City of Tallahassee
Arvah B. Hopkins Generating Station
Facility ID No. 0730003
Leon County

Title V Air Operation Permit Renewal 0730003-014-AV

Renewal of Title V Air Operation Permit No. 0730003-011-AV

DRAFT/PROPOSED

Permitting Authority:

State of Florida
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Division of Air Resource Management
Office of Permitting and Compliance
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Title V Air Operation Permit Renewal
Permit No. 0730003-014-AV

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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PERMITTEE:
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2602 Jackson Bluff Road
Tallahassee, Florida 32304

Permit No. 0730003-014-AV
Hopkins Generating Station
Facility ID No. 0730003
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Hopkins Generating Station is located in Tallahassee in Leon County at 1125 Geddie Road, Tallahassee, Florida. UTM Coordinates are: Zone 16, 749.5 km East, and 3371.7 km North. Latitude is: 30º 27` 8" North; and, Longitude is: 84º 24` 10" 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, 62-204, 62-210, 62-296, 62-297, 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.

Effective Date: January 1, 2013
Renewal Application Due Date: May 20, 2017
Expiration Date: December 31, 2017

(Draft/Proposed)

_____

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

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Subsection A. Facility Description.

This facility consists of a fossil fuel-fired steam generator (Unit 1), two Westinghouse simple cycle combustion turbines (CT-1, CT-2), two NSPS regulated General Electric LM 6000 Sprint simple cycle combustion turbines (HC3, HC4), and a General Electric 7FA combined cycle combustion turbine (Unit 2A). Phase II Acid Rain Units include Units 1, HC3, HC4, and 2A. The total (nominal) combined electrical generating capacity from the facility is 518 megawatts (MW). The fuels used at this facility are natural gas, fuel oil and on-specification used oil. Also included are reciprocating internal combustion engines (RICE) including a fire pump and two black start engines associated with combustion turbines (CT-1 and CT-2).

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Boiler (Unit 1): 903 MMBtu/hr
002	Combustion Turbine (CT-1) 16.5 MW
003	Combustion Turbine (CT-2) 26.8 MW
004	Boiler (Unit 2) retired February 9, 2008
031	Combustion Turbine (HC3) 50 MW
032	Combustion Turbine (HC4) 50 MW
033	Combined Cycle Combustion Turbine, (Unit 2A) 188 MW (and Heat Recovery Steam Generator with gas-fired duct burner)
006, 035	RICE affected engines including: Fire pump (006) for the facility, 260 hp installed in 1996 and Black Start engines (035)

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see attached Appendix I – List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received May 21, 2012, this facility is a major source of hazardous air pollutants (HAP). 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.

Applicable Requirement/Regulation	E.U. ID No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, New Source Performance Standards (NSPS) General Provisions	031, 032, 033
40 CFR 60, Subparts GG and KKKK	031, 032, 033
40 CFR 63, Subpart A, National Emission Standards for Hazardous Air Pollutants (NESHAP) General Provisions	006, 033, 035
40 CFR 63, Subpart YYYY - NESHAP for Stationary Combustion Turbines	033
40 CFR 63, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)	006, 035
40 CFR 75 Acid Rain Monitoring Provisions	001, 003, 031, 032, 033
State Rule Citations	

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Applicable Requirement/Regulation	E.U. ID No(s).
Rules 62-4.070(3), F.A.C., Reasonable Assurance	All
Rule 62-210.300, F.A.C., Permits Required	All
Rule 62-210.200(PTE), F.A.C., Definitions	All
Rule 62-210.700(3), F.A.C., Excess Emissions	All
Rules 62-4.160(2), F.A.C., Permit Conditions	All
Rule 62-213.410, F.A.C., Changes Without Permit Revision	All
Rule 62-213.440, F.A.C., Permit Content	All
Rule 62-214, F.A.C., Acid Rain, Phase II	001, 031, 032, 033
Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, New and Existing Emissions Units	001
Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input, New and Existing Emissions Units	033
Rule 62-296.470, F.A.C., Clean Air Interstate Rule	001, 003, 031, 032, 033
Rule 62-297.310(2), F.A.C., General Compliance Requirements	All

