u>Section</u>	<u>Page Number</u>
I. Facility Information.	
A. Facility Description. ....	2
B. Summary of Emissions Units. ....	2
C. Applicable Regulations. ....	2
II. Facility-wide Conditions. ....	3
III. Emissions Units and Conditions.	
A. Boiler No. 1. ....	6
B. Boiler No. 2. ....	12
C. Combustion Turbine No. 3. ....	<u>1725</u>
D. Coal Handling and Storage Activities. ....	<u>2331</u>
IV. Acid Rain Part. ....	<u>2533</u>
Phase II Acid Rain Application/Compliance Plan.	
Phase II Acid Rain NO <sub>x</sub> Compliance Plan.	
V. Clean Air Interstate Rule Part. ....	<u>3240</u>
VI. Appendices. ....	<u>3745</u>
Appendix A, Glossary.	
Appendix ASP, ASP Number 97-B-01 (With Scrivener’s Order Dated July 9, 1997).	
Appendix CAM, Compliance Assurance Monitoring Plan.	
Appendix I, List of Insignificant Emissions Units and/or Activities.	
Appendix ICE, Requirements for Internal Combustion Engines.	
Appendix NSPS, Subpart A - General Provisions.	
Appendix NSPS, Subpart D - Standards of Performance for Fossil Fuel Fired Steam Generators for which Construction is Commenced After August 17, 1971.	
Appendix NSPS, Subpart GG - Standards of Performance for Gas Turbines.	
Appendix NSPS, Subpart Y - Standards of Performance for Coal Preparation Plants.	
Appendix RR, Facility-wide Reporting Requirements.	
Appendix TR, Facility-wide Testing Requirements.	
Appendix TV, Title V General Conditions.	
Appendix U, List of Unregulated Emissions Units and/or Activities.	
Referenced Attachments. ....	At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).	
Table H, Permit History.	
Table 1, Summary of Air Pollutant Standards and Terms.	
Table 2, Compliance Requirements.	

**PERMITTEE:**

City of Gainesville  
Gainesville Regional Utilities (GRU)  
P.O. Box 147117 (A132)  
Gainesville, Florida 32614-7117

Permit No. 0010006-019-AV  
Deerhaven Generating Station  
Facility ID No. 0010006  
Title V Air Operation Permit Revision

This project is a Title V air operation permit revision to incorporate several, 5 - air construction (AC) permit projects: 0010006-005-AC, Installation of Air Quality Control Systems; 0010006-009-AC, Superheater Replacement; 0010006-012-AC & -016-AC, NOx & SO<sub>2</sub> Emission Caps; 0010006-014-AC, Low-NOx Burners & Modified Overfire Air System; and, to make several other miscellaneous revisions here.

The existing Deerhaven Generating Station is located in Alachua County at 10001 NW 13<sup>th</sup> Street, Gainesville, Florida. UTM Coordinates are: Zone 17, 365.70 East and 3,292.60 North. Latitude is: 29° 45' 30" North; and, Longitude is: 82° 23' 13" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Permit No. 0010006-010-AV Effective Date: January 1, 2010  
Permit No. 0010006-019-AV Revision Effective Date: [Day 46]  
Renewal Application Due Date: May 20, 2014  
Expiration Date: December 31, 2014

Executed in Tallahassee, Florida  
*Electronic Signature*

JFK/sa/sms

## SECTION I. FACILITY INFORMATION.

### **Subsection A. Facility Description.**

This facility consists of: two steam boilers; two steam turbines; three simple cycle combustion turbines (CT); a recirculating cooling water system; storage and handling facilities for coal, brine salt, fly ash and bottom ash; fuel oil storage tanks; water treatment facilities; a railcar maintenance facility; and ancillary support equipment. Boiler No. 1 (EU003) is only subject to the State of Florida emission standards. Boiler No. 2 (EU005) and CT No. 3 (EU006) are licensed under the Florida Power Plant Siting Act (PPSA). CT Nos. 1 and 2 (EU001 and EU002) are classified as unregulated emission units.

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

### **Subsection B. Summary of Emissions Units.**

<b>EU No.</b>	<b>Brief Description</b>
<i>Regulated Emissions Units</i>	
003	Boiler No. 1 (75 MW)
005	Boiler No. 2 (251 MW)
006	Combustion Turbine No. 3 (74 MW)
007	Coal Handling and Storage Activities
<i>Unregulated Emissions Units and Activities</i>	
001	Combustion Turbine No. 1 (20 MW)
002	Combustion Turbine No. 2 (20 MW)
008	Fly ash and bottom ash, soda ash, salt brine, urea, and lime storage and handling, and water and wastewater treatment systems
009	Stationary Reciprocating Internal Combustion Engine (1,100 hp)

### **Subsection C. Applicable Regulations.**

Based on the Title V air operation permit renewal application received May 18, 2009, this facility is a major source of hazardous air pollutants (HAP). Because this facility operates three stationary reciprocating internal combustion engines (RICE), it is subject to regulation under 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. However, since the engines being operated meet the Subpart ZZZZ definition of “existing units”, there are no unit specific applicable requirements that must be met pursuant to this rule at this time. Two of the stationary RICE are insignificant emissions units identified in Appendix I and one is an unregulated emissions unit (EU009) identified in Appendix U. The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

<b>Regulation</b>	<b>EU No(s).</b>
40 CFR 60, Subpart A, NSPS General Provisions	005, 006
40 CFR 60, Subpart D	005
40 CFR 60, Subpart GG	006
40 CFR 60, Subpart Y	007
40 CFR 75 Acid Rain Monitoring Provisions	003, 005, 006
62-296.470, F.A.C. Clean Air Interstate Rule	003, 005, 006
62-296.405, F.A.C.	003

**SECTION I. FACILITY INFORMATION.**

---

62-213.440, F.A.C.	003, 005, 006
62-210.700, F.A.C.	003, 006
62-297.310, F.A.C.	003, 005, 006, 007
62-297.401, F.A.C.	003, 007

draft/proposed

## SECTION II. FACILITY-WIDE CONDITIONS.

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

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

### **Emissions and Controls**

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

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

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

**FW5. Unconfined Particulate Matter (PM).** No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Chemical or water application to unpaved road and unpaved yard and Open stock piles;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation; and,
- d. Confining abrasive blasting where possible and appropriate.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 18, 2009]

### **Annual Reports and Fees**

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

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

**FW7. Annual Emissions Fee Form and Fee.** The annual Title V emissions fees are due (postmarked) by March 1<sup>st</sup> of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <http://www.dep.state.fl.us/air/emission/tvfee.htm>. [Rule 62-213.205, F.A.C.]

Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by April 1<sup>st</sup> of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The form is available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site:

## SECTION II. FACILITY-WIDE CONDITIONS.

---

<http://www.dep.state.fl.us/Air/permitting/tvfee.htm>. [Rule 62-213.205, F.A.C.; and, Chapter 2013-92, Section 18(11), at 11, Laws of Florida (amending Section 403.0872(11), Florida Statute (2012).]

*{Permitting notes:*

*In addition to the change in the Title V fee submission date from March 1<sup>st</sup> to April 1<sup>st</sup>, Section 403.0872(11)(a), F.S. has been amended to require that the annual fee be calculated based upon actual emissions rather than allowable emissions, as in the past.*

*In light of the 2013 statutory amendment, Rule 62-213.205, Annual Emissions Fee, F.A.C. and Rule 62-213.900, Forms and Instructions, F.A.C. will likely need to be changed. Changes to these rules will affect the associated Title V annual emissions fee provisions that are cited in Specific Conditions RR1., RR6. & RR16. within Appendix RR, Facility-wide Reporting Requirements.*

*The Department will be exploring the development of a revision to the electronic annual operating report (e-AOR) application to automatically calculate the amount of the fee based upon actual emission information provided with the AOR. When completed, the procedures for submitting the fee and/or the submission address may change.*

*Be sure to check the Title V Annual Emissions Fee On-line Information Center (see above web site address) periodically for updates, especially before submitting future Title V annual emissions fee payments.*

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

**SECTION II. FACILITY-WIDE CONDITIONS.**

---

**FW9.** Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
- b. 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]

draft/proposed

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection A. Emissions Unit 003**

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

EU No.	Brief Description
003	Boiler No. 1

Emissions unit 003 (EU003) is a 75 MW (nominal) fossil fuel fired steam boiler (Boiler No. 1). Boiler No. 1 began commercial operation in 1972 and thus is only subject to the State of Florida emission standards. There is no air pollution control device on this emissions unit. The combustion gases exhaust through a single stack of 300 feet, 11 feet diameter, 285 °F exit temperature, and 342,700 acfm.

*{Permitting note(s): This emissions unit is regulated under Acid Rain, Phase II; Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR); Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. As required under the Acid Rain Program, the unit has a Continuous Emission Monitoring System (CEMS) for measuring opacity, nitrogen oxides, and carbon dioxide. These monitors are used as indicators of compliance and periodic monitoring.}*

**Essential Potential to Emit (PTE) Parameters**

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
003	960 MMBtu/hr	Natural Gas
	960 MMBtu/hr	Residual Fuel Oils (Nos. 4, 5 or 6), Distillate Fuel Oils (Nos. 1 or 2), propane (for ignition), on-specification used oil
	960 MMBtu/hr	Co-firing any combination of above

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 and 62-296.405, F.A.C.]

**A.2. Methods of Operation.**

a. *Fuels.* The fuels that are allowed to be burned in this unit are:

- (1) Distillate fuel oils (Nos. 1 or 2),
- (2) Residual Fuel oils (Nos. 4, 5 or 6),
- (3) Natural Gas,
- (4) Propane,
- (5) On-specification used oil (see Specific Condition **A.10.**),
- (6) or, any combination of (1) through (5).

b. *Other.*

- (1) Used oil containing a polychlorinated biphenyl (PCB) concentration equal to or greater than 50 parts per million (ppm) shall not be burned. Used oil containing PCBs above the detectable level (2 ppm) cannot be used for startup or shutdown.