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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. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}

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

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

a. Concrete mixing in the portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever practical.
b. Abrasive blasting activities that are associated with normal maintenance and corrosion control activities shall be enclosed where practical.
c. Unconfined emissions associated with the limited on-site traffic shall be controlled by limiting vehicle speeds and unnecessary traffic within the plant grounds.
d. Aggregate storage piles occur on a temporary basis associated with miscellaneous construction activities. Water is applied on an as-needed basis to control unconfined emissions from the handling and storage of the aggregate materials where practical.
e. Spray applications of surface coatings are associated with normal maintenance and corrosion activities. The activities are enclosed whenever practicable.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 21, 2012.]

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 1st of each year. [Rule 62-210.370(3), F.A.C.]

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

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

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

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. (See paragraph e., below.)

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Division of Emergency Management, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the Division of Emergency Management on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

d. Any required written reports, notifications, certifications, and data required to be sent to the Division of Emergency Management, should be sent to: Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9970, Fax: (850) 488-1739.

e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.

g. Send the required annual registration fee using approved forms made payable to: Cashier, Division of Emergency Management, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

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

EU No.	Brief Description
-001	Boiler Number 1 (Phase II Acid Rain unit)

Emissions unit number 001 is a Foster-Wheeler Corporation fossil fuel fired steam generator (model number SF-5) designated as "Boiler Number 1". It is rated at a maximum heat input of 903 MMBtu/hour when firing natural gas or fuel oil and a nominal 75 MW (electric) and 750,000 pounds of steam per hour. The stack dimensions are: height 200 feet, exit diameter 11 feet, exit temperature 260ºF, actual volumetric cubic feet per minute (ACFM) 223,755 acfm. There are no backend controls on this existing boiler. This unit began commercial operation in May of 1971.

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
001	903	Natural Gas
	903	Fuel Oil; On-Specification Used Oil

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C. and, Permit No. AO37-242825.]

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

A.3. Methods of Operation.

a. *Fuels*: The fuels that are allowed to be burned in this boiler are natural gas and/or fuel oil and/or on-specification used oil. Liquefied petroleum gas (LPG) may be used as an igniter fuel for the fuel oil.

b. *Other*: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used. [Rule 62-213.410, F.A.C.]

A.4. Hours of Operation. This emissions unit may operate continuously, i.e. 8,760 hours/year. [Rule 62-210.200(PTE), 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 times for Specific Conditions **A.5. – A.10.** are based on the specified averaging time of the applicable test method.

A.5. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one six-minute period per hour during which opacity shall not exceed 27 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. 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. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1)(b), F.A.C.]

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

A.9. Sulfur Dioxide. For compliance purposes, the following limit supersedes the higher limit contained in Rule 62-296.405(1)(c)1.h F.A.C: The SO_2 emission rate shall not exceed 0.75 pound per million Btu heat input, as measured by applicable compliance test methods in Specific Condition **A.21** (stack testing) or **A.22** (co-firing natural gas and oil). Any calculations used to demonstrate compliance shall be based on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned. [AO37-242825 Specific Conditions 4 & 6]

A.10. Fuel Sulfur Content for Co-firing Natural Gas and Fuel Oil. Fuel sulfur content (percent, by weight) shall be determined by a fuel analysis representative of all "as-fired" fuels using methods contained in Specific Condition **A.15**. Prior to burning any fuels in the boiler pursuant to this permit, receipts of the analyses of the existing fuels shall have been received by the City in order to use their values and calculate a maximum allowable fuel blend of natural gas and fuel oil. Upon subsequent fuel deliveries, if the vendor's delivery receipts indicate that the sulfur content of the delivered fuel is greater than the sulfur content established by the previous analysis, then a new maximum allowable fuel blend shall be calculated (to comply with the 0.75 lb/MMBtu limit) using the assumption that any future fuel fired contains the higher sulfur content. The resulting maximum allowable fuel blend (ratio of fuel oil to natural gas) shall be adhered to until such time that a more accurate analysis has been provided. If the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is less than the sulfur content previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established maximum allowable fuel blend. (See Specific Conditions **A.22.** for co-firing gas and oil). [Rules 62-4.070(3) F.A.C.]