[Rule 62-213.410, F.A.C. and 40 CFR 761.20(e)]

**A.3. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

**A.4. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection A. Emissions Unit 003**

Unless otherwise specified, the averaging times for Specific Conditions **A.5. – A.10.** are based on the specified averaging time of the applicable test method.

- A.5. Visible Emissions (VE).** VE shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. [Rule 62-296.405(1)(a), F.A.C.]
- A.6. Visible Emissions - Soot Blowing and Load Change.** Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. Visible emissions above 60% opacity shall be allowed for not more than four, six (6)-minute periods, during the three-hour period of excess emissions allowed by this condition. A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit’s rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.]
- A.7. Particulate Matter (PM) Emissions.** PM emissions shall not exceed 0.1 pound per million Btu heat input, minimum three hour average. [Rule 62-296.405(1)(b), F.A.C.]
- A.8. Particulate Matter - Soot Blowing and Load Change.** Particulate matter emissions shall not exceed an average of 0.3 pounds per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- A.9. Sulfur Dioxide (SO<sub>2</sub>).**
  - a. *Emissions from Liquid Fuels.* While combusting liquid fuels, SO<sub>2</sub> emissions shall not exceed 2.75 pounds per million Btu heat input, minimum three hour average. [Rules 62-213.440 and 62-296.405(1)(c)1.j., F.A.C.]
  - b. *Fuel Sulfur Content.* The sulfur content of liquid fuels may be used as a surrogate for the SO<sub>2</sub> limitation and shall not exceed 2.5% sulfur, by weight. [Rule 62-296.405(1)(e)3., F.A.C.]
- A.10. Used Oil.** Burning of on-specification used oil is allowed at this emissions unit in accordance with all other conditions of this permit and the following conditions:
  - a. *On-specification Used Oil Emissions Limitations.* This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. “Off-specification” used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered “off-specification” used oil.

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

- b. *Quantity Limitation.* This emissions unit is permitted to burn “on-specification” used oil, not to exceed 1.5 million gallons during any consecutive 12 month period. Compliance with this specific condition shall be demonstrated using the recordkeeping requirements of Specific Condition **A.10.f.**, below.
- c. *PCB Limitation.* Used oil containing a PCB concentration of 50 or more ppm shall not be burned in this emission unit. Used oil shall not be blended to meet this requirement.
- d. *Operational Requirements.* On-specification used oil with a PCB concentration less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration above the detectable level (2 ppm) shall not be burned during periods of startup or shutdown.

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection A. Emissions Unit 003

- e. *Testing Requirements.* The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters (“batch” means the amount of used oil placed in inventory at one time):
- (1) Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.
  - (2) Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).
  - (3) Sulfur content, percent by weight.
  - (4) Alternatively, the owner or operator may rely on other analyses or other information to make the determination that the used oil meets the specifications of 40 CFR 279.11. Documentation used to make the determination shall be maintained at the facility.
- f. *Recordkeeping Requirements.* The owner or operator shall obtain, make, and keep the following records in a form suitable for inspection at the facility by the Department:
- (1) The gallons of on-specification used oil placed in inventory each month.
  - (2) The total gallons of on-specification used oil placed in inventory in the preceding consecutive 12-month period.
  - (3) Copies of the analyses or other information required above.  
[40 CFR 279.72, 279.74(b) and 761.20(e)]
- g. *Reporting Requirements.* The owner or operator shall submit, with the Annual Operating Report form, the analytical results or other information referenced in Specific Condition **A.10.e.(4)** and the total amount of on-specification used oil placed in inventory during the previous calendar year, even if the response is zero. The above record shall be maintained in a form suitable for inspection, retained for a minimum of five years.  
[Rules 62-213.440, F.A.C.; and, 40 CFR 279 and 761, unless otherwise noted.]

#### **Excess Emissions**

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

#### **A.11. Excess Emissions Allowed.**

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

**A.12. Excess Emissions Prohibited.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

#### **Monitoring of Operations**

**A.13. Monitoring SO<sub>2</sub> Ambient Concentrations.** The owner shall monitor their emissions and the effects of the emissions on ambient concentrations of sulfur dioxide, in a manner, frequency, and locations approved and deemed reasonable necessary and ordered by the Department. [Rule 62-296.405(1)(c)3., F.A.C.]

#### **Continuous Monitoring Requirements**

**A.14. Continuous Monitoring System Required.** Each owner or operator shall operate and maintain a continuous monitoring system for continuously monitoring opacity, as required by Rule 62.296.405(1)(f), F.A.C. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 CFR 51, Appendix P, adopted and incorporated by

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection A. Emissions Unit 003**

reference in subsection 62-204.800(2), F.A.C., and 40 CFR 60 Appendix B, adopted by reference in subsection 62-204.800(7), F.A.C. [Rule 62-296.405(1)(f), F.A.C.]

{Permitting Note: COMS required under the Acid Rain Program satisfies Specific Condition A.14.}

**Test Methods and Procedures**

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**A.15. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

<b>Method</b>	<b>Description of Method and Comments</b>
5	Determination of Particulate Emissions from Stationary Sources
5B	Determination of Nonsulfuric Acid Particulate Matter from Stationary Sources
5F	Determination of Nonsulfate Particulate Matter from Stationary Sources
6	Determination of Sulfur Dioxide Emissions from Stationary Sources
6A	Determination of Sulfur Dioxide Daily Average Emissions from Fossil Fuel Combustion Sources
6B	Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
17	Determination of Particulate Emissions from Stationary Sources
ASTM D2622-92, ASTM D2622-98, ASTM D4294-90, ASTM D4294-98, ASTM D1552-90, ASTM D4057-88 or ASTM D129-91, or the latest edition ASTM method	Fuel Analysis Standard Methods by the American Society of Testing and Materials

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.401 and 62-296.405, F.A.C.]

**A.16. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

**A.17. Annual Compliance Tests Required.** Except as provided in Specific Conditions A.24. and A.25., during each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), EU003 shall be tested to demonstrate compliance with the emissions standards for PM, VE and SO<sub>2</sub>. [Rules 62-297.310(7), and 62-296.405(1)(a), F.A.C.; and ASP Number 97-B-01]

**A.18. Compliance Tests Prior To Renewal.** Except as provided in Specific Condition A.26., compliance tests shall be performed for PM, VE and SO<sub>2</sub> once every 5 years. The tests shall occur prior to obtaining a

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection A. Emissions Unit 003

renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **A.5.** – **A.10.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

- A.19.** VE. The test method for VE shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. In lieu of Method 9 testing, a transmissometer utilizing a 6-minute block average for opacity measurement may be used, provided such transmissometer is installed, certified, calibrated, operated, and maintained in accordance with the provisions of 40 CFR Part 75. [Rule 62-296.405(1)(e)1., F.A.C.]
- A.20.** DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
- a. *EPA Method 9, Section 2.4, Recording Observations.* Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
  - b. *EPA Method 9, Section 2.5, Data Reduction.* For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
    - (1) For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
    - (2) For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.
- In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]
- A.21.** PM. The test methods for PM emissions shall be EPA Methods 17, 5, 5B or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-213.440, 62-296.405(1)(e)2. and 62-297.401, F.A.C.]
- A.22.** SO<sub>2</sub>. The test methods for SO<sub>2</sub> emissions shall be EPA Methods 6, 6A, 6B or 6C, incorporated by reference in Chapter 62-297, F.A.C. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedances of the SO<sub>2</sub> emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with SO<sub>2</sub> standards. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee has elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon delivery (see Specific Condition **A.23.**). [Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.]
- A.23.** SO<sub>2</sub> – Fuel Analysis. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection A. Emissions Unit 003**

D2622-92, ASTM D2622-98, ASTM D4294-90, ASTM D4294-98, ASTM D1552-90, ASTM D4057-88 or ASTM D129-91, or the latest edition of the above ASTM methods. [Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

- A.24. Annual VE Test Waiver.** By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit while burning:
- a. only gaseous fuel(s)
  - b. gaseous fuel(s) in combination with any amount of liquid fuel(s), other than during startup, for no more than 400 hours per year; or
  - c. only liquid fuel(s), other than during startup, for no more than 400 hours per year.
- [Rule 62-297.310(7)(a)4., F.A.C.]

- A.25. Annual and Renewal PM Test Waiver.** Annual and permit renewal compliance testing for particulate matter emissions is not required for this emissions unit while burning:
- a. only gaseous fuel(s); or
  - b. gaseous fuel(s) in combination with any amount of liquid fuel(s), other than during startup, for no more than 400 hours per year; or
  - c. only liquid fuel(s), other than during startup, for no more than 400 hours per year.
- [Rules 62-297.310(7)(a)3., 4. & 5., F.A.C.; and, ASP Number 97-B-01]

**Recordkeeping and Reporting Requirements**

- A.26. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority

<b>Report</b>	<b>Reporting Deadline</b>	<b>Related Condition(s)</b>
Notice of Excess Emissions	Quarterly	A.29.

- A.27. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
- A.28. Excess Emissions Reporting.** The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards for each calendar quarter. The nature of excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the facility for a period of two years. [Rule 62-296.405(1)(g), F.A.C.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 005**

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

EU No.	Brief Description
005	Boiler No. 2

Emissions unit 005 (EU005) is a 251 MW (nominal) fossil fuel fired steam boiler (Boiler No. 2). This emissions unit is a dry bottom wall-fired boiler. PM emissions are had only been controlled by an electrostatic precipitator. Sulfur dioxide emissions are had only been minimized through the use of low sulfur coal. Emissions can now be controlled by a low-NOx burner (LNB) system and modified over-fire air (OFA) system, selective catalytic reduction (SCR), circulating dry scrubber (CDS) and baghouse systems. Emissions are exhausted through a 350 foot stack with an exit diameter of 18.5 feet, 352 °F exit temperature, and 766,500 acfm. Boiler No. 2 began commercial operation in 1981.

*{Permitting Note(s): This emissions unit is regulated under Acid Rain, Phase I (NO<sub>x</sub> Early Election) and Phase II; Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR); 62-210.300, F.A.C., Permits Required; and, 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971. As required under the Acid Rain Program, the unit is equipped with a Continuous Emission Monitoring System for measuring opacity, sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and carbon dioxide (CO<sub>2</sub>). The NO<sub>x</sub> and opacity monitors are also required pursuant to the New Source Performance Standards; the SO<sub>2</sub> monitor is also required under the Conditions of Certification. These monitors are used as indicators of compliance. CAM applies to particulate matter.}*

**Essential Potential to Emit (PTE) Parameters**

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
005	591	Natural Gas
	900	Distillate Fuel Oils (Nos. 1 or 2)
	2,428,700 4-hour block average <sup>1</sup>	Coal
	2,428,700 4-hour block average <sup>1</sup>	Co-firing any combination of the above

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 and 62-296.405, F.A.C.; <sup>1</sup>Permit No. 0010006-014-AC, Specific Condition 3.A.2.]

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

**B.3. Methods of Operation.**

a. *Fuels.* The fuels that are allowed to be burned in this unit are:

- (1) Coal,
- (2) Natural gas, and
- (3) Distillate fuel oils (Nos. 1 or 2).

b. *Other.*

- (1) Fuels may be co-fired in any combination.

[Rule 62-213.410, F.A.C. and PA 74-04]

**B.4. Hours of Operation.** This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

**B.5. Flue Gas Desulfurization (FGD) Equipment Requirement.** Prior to installation of any FGD equipment, plans and specifications for such equipment shall be submitted to the Department for review and approval. [Power Plant Certification: PA 74-04]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 005

#### Emission Limitations and Standards

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **B.6. – B.9.** are based on the specified averaging time of the applicable test method.

- B.6. PM Emissions.** No owner or operator shall cause to be discharged into the atmosphere any gases which contain PM in excess of 43 nanograms per joule heat input (0.10 lb per million Btu), minimum three hour average, derived from fossil fuel. [40 CFR 60.42(a)(1)]
- B.7. VE Emissions.** No owner or operator shall cause to be discharged into the atmosphere any gases which exhibit greater than 20 percent opacity, except for one six-minute period per hour of not more than 27 percent opacity. [40 CFR 60.42(a)(2)]
- B.8. SO<sub>2</sub> Emissions.** No owner or operator shall cause to be discharged into the atmosphere any gases which contain SO<sub>2</sub> in excess of 340 nanograms per joule (ng/J) heat input (0.80 lb per million Btu), minimum three hour average, derived from liquid fossil fuel and 520 ng/J heat input (1.2 lb per million Btu), minimum three hour average, derived from solid fossil fuel.
- a. *Simultaneously Burning Multiple Fuels.* When different fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:
- $$PS_{SO_2} = [y(340) + z(520)] / (y + z)$$
- Where:
- PS<sub>SO<sub>2</sub></sub> is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired,  
y is the percentage of total heat input derived from liquid fossil fuel, and  
z is the percentage of total heat input derived from solid fossil fuel.
- b. *Compliance.* Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.  
[40 CFR 60.43(a), (b), & (c)]
- B.9. NO<sub>x</sub> Emissions**
- a. *Emission Limits.* No owner or operator shall cause to be discharged into the atmosphere any gases which contain nitrogen oxides, expressed as NO<sub>2</sub> in excess of:
- (1) 86 nanograms per joule heat input (0.20 lb per million Btu), minimum three hour average, derived from gaseous fossil fuel.
  - (2) 129 nanograms per joule heat input (0.30 lb per million Btu), minimum three hour average, derived from liquid fossil fuel.
  - (3) 300 nanograms per joule heat input (0.70 lb per million Btu), minimum three hour average, derived from solid fossil fuel.
- b. *Simultaneously Burning Multiple Fuels.* When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:
- $$PS_{NO_x} = (86x + 130y + 300z) / (x + y + z)$$
- Where:
- PS<sub>NO<sub>x</sub></sub> is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in ng/J, heat input derived from all fossil fuels fired;  
x = percentage of total heat input derived from gaseous fossil fuel;  
y = percentage of total heat input derived from liquid fossil fuel; and  
z = percentage of total heat input derived from solid fossil fuel.  
[40 CFR 60.44(a) & (b)]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 005**

**Excess Emissions**

**B.10. NSPS Excess Emissions.** Periods of excess emissions and monitoring systems downtime shall be determined and reported in accordance with 40 CFR 60.45(g). [40 CFR 60.45(g)]

**Monitoring of Operations**

**B.11. CAM Plan.** This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**B.12. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

<b>Method</b>	<b>Description of Method and Comments</b>
3	Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources
3B	Gas Analysis for The Determination of Emission Rate Correction Factor or Excess Air
5	Determination of Particulate Emissions from Stationary Sources
6	Determination of Sulfur Dioxide Emissions from Stationary Sources
6A	Determination of Sulfur Dioxide Daily Average Emissions from Fossil Fuel Combustion Sources
6B	Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
7	Determination of Nitrogen Oxide Emissions from Stationary Sources
7A	Determination of Nitrogen Oxide Emissions from Stationary Sources – Ion Chromatographic Method
7C	Determination of Nitrogen Oxide Emissions from Stationary Sources – Alkaline-Permanganate/Colorimetric Method
7D	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrument Analyzer Procedure)
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
17	Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method)

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 005**

<b>Method</b>	<b>Description of Method and Comments</b>
19	Determination of Sulfur Dioxide removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates
ASTM Methods D2015, D5865, D240, D1826	Fuel Analysis Standard Methods by the American Society of Testing and Materials

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C., 40 CFR 60, Subpart D]

- B.13. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
- B.14. Annual Compliance Tests Required.** Except as provided in Specific Condition **B.17.**, during each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), EU005 shall be tested to demonstrate compliance with the emissions standards for SO<sub>2</sub>, NO<sub>x</sub>, PM and VE. (See Specific Condition **B.17.**) [Rules 62-213.440, and 62-297.310(7), F.A.C. and PA 74-04]
- B.15. Compliance Tests Prior To Renewal.** Except as provided in Specific Condition **B.17.**, compliance tests shall be performed for SO<sub>2</sub>, NO<sub>x</sub>, PM and VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **B.6. – B.9.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]
- B.16. VE.** The test method for visible emissions shall be EPA Method 9, (adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.). [Rules 62-204.800 and 62-297.401, F.A.C.; 40 CFR 60.254(b) and 60.11]
- B.17. When PM and VE Tests Not Required.** PM annual and permit renewal compliance testing and VE annual testing is not required for this emissions unit while burning:
- only gaseous fuel(s); or
  - gaseous fuel(s) in combination with any amount of liquid fuel(s), other than during startup, for no more than 400 hours per year; or
  - only liquid fuel(s), other than during startup, for no more than 400 hours per year.
- [Rules 62-297.310(7)(a)3. & 5. and 62-4.070(3), F.A.C.; and, ASP Number 97-B-01.]

**Recordkeeping and Reporting Requirements**

- B.18. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

<b>Report</b>	<b>Reporting Deadline</b>	<b>Related Condition(s)</b>
Monitoring System Performance	30 <sup>th</sup> day following end of each three month period	<b>B.19.b.</b>

- B.19. Fuel Logbook and Reporting.**
- Logbook.* The owner or operator shall maintain a daily log of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values to facilitate calculations of emissions.
  - Quarterly Reporting.* Stack monitoring, fuel usage and fuel analyses data shall be reported to the Department on a quarterly basis in accordance with 40 CFR 60.7. Such monitoring shall include amounts

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

---

**Subsection B. Emissions Unit 005**

of distillate (Nos. 1 or 2) fuel oil and natural gas used for start up or flame stabilization.  
[PA 74-04]

**B.20. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**Other Requirements**

**B.21. Pursuant to 40 CFR 60.41: Definitions.** As used in this Subsection of the permit, the definitions in 40 CFR 60.41 apply, as well as additional definitions under Subpart A, 40 CFR 60. [Rule 62-4.070(3), F.A.C.]

**B.22. Federal Rule Requirements.** In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart D – Standards of Performance for Fossil Fuel Fired Steam Generators for which Construction is Commenced After August 17, 1971, attached to this permit as Appendix NSPS, Subpart A and Appendix NSPS, Subpart D, respectively. [Rule 62-213.440, F.A.C.]

draft/proposed

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 005

#### **Steam Turbine Upgrade, Replacement of Superheater and Installation of Selective Catalytic Reduction (SCR), Circulating Dry Scrubber (CDS) and Baghouse Systems Project (Permit Nos. 0010006-005-AC & -009-AC)**

Emission control equipment installed on Boiler No. 2 had previously consisted only of a hot-side electrostatic precipitator for the control of particulate matter emissions. Permit Nos. 0010006-005-AC & -009-AC authorized a steam turbine upgrade, replacement of the superheater and the installation of selective catalytic reduction (SCR), circulating dry scrubber (CDS) and baghouse systems for Unit 2. The permittee elected to install these controls as part of its plan to comply with the Clean Air Interstate Rule (Rule 62-296.470(CAIR), F.A.C.) and the Clean Air Mercury Rule (Rule 62-296.480(CAMR), F.A.C.). Because CAIR affords a regulated facility the flexibility to evaluate market conditions to determine whether it will install controls, operate existing controls, or purchase allowances generated by other plants, the Department does not require the installation of this equipment nor its operation, except as needed to comply with the NSPS in 40 CFR 60, Subpart D.