Excess Emissions

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

A.11. Malfunction Excess Emissions Allowed. Excess emissions resulting from 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.]

A.12. Startup or Shutdown Excess Emissions Allowed. 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.13. 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

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on this unit: Gas Fuel Flow, Oil Fuel Flow, Nitrogen Oxides (NO_X) and Carbon Dioxide (CO_2).}

A.14. Sulfur Dioxide Fuel Sampling Protocol. The permittee elected to demonstrate compliance using fuel sampling and analysis methods from Specific Condition **A.15**. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. [Rule 62-296.405(1)(f)1.b., F.A.C.]

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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. When required, tests shall be performed in accordance with the following EPA reference methods from 40 CFR 60 Appendix A or Subpart A:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
17, 5, 5B, or 5F	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM_{10}.)
6, 6A, 6B, or 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91	Fuel Sampling Analysis for liquid fuel
ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D3246-92, ASTM D4084-94, ASTM D5504-94, or equivalent	Fuel Sampling Analysis for gaseous fuel

The above methods, except for the ASTM 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 62-204.800, 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. Unless otherwise specified in Appendix TR and Specific Conditions **A.23** & **A.24** for less than 400 hours/yr of oil firing, annual tests shall be conducted during each federal fiscal year (October 1st to September 30th), to demonstrate compliance with the emissions standards for visible emissions and PM. [Rule 62-297.310(7), F.A.C.]

A.18. Compliance Tests Prior To Renewal. In addition to the annual compliance tests specified above, compliance tests shall also be performed for VE (and, if the unit has been fired on oil more than 400 hours in any year during this period, PM and SO_2) prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits**.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be scheduled if possible roughly five years from the previous test.}

A.19. Visible emissions. The test method for visible emissions shall be Method 9, incorporated in Chapter 62-204, F.A.C. [Rule 62-296.405(1)(e)1., F.A.C.]

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A.20. Particulate Matter. The test methods for particulate matter emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-204, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. EPA Method 3 or 3A shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17. [Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]

A.21. Sulfur Dioxide. The stack test methods for demonstrating compliance with sulfur dioxide emissions limit shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-204, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance with sulfur dioxide 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 elected to demonstrate compliance by using fuel sampling and analysis shown below. [Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. & 62-297.401, F.A.C.; and, Permit No. AO37-242825 Condition 4 & 6]

A.22. Alternative Fuel Sampling Analysis Protocol for Co-Firing Gas and Fuel Oil. As an alternative to the stack test methods in Specific Condition A.21. the following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard (lb/MMBtu) and to provide the necessary values needed to calculate a maximum allowable fuel blend:

a. Establish and maintain a record of the sulfur content (percent, by weight) of the "as-fired" fuel oil using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent, to analyze a representative sample of the blended fuel following each fuel delivery. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) By "as-fired" sample results provided by the permittee.
b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas using either ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D3246-92, ASTM D4084-94, ASTM D5504-94, or equivalent. This record may be maintained either by;
   1) retaining delivery receipts provided by the natural gas vendor (which indicates that the proper ASTM test methods have been followed and which shall be provided, at a minimum, each time there is a measurable increase in the sulfur content of the natural gas), or;
   2) By on-site sample results provided by the permittee, or;
   3) By utilizing the FERC Tariff guaranteed maximum sulfur content of 10 grains per 100 cubic feet of natural gas as a "default value".
c. Establish and maintain a record of either the volume (using ASTM D 1298-80, or equivalent), or the mass flow rate, and the calorific heat value in Btu per pound (using ASTM D 240-76, or equivalent), of the fuel oil combusted. This record may be maintained either by;
   1) retaining the delivery receipts of fuel density that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) By on-site sample results provided by the permittee, or;
   3) by utilizing data provided by a certified continuous mass flow monitor in accordance with 40 CFR 75, Appendix D.