#### **Essential Potential to Emit (PTE) Parameters**

**B.23. Methods of Operation. Fuels:** Unit 2 had previously been authorized to fire low sulfur eastern bituminous coal. Unit 2 is now also authorized to fire a variety of eastern bituminous coal blend, including medium sulfur coal (up to 2.5 weight percent sulfur). [Rules 62-4.160(2), 62-210.200(PTE), 62-213.410, F.A.C.; and, Permit No. 0010006-005-AC.]

**B.24. Capacities and Specifications - Project (Permit Nos. 0010006-005-AC & -009-AC):** Unless otherwise indicated in Permit Nos. 0010006-005-AC & -009-AC, the construction and operation of Unit 2 shall be in accordance with the capacities and specifications stated in the applications. No changes to the existing electrical generator (i.e., no expansion in steam generating capability) and no increase in maximum heat input to the boiler or steam flow capability of the turbine were authorized in Permit No. 0010006-005-AC.

*[Permitting Note: The capacities and specifications stated in the AC permit applications were based on preliminary design and the final design could include minor changes from the capacities and specification listed in the original applications.]*

[Permit No. 0010006-005-AC, Specific Condition 2.3.]

#### **Air Pollution Control Technologies & Measures**

**B.25. SCR System:** The permittee was authorized to construct, tune, operate and maintain a new SCR system for Unit 2 to reduce emissions of nitrogen oxides (NO<sub>x</sub>) as described in the application for Permit No. 0010006-005-AC. In general, the SCR system includes the following equipment: urea to ammonia conversion system; ammonia flow control unit; ammonia injection grid; two active layers of catalyst with space provided for a future layer; SCR reactor chamber; and other ancillary equipment, including a system to add calcium to the fuel for catalyst preservation. [Permit No. 0010006-005-AC, Specific Condition 3.2.; and, Rules 62-296.470(CAIR) and 62-210.200(PTE), F.A.C.]

**B.26. CDS System:** The permittee was authorized to install a new CDS system for Unit 2 to reduce emissions of SO<sub>2</sub> and SO<sub>3</sub>. The new system was installed downstream of the existing Unit 2 induced draft fan. In general, the system includes the CDS vessel, adsorbent preparation and injection, water injection; product recycle injection and a flue gas recycle system. SO<sub>2</sub> shall be measured at the inlet of the CDS reactor; outlet SO<sub>2</sub> shall be measured at the stack. [Permit No. 0010006-005-AC, Specific Condition 3.3.; and, Rules 62-296.470(CAIR) and 62-210.200(PTE), F.A.C.]

**B.27. Baghouse System:** The permittee was authorized to install one pulse-jet baghouse containing ten compartments. The baghouse was installed between the outlet of the CDS and inlet of the booster fans. The design outlet grain loading is 0.01 grains per dry standard cubic foot (gr/dscf) at 3% oxygen. The design gas flow rate through the baghouse is 554,250 dscf/min. The design air-to-cloth ratio is 4:1. An automatic

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 005

cleaning system shall be utilized to dislodge the filter cake. [Permit No. 0010006-005-AC, Specific Condition 3.4.; and, Rules 62-296.470(CAIR) and 62-210.200(PTE), F.A.C.]

**B.28. Circumvention - Project (Permit Nos. 0010006-005-AC & -009-AC):** No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. Operation of the SCR and CDS was not required by Permit Nos. 0010006-005-AC & -009-AC. As necessary, the permittee shall operate the hydrated lime addition system and baghouse for SAM emissions control to ensure the project (Permit No. 0010006-005-AC) does not result in a PSD-significant emissions increase (7 tons/year) of sulfuric acid mist emissions above baseline actual emissions (49 tons/year). [Permit No. 0010006-005-AC, Specific Condition 3.5.; and, Rules 62-210.650 and 62-212.400(12), (escape Prevention of Significant Deterioration (PSD), F.A.C.)]

#### **Operating Requirements**

**B.29. Annual SAM Emissions Projections - Project (Permit Nos. 0010006-005-AC & -009-AC):** The permittee had projected that the increase in actual annual emissions of SAM due to the project would not exceed the PSD significance level (i.e., 7 tons/year). The permittee shall demonstrate this by compiling and submitting the reports required by Permit No. 0010006-005-AC. [Permit No. 0010006-005-AC, Specific Condition 3.6.; and, Rules 62-212.300 and 62-210.370, F.A.C.]

*{Permitting Note: The baseline actual emission of SAM is 49 tons/year.}*

**B.30. Hydrated Lime Injection for SAM Emissions Control:** On an annual basis, the permittee must demonstrate that SAM emissions as a result of the project (Permit No. 0010006-005-AC) do not exceed 7 tons per year above the baseline actual emissions of 49 tons per year. The permittee shall add hydrated lime at a frequency and injection rate for SAM control to satisfy this requirement. The permittee shall adjust the hydrated lime flow rate for the given set of operating conditions based on the most recent correlation curves in a performance test. [Permit No. 0010006-005-AC, Specific Condition 3.7.; and, Rules 62-4.070(3) and 62-212.300(1)(e), F.A.C.]

**B.31. Ammonia Slip:** Ammonia slip measured at the stack downstream of all emission control systems shall not exceed 5 parts per million by volume (ppmv) as demonstrated by an annual test. [Permit No. 0010006-005-AC, Specific Condition 3.8.; and, Rule 62-4.070(3), F.A.C.]

#### **Excess Emissions**

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

**B.32. Startup, Shutdown and Malfunction:** Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [Rule 40 CFR 60.8(c).]

*{Permitting Note: Boiler startup or shutdown may exceed two hours due to operational constraints of the control equipment, which include:*

- a. *During boiler startup or shutdown, the SCR system is fully functional once the boiler flue gas temperature at the SCR reactor inlet stabilizes to 613<sup>o</sup>F or greater.*
- b. *During boiler startup and shutdown, the CDS system is fully functional once the following sequential criteria are met:*
  - *The flue gas flow rate at the outlet of the baghouse stabilizes at approximately 1.5 million pounds per hour or greater for a minimum of 6 hours;*
  - *The boiler flue gas temperature at the CDS inlet stabilizes at 230<sup>o</sup>F or greater; and*

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 005**

- *Water has been injected into the reactor for a minimum of 2 hours.*

[Permit No. 0010006-005-AC, Specific Condition 3.14.]

**Test Methods and Procedures**

**B.33. Annual Tests - Hydrated Lime Injection for SAM Emissions Control:** During each federal fiscal year, the permittee shall conduct performance tests to determine the SAM emission rates and adjust the lime injection rates as necessary. The Department may re-evaluate this requirement based on the results of the initial testing. [Permit No. 0010006-005-AC, Specific Condition 3.11.; and, Rules 62-4.070(3) and 62-212.300(1)(e), F.A.C.]

**B.34. Test Methods:** Required tests shall be performed in accordance with the following reference methods or other Department approved methods upon request by permittee:

<u>EPA Method</u>	<u>Description of Method and Comments</u>
<u>1-4</u>	<u>Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content</u>
<u>8</u>	<u>Determination of Sulfuric Acid Mist Emissions</u>
<u>19</u>	<u>Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)</u>

Compliance with the sulfuric acid mist emissions can also be determined with the National Council for Air and Stream Improvement (NCASI) Method 8A. Compliance with the ammonia slip limit shall be determined annually using EPA conditional test method (CTM-027), EPA method 320, or other methods approved by the Department. [Permit No. 0010006-005-AC, Specific Condition 3.13.; Rules 62-204.800 and 62-297.100, F.A.C.; and, 40 CFR 60, Appendix A.]

**Recordkeeping and Reporting Requirements**

**B.35. Test Reports - Project (Permit Nos. 0010006-005-AC & -009-AC):** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Rule 62-297.310, F.A.C. For each sulfuric acid mist test run, the report shall also indicate the lime injection rate for SAM emissions control, unit load, and unit heat input rate. [Permit No. 0010006-005-AC, Specific Condition 3.16.; and, Rule 62-297.310(8), F.A.C.]

**B.36. Operational Data - Project (Permit Nos. 0010006-005-AC & -009-AC):** The permittee shall monitor and record the hydrated lime consumption rate for SAM emissions control when the unit is combusting compliance coal (approximately up to 0.8 weight percent sulfur) and the CDS is not fully operational. [Permit No. 0010006-005-AC, Specific Condition 3.17.; and, Rule 62-4.070(3), F.A.C.]

**B.37. Annual SAM Emissions Reports - Project (Permit Nos. 0010006-005-AC & -009-AC):** In accordance with Rule 62-212.300(1)(e), F.A.C., the permittee shall comply with the following monitoring, reporting and recordkeeping provisions:

- The permittee shall evaluate the SAM emissions using the most reliable information available. On a calendar year basis, the permittee shall calculate and maintain a record of the annual emissions (tons per year) for a period of 5 years following resumption of regular operations after completing construction on the unit's emission control system {all items of the Project were completed by the end of June 2013; therefore, the 5-year period is effective for calendar year (CY) 2014 emissions through CY 2018 emissions}. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.
- Within 60 days after each calendar year following completion of construction, the permittee shall report to the Compliance Authority the annual emissions for the unit for the preceding calendar year. The report shall contain the following:
  - Name, address and telephone number of the owner or operator of the major stationary source;
  - Annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection B. Emissions Unit 005**

c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

d. Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained shall be submitted to the Compliance Authority, where it will be available for review to the general public.

[Permit No. 0010006-005-AC, Specific Condition 3.18.; and, Rule 62-212.300(1)(e), F.A.C.]

**B.38. SAM Emissions Computation and Reporting - Project (Permit Nos. 0010006-005-AC & -009-AC):** The permittee shall compute SAM emissions in accordance with the following requirements.

a. For each year of reporting required, emissions shall be computed based on the controlled and uncontrolled emissions factors determined during the required annual emissions test. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

b. With appropriate supporting test data, multiple emission factors may be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

c. The permittee shall compute emissions by multiplying the appropriate controlled or uncontrolled emission factor by the annual heat input rate for the period over which the emissions are computed. The uncontrolled emissions factor shall be used if the minimum lime injection rate established for the latest test is not met.

d. The permittee shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the Department or Compliance Authority for any regulatory purpose.