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d. Record daily the amount of each fuel fired, and the calorific heat value of each fuel. For all fuels fired, the highest value for any parameter (i.e., density, calorific heat value, etc.) that has been established by the vendor's receipt shall be utilized until an as-fired fuel analysis is received to establish a new value for the parameter in question.
e. Utilize the information in a., b. c. and d., above, to calculate the SO_2 emission rate (lb/MMBtu) to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. & 62-297.440, F.A.C.]

A.23. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
a. only gaseous fuel(s); or,
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or,
c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

A.24. Particulate Matter Testing - Annual and Permit Renewal. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:
a. only gaseous fuel(s); or,
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or,
c. only liquid fuel(s) for less than 400 hours per year.

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

A.25. Operating Conditions During Testing. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil to natural gas ratio that can be fired while meeting the SO_2 standard. [Rule 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

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

Report	Reporting Deadline	Related Condition(s)
Malfunction	If Requested by the Department	**A.28.**
Used Oil	Annual reports	**A.31.**

[Rule 62-213.440(1)(b), F.A.C.]

A.27. Fuel Sulfur Records. The owner or operator shall maintain records of fuel sulfur and each analysis that provides the heating value and sulfur content for all fuels fired. These records must be of sufficient detail to determine compliance with the conditions of this permit. All recorded data shall be maintained on file by the Source for a period of five years. [Rule 62-4.070(3), F.A.C.]

A.28. Malfunction. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in the quarterly excess emissions report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

A.29. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

A.30. Used Oil. Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:

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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 that is generated by the City of, not to exceed 10,000 gallons during any calendar year.

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

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

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

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

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

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

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

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

(iii) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs. [40 CFR 761.20(e)(2)]

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

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs. Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

In addition to the above requirements, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with approved test methods.

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

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

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

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

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

EU No.	Brief Description
-002	Combustion Turbine Number 1
-003	Combustion Turbine Number 2

Emissions unit number EU002 is a combustion turbine manufactured by Westinghouse (model number W191G) and is designated as "Combustion Turbine Number 1". It is rated at a maximum heat input of 228 MMBtu/hour while being fueled by natural gas and/or No. 2 fuel oil with a maximum fuel oil sulfur content of 0.4%, by weight. Combustion Turbine Number 1 has a nominal 16.5 MW generator. Emissions from the combustion turbines are uncontrolled. Each combustion turbine has its own stack. Combustion Turbine Number 1: stack height of 29 feet, exit equivalent diameter of 9.2 feet, exit temperature of 802.4 ºF, actual volumetric flow rate of 456,297 acfm. Combustion Turbine Number 1 began commercial operation in February of 1970.

Emissions unit number EU003 is a combustion turbine manufactured by Westinghouse (model number W251G) and is designated as "Combustion Turbine Number 2". Combustion Turbine Number 2 has a nominal 26.8 MW generator. It is rated at a maximum heat input of 446 MMBtu/hour while being fueled by natural gas and may fire No. 2 fuel oil with a maximum fuel oil sulfur content of 0.4%, by weight. Combustion Turbine Number 2 has stack height of 36.75 feet, exit equivalent diameter of 14.7 feet, exit temperature of 874 ºF, actual volumetric flow rate of 707,144 acfm. It began commercial operation in September 1, 1972. This unit is regulated under CAIR.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. Both units modeled out of BART and do not have controls other than a fuel sulfur limit. CT-2 (EU 003) is an affected Florida Clean Air Interstate Rule (CAIR) unit.}

The following conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
002(CT -1)	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil
003 (CT -2)	446 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	446 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil

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

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*: Only natural gas and/or No. 2 fuel oil shall be fired in these turbines.
b. *Other*: Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used. [*Rul*e 62-213.410, F.A.C.]

B.4. Hours of Operation. Combustion Turbine Number 1 may operate 8,491 hours per year. Combustion Turbine Number 2 may operate 7,071 hours per year. The permittee shall maintain an operation log available for Department inspection that documents the total hours of operation annually.
[Rule 62-210.200, F.A.C., (PTE) and Permit No. AO37-242824 Specific Condition number 3.]