[Permit No. 0010006-005-AC, Specific Condition 3.19; and, Rule 62-210.370, F.A.C.]

**B.39. Source Obligation - Project (Permit Nos. 0010006-005-AC & -009-AC):** At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by increasing its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction has not yet commenced on the source or modification. [Permit No. 0010006-005-AC, Specific Condition 2.7.; and, Rule 62-212.400(12)(c), (escape Prevention of Significant Deterioration (PSD), F.A.C.)]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection B. Emissions Unit 005

#### **Low-NOx Burners & Modified Overfire Air System Project (Permit No. 0010006-014-AC)**

Permit No. 0010006-014-AC authorized the replacement of the existing Unit 2 coal burners with a low-NOx burner (LNB) system and modified over-fire air (OFA) system. The LNB project consists of 18 Opti-Flow fuel injectors, secondary air nozzles, windbox compartment modifications, igniters, burner panels, over-fire air modifications, auxiliary air port modifications and coal piping.

#### **Essential Potential to Emit (PTE) Parameters**

**B.40. Permitted Capacity - Low-NOx Burners & Modified Overfire Air System Project (Permit No. 0010006-014-AC):** The maximum heat input rate to this unit is 2,700 MMBtu per hour based on a 4-hour block average as determined by data collected from the Acid Rain monitoring system. On a calendar year basis, no more than ten, 4-hour block averages shall be greater than the specified maximum heat input rate.

*{Permitting Note: The purpose of this specification is to define the maximum expected equipment capacity and thereby the potential to emit. The equipment may be physically capable of infrequent, but brief episodes that exceed the maximum capacity during periods of high demand.}*

[Permit No. 0010006-014-AC, Specific Condition 3.A.2.; and, Rule 62-210.200(PTE), F.A.C.]

#### **Air Pollution Control Technologies & Measures**

**B.41. LNB Project:** The permittee was authorized to replace the existing Unit 2 coal burners with a LNB system and modified over-fire air system. The LNB project consists of 18 Opti-Flow fuel injectors, secondary air nozzles, windbox compartment modifications, igniters, burner panels, over-fire air modifications, auxiliary air port modifications and coal piping.

*{Permitting Note: The burner vendor expects a 22% to 30% reduction in nitrogen oxides emissions from the boiler furnace prior to the SCR system.}*

[Permit No. 0010006-014-AC, Specific Condition 3.A.1.]

#### **Operating Requirements**

**B.42. Emissions Monitoring - Low-NOx Burners & Modified Overfire Air System Project (Permit No. 0010006-014-AC):**

- a. **CO Process Monitor:** The permittee refurbished and recalibrated the existing CO process monitoring system to measure and record carbon monoxide emissions from the boiler furnace. CO emissions measured by the process monitoring system shall be used in the annual report to determine whether the LNB project caused a PSD-significant increase in emissions (100 tons/year or more).
- b. **NOx CEMS:** NOx emissions measured by the existing Acid Rain CEMS shall be used in the annual report to determine whether the LNB project caused a PSD-significant increase in emissions (40 tons/year or more).

[Permit No. 0010006-014-AC, Specific Condition 3.A.6.; and, Rule 62-4.070(3), F.A.C.]

#### **Recordkeeping and Reporting Requirements**

**B.43. Stack Test Report - Low-NOx Burners & Modified Overfire Air System Project (Permit No. 0010006-014-AC):** In addition to the stack test reports, the permittee shall submit records of the following for each test run: SO<sub>2</sub> emissions (CEMS); NOx emissions (CEMS); CO emissions (process monitor); stack opacity (COMS); and heat input rate (Acid Rain CEMS). [Permit No. 0010006-014-AC, Specific Condition 3.A.7.; and, Rule 62-297.310(8), F.A.C.]

**B.44. Source Obligation - Low-NOx Burners & Modified Overfire Air System Project (Permit No. 0010006-014-AC):**

- (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation)

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection B. Emissions Unit 005

solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

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

[Permit No. 0010006-014-AC, Specific Condition 2.7.; and, Rule 62-212.400(12), (escape Prevention of Significant Deterioration (PSD), F.A.C.)]

**B.45. Actual Emissions Reporting - Low-NOx Burners & Modified Overfire Air System Project (Permit No. 0010006-014-AC):** This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for emissions of carbon monoxide and nitrogen oxides. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change {the Project was completed by the end of June 2013; therefore, the 5-year period is effective for calendar year (CY) 2014 emissions through CY 2018 emissions}. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C.
- b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
- 1) The name, address and telephone number of the owner or operator of the major stationary source;
  - 2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
  - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
  - 4) Any other information that the owner or operator wishes to include in the report.
- c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the permit requires the annual reporting of actual carbon monoxide (CO) and nitrogen oxides (NOx) emissions for Deerhaven Unit 2.

[Permit No. 0010006-014-AC, Specific Condition 2.9.; and, Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection B. Emissions Unit 005

##### **Emissions Caps for Nitrogen Oxides (NO<sub>x</sub>) and Sulfur Dioxide (SO<sub>2</sub>) Project (Permit Nos. 0010006-012-AC & -016-AC)**

Permit No. 0010006-005-AC issued in August 2007 authorized the installation of a selective catalytic reduction system (SCR), circulating dry scrubber (CDS) and a baghouse on the existing Unit 2 (Emissions Unit (E.U.) ID No. 005) at the Deerhaven Generating Station.

Permit Nos. 0010006-012-AC & -016-AC established new NO<sub>x</sub> and SO<sub>2</sub> emissions caps from the existing Unit 2 based on the available controls and the baseline emissions. The emissions caps ensure that there will be no net increase in NO<sub>x</sub> or SO<sub>2</sub> emissions when also considering the increases from the collocated project for the Gainesville Renewable Energy Center ("GREC") (ARMS Facility ID No. 0010131).

##### **Essential Potential to Emit (PTE) Parameters**

**B.46. Capacities and Specifications - Project (Permit No. 0010006-016-AC):** Permit No. 0010006-016-AC did not authorize any new construction, nor any increases in capacity or actual pollutant emissions to the atmosphere. [Permit No. 0010006-016-AC, Specific Condition 2.1.]

##### **Emission Limitations and Standards**

**B.47. Emissions Caps - Project (Permit No. 0010006-016-AC):** To avoid being subject to the reasonable progress requirements of the Regional Haze State Implementation Plan, the following specific condition is to assure that the Q/D ratio (annual SO<sub>2</sub> emissions in tons / distance from a Class 1 area in kilometers) is less than 50.

- a. NO<sub>x</sub> emissions from Unit 2 shall not exceed 3,381 tons during any calendar year based on data collected by CEMS for all periods of operation including startup, shutdown and malfunction. The NO<sub>x</sub> emissions cap shall become effective beginning with the calendar year that the Gainesville Renewable Energy Center ("GREC") (ARMS Facility ID No. 0010131) establishes commercial operation {the GREC boiler began commercial operation on August 16, 2013}.
- b. SO<sub>2</sub> emissions from Unit 2 shall not exceed 5,500 tons during any calendar year based on data collected by CEMS for all periods of operation including startup, shutdown and malfunction. [Permit No. 0010006-016-AC, Specific Condition 2.2.; and, Rule 62-4.070(3), F.A.C.]

##### **Monitoring Requirements**

**B.48. CEMS - Project (Permit No. 0010006-012-AC):** The permittee shall demonstrate compliance with the NO<sub>x</sub> and SO<sub>2</sub> emissions caps with data collected from the existing certified CEMS. [Permit No. 0010006-012-AC, Specific Condition 3.A.3.; and, Rule 62-4.070(3), F.A.C.]

##### **Recordkeeping and Reporting Requirements**

**B.49. Test Reports - Project (Permit Nos. 0010006-012-AC):** In conjunction with the Annual Operating Report (AOR) required by Rule 62-210.370, F.A.C., the permittee shall report the actual annual NO<sub>x</sub> and SO<sub>2</sub> emissions to demonstrate compliance with the NO<sub>x</sub> and SO<sub>2</sub> emissions caps of 3,381 tons and 5,500 tons, respectively from Permit No. 0010006-016-AC. [Permit No. 0010006-012-AC, Specific Condition 3.A.4.; and, Rule 62-4.070(3), F.A.C.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 006**

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

EU No.	Brief Description
006	Combustion Turbine (CT) No. 3

Emissions unit 006 (EU006), is a 74 MW (nominal) GE Model MS7001EA simple cycle combustion turbine (CT No. 3). Emissions are exhausted through a 52 feet tall stack with a 14.1 feet exit diameter, 1,100° F exit temperature, and 1,573,615 acfm. Emissions are controlled by dry low-NO<sub>x</sub> combustors when firing natural gas, and by water injection when firing fuel oil. The combustion turbine began commercial operation in 1996.

*{Permitting Notes: This emissions unit is regulated under Acid Rain, Phase II; Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR); Rule 62-210.300, F.A.C., Permits Required; and 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. This unit underwent a BACT Determination dated April 11, 1995; and, amended on November 8, 2004. BACT limits were incorporated into the PSD permit, No. PSD-FL-212 (and, amended on November 8, 2004: see 0010006-004-AC/PSD-FL-212(A)), and Power Plant Siting Act Conditions of Certification (PPCC), PA 74-04. These limitations are more stringent than the NSPS sulfur dioxide and nitrogen oxides limitations and thus assure compliance with 40 CFR 60.332, 60.333 and 60.334. As required under the Acid Rain Program, the unit has a CEMS for NO<sub>x</sub> and carbon dioxide. The NO<sub>x</sub> CEMS is used in lieu of the water/fuel monitoring, which is required in accordance with 40 CFR 60, Subpart GG; also, the NO<sub>x</sub> CEMS will be used for compliance. Since the NO<sub>x</sub> emission standard from Subpart GG is more than twice the BACT standard, monitoring for emissions in excess of the BACT limits using the NO<sub>x</sub> CEMS is more stringent and thus assures compliance with 40 CFR 60.334 and 60.335.}*

**Essential Potential to Emit (PTE) Parameters**

**C.1. Permitted Capacity.** The maximum operation heat input rates, based on the higher heating values of the fuel, are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
006	971.1*	Natural Gas
	990.6*	Distillate Fuel Oils (Nos. 1 or 2)

\*Based on ISO standard conditions, i.e., 100% load, 101.3 kilopascals pressure, 59 °F and 60% relative humidity.

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), and 62-214.330, F.A.C.; Permit No. PSD-FL-212; and PA 74-04]

*{Permitting note: Heat input will vary depending on ambient conditions and the DHCT3 characteristics. Compliance with the heat input limits will be demonstrated according to the heat input vs ambient temperature curves (see Specific Condition C.26.)}*

**C.2. Methods of Operation.**

a. **Fuels.** The fuels that are allowed to be burned in this unit are:

- (1) Natural gas, and
- (2) Distillate fuel oil (Nos. 1 or 2).

b. **Other.**

- (1) Fuels may be co-fired.

[Rule 62-213.410, F.A.C.; Permit No. PSD-FL-212; and PA 74-04]

**C.3. Hours of Operation.** The CT No. 3 (EU006) is allowed to operate up to 3,900 hours per year, but not to exceed 2,000 hours while firing fuel oil. [Permit No. PSD-FL-212 and PA 74-04]

**C.4. Control Equipment.** The permittee shall utilize dry low-NO<sub>x</sub> combustors on CT No. 3 (EU006) for NO<sub>x</sub> control when firing natural gas. Control of NO<sub>x</sub> when firing distillate fuel oils (Nos. 1 or 2) shall be accomplished by water injection. [Rule 62-213.440, F.A.C.; PA 74-04; Permit No. PSD-FL-212; BACT]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 006**

**C.5. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**Emission Limitations and Standards**

*{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **C.6. – C.8.** are based on the specified averaging time of the applicable test method.

**C.6. Visible Emissions.** Visible emissions (VE) shall not exceed 10% opacity when firing natural gas or fuel oil. [PA 74-04 and Permit No. PSD-FL-212]

**C.7. SO<sub>2</sub> - Sulfur Content.** The distillate fuel oil sulfur content shall not exceed 0.05 percent, by weight. [Rule 62-213.440, F.A.C.; PA 74-04; and Permit No. PSD-FL-212]

**C.8. Allowable Emissions.** The maximum allowable emissions from CT No. 3, when firing natural gas or distillate fuel oils (Nos. 1 or 2), in accordance with the BACT determination, and at 95 - 100% percent load based on the manufacturer's curves submitted to the DEP, shall not exceed the following limits except during periods of start up, shutdown, load changing, fuel switching and malfunction pursuant to Rule 62-210.700, F.A.C., and the BACT analysis (including the amended BACT).

Pollutant	Fuel	BACT Standard
NO <sub>x</sub> <sup>(c)</sup>	Gas	15 ppmvd @ 15% Oxygen <sup>(a)</sup>
	Oil	42 ppmvd @ 15% Oxygen <sup>(a)</sup>
PM <sub>10</sub>	Gas	Good combustion; VE shall not exceed 10% opacity <sup>(b)</sup>
	Oil	Good combustion of low sulfur fuel oil, max. 0.05% sulfur, by weight; VE shall not exceed 10% opacity <sup>(b)</sup>
SO <sub>2</sub>	Gas	Good combustion <sup>(b)</sup>
	Oil	Good combustion of low sulfur fuel oil; max. 0.05% sulfur content, by weight <sup>(b)</sup>
Sulfuric Acid Mist	Gas	Good combustion <sup>(b)</sup>
	Oil	Good combustion of low sulfur fuel oil; max. 0.05% sulfur content, by weight <sup>(b)</sup>

<sup>(a)</sup> The averaging time shall be based on the test method.

<sup>(b)</sup> Compliance shall be demonstrated through combustion of pipeline natural gas and fuel oil sulfur analysis.

<sup>(c)</sup> The NO<sub>x</sub> CEMS will be used in lieu of water/fuel system monitoring and will be used for determining compliance with the NO<sub>x</sub> standard.

[PA 74-04; BACT; BACT, as amended; and, Permit Nos. PSD-FL-212 and 0010006-004-AC/ PSD-FL-212(A)]

**Excess Emissions**

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

**C.9. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

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

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection C. Emissions Unit 006

- C.11. NO<sub>x</sub> Excess Emissions.** One hour periods when NO<sub>x</sub> emissions (parts per million by volume, dry (ppmvd) @ 10% O<sub>2</sub>) are above the BACT standards (15/42 gas/oil) shall be reported as excess emissions following the format of 40 CFR 60.7. [Permit No. PSD-FL-212]
- C.12. Excess Emissions by CEMS.** The CEMS for NO<sub>x</sub> shall be used to determine periods of excess emissions. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from this source. An hour of excess emissions shall be any unit operating hour in which the 4-hour rolling average NO<sub>x</sub> concentration exceeds the BACT standards (15/42 gas/oil) and shall be reported as excess emissions in accordance with 40 CFR 60.13 and following the format of 40 CFR 60.7(c); and, a “4-hour rolling average NO<sub>x</sub> concentration” is the arithmetic average of the average NO<sub>x</sub> concentration measured by the CEMS for a given hour (corrected to 15 percent O<sub>2</sub>) and the three unit operating hour average NO<sub>x</sub> concentrations immediately preceding that unit operating hour. Periods of startup, shutdown, fuel switching, malfunction, and load change shall be monitored and recorded. [Rule 62-213.440, F.A.C.; PA 74-04; Permit Nos. PSD-FL-212, 0010006-004-AC and PSD-FL-212(A); and 40 CFR 60.334(j)(1)(iii)(A)]
- C.13. Excess NO<sub>x</sub> Emissions by CEMS.** Excess NO<sub>x</sub> emissions resulting from startup, shutdown, malfunction, fuel switching or load change, shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the DEP’s Bureau of Air Regulation or the Northeast District office for a longer duration. [Rule 62-210.700(1), F.A.C.; Permit No. PSD-FL-212; and PA 74-04]

#### **Monitoring of Operations**

- C.14. Custom Fuel Monitoring Schedule.** The sulfur content of the fuel oil being fired in the combustion turbine shall be determined in accordance with this schedule. Monitoring of the nitrogen and sulfur content in natural gas is *not* required.
- Fuel oil: On each occasion that fuel oil is transferred to the storage tank from another source.
  - Natural gas: Not required.
- The records of natural gas and distillate fuel oil usage shall be kept by the company for a five-year period for regulatory agency inspection purposes. [PA 74-04 and PSD-FL-212; and, applicant’s request]
- {Permitting note: Monitoring of the pipeline natural gas is not required because the fuel-bound nitrogen content of the fuel is minimal and the SO<sub>2</sub> emissions are measured using monitoring systems that have been certified by EPA in accordance with 40 CFR 75. Monitoring of the nitrogen content in the fuel oil is not required because the permit does not provide a fuel-bound nitrogen allowance for this emissions unit.}*

#### **Continuous Monitoring Requirements**

- C.15. Continuous Emissions Monitor.** The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emission from CT No. 3 (EU006). [Permit No. PSD-FL-212]
- C.16. Continuous Monitoring Required – Fuel, NO<sub>x</sub>, SO<sub>2</sub>.** A continuous monitoring system shall be maintained to record fuel consumption. A continuous monitoring system shall be maintained to record emissions of nitrogen oxides and sulfur dioxide in accordance with the requirements of 40 CFR 75. The continuous emission monitor must comply with Rule 62-297.520, F.A.C.; 40 CFR 60, Appendix F, Quality Assurance Procedures (or other DEP approved QA plan); 40 CFR 60, Appendix B, Performance Specification 2; or, if applicable, 40 CFR 75, Appendix A and Appendix B. Upon request from the Department, the CEMs NO<sub>x</sub> emission rates shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>x</sub> standard established in 40 CFR 60.332. [Rule 62-213.440; PA 74-04 and Permit No. PSD-FL-212]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 006**

*{Permitting Note: ISO correction is not used for compliance determinations with the BACT standards. See Specific Condition C.29.}*

**C.17. NO<sub>x</sub> CEMS.** The NO<sub>x</sub> CEMS shall be used for continuous compliance. [Permit Nos. PSD-FL-212 and 0010006-004-AC/PSD-FL-212(A); PA 74-04]

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**C.18. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

<b>Method</b>	<b>Description of Method and Comments</b>
9	Visual Determination of the Opacity of Emissions from Stationary Sources
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
ASTM D2880-71 or D4294 9, D1072-80, D3031-81, D4084-82 or D3246-81	Standard Methods by the American Society of Testing and Materials for Fuel Analysis

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.]

**C.19. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

**C.20. Annual Compliance Tests Required.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), EU006 shall be tested to demonstrate compliance with the emissions standards for VE and NO<sub>x</sub>. [Rule 62-297.310(7), F.A.C. and Permit No. PSD-FL-212]

**C.21. Compliance Tests Prior To Renewal.** Compliance tests shall be performed for VE and NO<sub>x</sub> once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **C.6 – C.8**. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

**C.22. VE.** VE tests shall be conducted using EPA Reference Method 9 in accordance with 40 CFR 60, Appendix A. [Rule 62-213.440, F.A.C.; and, PA 74-04; and Permit No. PSD-FL-212]

**C.23. VE Tests Not Required.** Annual emissions compliance testing for visible emissions is not required while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for no more than 400 hours per year; or
- c. only liquid fuel(s) for no more than 400 hours per year.

[Rules 62-297.310(7)(a)3., F.A.C.]

**C.24. Relative Accuracy Test Audit (RATA).** The annual calibration RATA associated with the NO<sub>x</sub> CEMS shall be performed annually in accordance with Specific Condition **C.26**, using EPA Reference Method 20

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 006**

pursuant to 40 CFR 60, Appendix A, and includes all of the requirements of Rule 62-297.310, F.A.C., (i.e., prior test notification, proper test result submittal, etc.). [Rule 62-213.440, F.A.C.; PA 74-04; and Permit No. PSD-FL-212]

- C.25. SO<sub>2</sub>, PM<sub>10</sub> and H<sub>2</sub>SO<sub>4</sub>.** Notwithstanding the requirements of Rule 62-297.310(7), F.A.C., the exclusive use of fuel oil with a maximum sulfur content limit of 0.05% or less, by weight, is the method for determining compliance for SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub> (sulfuric acid or SAM) mist, and PM<sub>10</sub>. There is no suitable method for the testing of PM<sub>10</sub> from this type of emissions unit, and the SO<sub>2</sub> and SAM emissions are clearly limited by the sulfur content of the fuel. Compliance with the SO<sub>2</sub> and sulfuric acid mist emission limits shall be determined by fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of the liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel. Alternatively, natural gas and fuel oil supplier data for sulfur content may be submitted. However, the owner or operator 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). [Rule 62-213.440, F.A.C.; and, PA 74-04; and Permit No. PSD-FL-212]
- C.26. Compliance Testing.** Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 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 curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 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. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. The fuel feed rates and the high heating value of the fuels shall be established during the initial and annual compliance tests. [PA 74-04 and Permit No. PSD-FL-212]
- C.27. NO<sub>x</sub> CEMS in Lieu of Water/Fuel Monitoring.** The NO<sub>x</sub> CEMS will be used in lieu of the water/fuel monitoring system and will be used for determining compliance with the NO<sub>x</sub> standard in this permit and BACT. Calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) will be replaced by certification tests of the NO<sub>x</sub> CEMS. [Permit Nos. PSD-FL-212 and 0010006-004-AC/PSD-FL-212(A)]
- C.28. SO<sub>2</sub> – Fuel Analysis.** The sulfur content of the fuel oil being fired in the combustion turbine shall be determined in accordance with 40 CFR 60.334 (b). Any request for a future custom schedule shall be made in writing and directed to the EPA’s office in Atlanta and the DEP’s Bureau of Air Regulation office. Any custom schedule approved by EPA and DEP pursuant to 40 CFR 334(b) will be recognized as enforceable provisions of the permit. [Permit No. PSD-FL-212]
- C.29. Test Data Correction to ISO.** The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standards. [Permit No. PSD-FL-212]

**Recordkeeping and Reporting Requirements**

**C.30. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

<b>Report</b>	<b>Reporting Deadline</b>	<b>Related Condition(s)</b>
Fuel Information	Annually with AOR	<b>C.32.</b>

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection C. Emissions Unit 006**

**C.31. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**C.32. Additional Reports Required.** The owner or operator shall report the following with the Air Operating Report (AOR): sulfur content, by weight, and higher heating value(s) of the fuel oil being fired; annual consumption of distillate fuel oil and natural gas; and, hours of operation per fuel usage. [Rule 62-210.370(3), F.A.C.; and, PA 74-04; and Permit No. PSD-FL-212]

**Other Requirements**

**C.33.** For informational purposes only, the potential emissions projected from the DHCT3 are:

<b>ESTIMATED POTENTIAL EMISSIONS</b>		
<b>Pollutant</b>	<b>Method of Control</b>	<b>TPY *</b>
CO	Good combustion; and, proper use of water injection system	95.4
VOC	Good combustion	8.66
Inorganic Arsenic	Firing Natural Gas/Nos. 1 or 2 Fuel Oil	0.004854
Mercury	Firing Natural Gas/Nos. 1 or 2 Fuel Oil	0.0009
Lead	Firing Natural Gas/Nos. 1 or 2 Fuel Oil	0.05746
Beryllium	Firing Natural Gas/Nos. 1 or 2 Fuel Oil	0.00032

\* TPY values are for annual operation reports (AOR) and PSD applicability determinations. These values are based on the DHCT3 operating at full load at ISO conditions for a total of 3,900 hrs/yr, with up to 2,000 hrs/yr of Nos. 1 or 2 fuel oil-fired operation.

**C.34. Federal Rule Requirements.** In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart GG – Standards of Performance for Gas Turbines, attached to this permit as Appendix NSPS, Subpart A and Appendix NSPS, Subpart GG, respectively. [Rule 62-213.440, F.A.C.]

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection D. Emissions Unit 007**

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

EU No.	Brief Description
007	Coal Handling and Storage Activities

This emissions unit includes the following emissions points:

Source Description	Emission Pt. ID	Emission Type
Coal Handling - Railcar Unloading; Bottom Discharge	CH-001	Fugitive (F)
Coal Handling - Belt Conveyor 2 to Belt Conveyor 3A	CH-002	F
Coal Handling - Belt Conveyor 2 to Belt Conveyor 3B	CH-003	F
Coal Handling - Belt Conveyor 3A to Storage Pile	CH-004	F
Coal Handling - Belt Conveyor 3B to Storage Pile	CH-005	F
Coal Storage - Ready Storage Pile	CH-006	F
Coal Storage - Episodic Storage Pile	CH-007	F
Coal Storage - Main Storage Pile	CH-008	F
Coal Handling - Dozer Operations on Storage Pile	CH-009	F
Coal Handling - Crusher Building	CH-010	F
Coal Handling - Coal Bunker Building	CH-011	F
Coal Handling - Belt Conveyor 4A to Surge Bin		
Coal Handling - Crusher Building: Crusher Feeder to Crusher		
Coal Handling - Crusher Building: Crusher to Belt Conveyor		
Coal Handling - Belt Conveyor 5A to Belt Conveyor 6A		
Coal Handling - Coal Bunker Building: Belt Conveyor 6A to Bunkers		

*{Permitting Notes: This emissions unit/activity is regulated under Rule 62-210.300, F.A.C., Permits Required; and 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, with the exception of Emission Points CH-006, -007, and -008.}*

**Essential Potential to Emit (PTE) Parameters**

- D.1. Hours of Operation.** These emissions points may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C. and PA 74-04]
- D.2. Emissions Unit Operating Rate Limitation After Testing.** See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

**Emission Limitations and Standards**

- D.3. VE Emissions.** The permittee shall not cause to be discharged into the atmosphere from any coal processing or conveying equipment, coal storage system or coal transfer and loading system processing coal, visible emissions which exceed 20 percent opacity. [40 CFR 60.252(c); and, Power Plant Certification: PA 74-04]

*{Permitting Note: Emissions are controlled by the enclosure of conveying, crushing, and bunkering equipment. By letters dated June 28, 1995, and December 2, 1996, GRU submitted to the Department information that demonstrated that the 20% opacity limit on the coal handling and storage sources could be met (without compromising the emissions estimated and modeled in the Site Certification application) through enclosure of the conveying, crushing and bunkering equipment alone. Visual emission observations by the Department confirmed GRU's findings regarding compliance with the opacity limits.}*

**Test Methods and Procedures**

*{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*

**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

**Subsection D. Emissions Unit 007**

**D.4. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-297.401, F.A.C.]

**D.5. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

**D.6. Annual Compliance Tests Required.** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), EU007 shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C.]

**D.7. Compliance Tests Prior To Renewal.** Compliance tests shall be performed for VE and NO<sub>x</sub> once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **D.3.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

**D.8. Visible Emissions.** The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C. and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800 and 62-297.401, F.A.C.; and 40 CFR 60.254(b)]

**Recordkeeping and Reporting Requirements**

**D.9. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

**SECTION IV. ACID RAIN PART.**

**Federal Acid Rain Provisions**

Operated by: City of Gainesville, Gainesville Regional Utilities  
ORIS Code: 0663

The emissions units listed below are regulated under Acid Rain, Phase II.

<b>E.U. No.</b>	<b>Brief Description</b>
003	Boiler No. 1
005	Boiler No. 2 (Phase I and Phase II NO <sub>x</sub> Unit)
006	Combustion Turbine (CT) No. 3

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

- a. DEP Form No. 62-210.900(1)(a), dated 05/13/09, received 05/18/09.
- b. EPA Form 7610-28 (12-03), dated 08/11/09, received 08/31/09.  
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

**A.2.** Nitrogen oxide (NO<sub>x</sub>) requirements for each Acid Rain Phase II unit are as follows:

<b>E.U. ID #</b>	<b>EPA ID</b>	<b>NO<sub>x</sub> Limit</b>
<b>005</b>	<b>B2</b>	<p>The Florida Department of Environmental Protection approves a NO<sub>x</sub> compliance plan for this unit. The compliance plan is effective for calendar year 2010 through calendar year 2014.</p> <p>This unit's applicable emission limitation for each year of the plan, is 0.46 lb/MMBtu from 40 CFR 76.7(a)(2) for dry bottom wall-fired boilers.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this unit shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO<sub>x</sub> compliance plan and the requirements covering excess emissions.</p>

**A.3.** Sulfur dioxide (SO<sub>2</sub>) Emission Allowances. SO<sub>2</sub> 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.  
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

**A.4.** Comments, notes, and justifications: None.

**SECTION IV. ACID RAIN PART.**

**Federal Acid Rain Provisions**

## Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

This submission is:  New     Revised     Renewal

**STEP 1**

Identify the source by plant name, state, and ORIS or plant code.

<b>Deerhaven</b> Plant name	<b>Florida</b> State	<b>0663</b> ORIS/Plant Code
--------------------------------	-------------------------	--------------------------------

**STEP 2**

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO<sub>2</sub> Opt-in unit, enter "yes" in column "b".

For new units or SO<sub>2</sub> Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO <sub>2</sub> Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO <sub>2</sub> Opt-in Units Commence Operation Date	New or SO <sub>2</sub> Opt-in Units Monitor Certification Deadline
<b>B1</b>	<b>No</b>	<b>Yes</b>	<b>N/A</b>	<b>N/A</b>
<b>B2</b>	<b>No</b>	<b>Yes</b>	<b>N/A</b>	<b>N/A</b>
<b>CT3</b>	<b>No</b>	<b>Yes</b>	<b>N/A</b>	<b>N/A</b>
		Yes		

## SECTION IV. ACID RAIN PART.

### Federal Acid Rain Provisions

Deerhaven

Plant Name (from STEP 1)

#### STEP 3

#### Read the standard requirements.

##### Acid Rain Part Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain Part application and issue or deny an Acid Rain Part.
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and
  - (ii) Have an Acid Rain Part.

##### Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
- (4) For applications including a SO<sub>2</sub> Opt-in unit, a monitoring plan for each SO<sub>2</sub> Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO<sub>2</sub> Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

##### Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000; or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

##### Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

##### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

**SECTION IV. ACID RAIN PART.**

**Federal Acid Rain Provisions**

<b>Deerhaven</b>
Plant Name (from STEP 1)

**STEP 3,  
Continued.**

**Recordkeeping and Reporting Requirements (cont)**

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

**Liability.**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities.**

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

**STEP 4**  
For SO<sub>2</sub> Opt-in units only.

In column "f" enter the unit ID# for every SO<sub>2</sub> Opt-in unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

f	g	h (not required for renewal application)
Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application

**SECTION IV. ACID RAIN PART.**

**Federal Acid Rain Provisions**

**Deerhaven**  
Plant Name (from STEP 1)

**STEP 5**

**For SO<sub>2</sub> Opt-in units only. (Not required for SO<sub>2</sub> Opt-in renewal applications.)**

**In column "i" enter the unit ID# for every SO<sub>2</sub> Opt-in unit identified in column "a" (and in column "f").**

**For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.**

i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO <sub>2</sub> Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO <sub>2</sub> Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO <sub>2</sub> Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO <sub>2</sub> Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

**STEP 6**

**For SO<sub>2</sub> Opt-in units only.**

**Attach additional requirements, certify and sign.**

- A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
- B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
- C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
- D. Attach a complete compliance plan for SO<sub>2</sub> under 40 CFR 72.40.
- E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
- F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature		Date
<b>Certification (for designated representative or alternate designated representative only)</b>		
I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.		
<b>John W. Stanton</b> Name	<b>Assistant General Manager - Energy Supply</b> Title	
<b>City of Gainesville, Gainesville Regional Utilities</b> Owner Company Name		
<b>(352) 393-1789</b> Phone	<b>stantonjw@gru.com</b> E-mail address	
Signature 	Date <b>5-13-09</b>	

**STEP 7**

**Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.**

**SECTION IV. ACID RAIN PART.**

**Federal Acid Rain Provisions**



United States  
Environmental Protection Agency  
Acid Rain Program

OMB No. 2060-0258

# Phase II NO<sub>x</sub> Compliance Plan

Page **1** of **2**

For more information, see instructions and refer to 40 CFR 76.9

This submission is:  New  Revised

**STEP 1**  
Indicate plant name, State, and ORIS code from NADB, if applicable

Deerhaven Plant Name	FL State	0663 ORIS Code
-------------------------	-------------	-------------------

**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID# B2	ID#	ID#	ID#	ID#	ID#
Type DBW	Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.66 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EPA Form 7610-28 (12-03)

**SECTION IV. ACID RAIN PART.**

**Federal Acid Rain Provisions**

Deerhaven
Plant Name (from Step 1)

NO<sub>x</sub> Compliance - Page 2  
Page 2 of 2

**STEP 2, cont'd.**

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>					
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>					
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>					
(p) Repowering extension plan approved or under review	<input type="checkbox"/>					

**STEP 3**  
Read the standard requirements and certification, enter the name of the designated representative, sign &

**Standard Requirements**

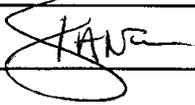
General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).  
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.  
Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	John W. Stanton, Assistant General Manager-Energy Supply	
Signature		Date
		8-1-09

**SECTION V. CAIR PART.**

**Clean Air Interstate Rule**

---

**Operated by:** City of Gainesville / Gainesville Regional Utilities

**Plant:** Deerhaven Generating Station

**ORIS Code:** 0663

The emissions units below are regulated under the Clean Air Interstate Rule.

<b>EU No.</b>	<b>EPA Unit ID#</b>	<b>Brief Description</b>
003	B1	Boiler No. 1
005	B2	Boiler No. 2
006	CT3	Combustion Turbine (CT) No. 3

- 1. Clean Air Interstate Rule Application.** The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b)) dated March 16, 2008, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]



**SECTION V. CAIR PART.**  
**Clean Air Interstate Rule**

**Deerhaven**

Plant Name (from STEP 1)

**STEP 3**

**Read the  
standard  
requirements.**

**CAIR NO<sub>x</sub> ANNUAL TRADING PROGRAM**

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall:
  - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C., and
  - (ii) [Reserved];
- (2) The owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO<sub>x</sub> source with the following CAIR NO<sub>x</sub> Emissions Requirements.

NO<sub>x</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for the control period from all CAIR NO<sub>x</sub> units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
- (2) A CAIR NO<sub>x</sub> unit shall be subject to the requirements under paragraph (1) of the NO<sub>x</sub> Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR NO<sub>x</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO<sub>x</sub> Requirements, for a control period in a calendar year before the year for which the CAIR NO<sub>x</sub> allowance was allocated.
- (4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
- (5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO<sub>x</sub> allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO<sub>x</sub> unit.

Excess Emissions Requirements.

If a CAIR NO<sub>x</sub> source emits NO<sub>x</sub> during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:

- (1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law, and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
  - (i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
  - (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Annual Trading Program.
  - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>x</sub> Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
- (2) The CAIR designated representative of a CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

**SECTION V. CAIR PART.**  
**Clean Air Interstate Rule**

**Deerhaven**

Plant Name (from STEP 1)

**STEP 3,  
Continued**

Liability.

- (1) Each CAIR NO<sub>x</sub> source and each CAIR NO<sub>x</sub> unit shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program.
- (2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> source or the CAIR designated representative of a CAIR NO<sub>x</sub> source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units at the source.
- (3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program that applies to a CAIR NO<sub>x</sub> unit or the CAIR designated representative of a CAIR NO<sub>x</sub> unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> source or CAIR NO<sub>x</sub> unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**CAIR SO<sub>2</sub> TRADING PROGRAM**

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall:
  - (i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
  - (ii) [Reserved].
- (2) The owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR SO<sub>2</sub> source and each SO<sub>2</sub> CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHH, and Rule 62-296.470, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO<sub>2</sub> source with the following CAIR SO<sub>2</sub> Emission Requirements.

SO<sub>2</sub> Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO<sub>2</sub> allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO<sub>2</sub> units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO<sub>2</sub> unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
- (3) A CAIR SO<sub>2</sub> allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO<sub>2</sub> Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO<sub>2</sub> allowance was allocated.
- (4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR SO<sub>2</sub> allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO<sub>2</sub> unit.

Excess Emissions Requirements.

If a CAIR SO<sub>2</sub> source emits SO<sub>2</sub> during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

- (1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
- (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

**SECTION V. CAIR PART.**

**Clean Air Interstate Rule**

**Deerhaven**

Plant Name (from STEP 1)

**STEP 3,  
Continued**

Excess Emissions Requirements.

If a CAIR NO<sub>x</sub> Ozone Season source emits NO<sub>x</sub> during any control period in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:  
 (1) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and  
 (2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.  
 (i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.  
 (ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.  
 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO<sub>x</sub> Ozone Season Trading Program.  
 (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO<sub>x</sub> Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.  
 (2) The CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall submit the reports required under the CAIR NO<sub>x</sub> Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit shall meet the requirements of the CAIR NO<sub>x</sub> Ozone Season Trading Program.  
 (2) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season source or the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> Ozone Season units at the source.  
 (3) Any provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program that applies to a CAIR NO<sub>x</sub> Ozone Season unit or the CAIR designated representative of a CAIR NO<sub>x</sub> Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

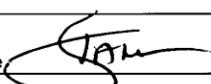
No provision of the CAIR NO<sub>x</sub> Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO<sub>x</sub> Ozone Season source or CAIR NO<sub>x</sub> Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

**STEP 4**

**Certification (for designated representative or alternate designated representative only)**

**Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.**

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

John W. Stanton Name		Assistant General Manager - Energy Supply Title	
City of Gainesville, Gainesville Regional Utilities Owner Company Name			
393-1789 Phone	(352)	stantonjw@gru.com E-mail address	
Signature 		Date 5-13-09	

**SECTION VI. APPENDICES.**

**The Following Appendices Are Enforceable Parts of This Permit:**

Appendix A, Glossary.

Appendix ASP, ASP Number 97-B-01 (With Scrivener's Order Dated July 9, 1997).

Appendix CAM, Compliance Assurance Monitoring Plan.

Appendix I, List of Insignificant Emissions Units and/or Activities.

Appendix ICE, Requirements for Internal Combustion Engines.

Appendix NSPS, Subpart A – General Provisions.

Appendix NSPS, Subpart D - Standards of Performance for Fossil Fuel Fired Steam Generators for which  
Construction is Commenced After August 17, 1971.

Appendix NSPS, Subpart GG. - Standards of Performance for Gas Turbines.

Appendix NSPS, Subpart Y. - Standards of Performance for Coal Preparation Plants.

Appendix RR, Facility-wide Reporting Requirements.

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions.

Appendix U, List of Unregulated Emissions Units and/or Activities.

draft/proposed