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Emission Limitations and Standards

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

B.5. Visible Emissions. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C. and Permit No. AO37-242824.]

{Permitting note: The averaging time for this condition is based on the averaging time of the applicable test method.}

B.6. Not federally enforceable. Sulfur Dioxide – Fuel Oil Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.4 percent, by weight. See Specific Condition **B.10** for the ASTM test methods. [Permit No. AO37-242824]

Excess Emissions

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

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

Monitoring of Operations

B.9. Sulfur Dioxide. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. [Rule 62-213.440, 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.10. Test Methods. When 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
ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent	Fuel Sampling Analysis for liquid fuel

The above methods, except for the ASTM 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.]

B.11. 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.]

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B.12. Annual Compliance Tests Required. Unless otherwise specified in Appendix TR, annual tests shall performed during each federal fiscal year (October 1st to September 30th), for each unit to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C.]

B.13. Compliance Tests Prior To Renewal. In addition to the annual compliance tests specified above, compliance tests shall also be performed for VE prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Condition **B.5.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

B.14. Sulfur Content. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent. [Rules 62-213.440 and 62-297.440, F.A.C.]

B.15. 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. [Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

B.16. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuels; or,
b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or,
c. only liquid fuels for less than 400 hours per year.[Rules 62-297.310(7)(a)4. & 8, F.A.C.]

Recordkeeping and Reporting Requirements

B.17. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Malfunction	If Requested by DEP, Quarterly	Appendix RR
Test Reports	No later than 45 days after testing	Appendix RR

[Rule 62-213.440(1)(b), F.A.C.]

B.18. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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

EU No.	Brief Description
-031	Combustion Turbine – Unit Number HC3 (Phase II Acid Rain unit)
-032	Combustion Turbine – Unit Number HC4 (Phase II Acid Rain unit)

This section addresses two General Electric LM 6000 Sprint simple cycle, inlet-chilled combustion turbines, complete with electrical generator sets. The gas turbines are capable of producing a nominal 100 MW of electricity (50 MW each). The turbines are permitted to fire natural gas or 0.05% sulfur distillate fuel oil. The units are equipped with selective catalytic reduction (SCR) systems and water injection for the reduction of Nitrogen Oxides (NO_X) emissions and oxidation catalysts for the reduction of Carbon Monoxide (CO), Volatile Organic Compounds (VOC), formaldehyde and Non-Methane/Non-Ethane emissions. Dimensions of each stack: height of 85 feet; exit diameter of 10 feet; exit temperature of 825°F; actual volumetric flow rate of 601,200 acfm. The initial startup date for these units was July 31, 2005.

{*Permitting notes: These emissions units are regulated under New Source Performance Standards (NSPS) - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C; Air Construction Permit No. 0730003-005-AC; PSD-FL-343, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; and, Best Available Control Technology (BACT) in Rule 62-212 F.A.C. Emissions Units 031 and 032 are affected Acid Rain Phase II and CAIR units.}*

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The heat input to each combustion turbine from firing natural gas shall not exceed 445 MMBtu/hour based on the following: 100% base load, a lower heating value (LHV) for natural gas and a compressor inlet air temperature of 29° F. The heat input to each combustion turbine from firing No. 2 fuel oil shall not exceed 434 MMBtu/hour based on the following: 100% base load, LHV and a compressor inlet air temperature of 29° F. Heat input rates will vary depending upon compressor conditions and the combustion turbine characteristics. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves on file with the Department.
[Design, Rule 62-210.200, F.A.C. (Definition - PTE); and, Permit No. 0730003-005-AC / PSD-FL-343]

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

C.3. Methods of Operation - Allowable Fuels. Each combustion turbine shall only be fired with natural gas containing no more than 2 grains of sulfur per 100 dry standard cubic feet of gas (monthly average) and 0.05% sulfur distillate oil (or superior). The permittee shall demonstrate compliance with the fuel sulfur limit by keeping the records specified in this permit.
[Rule 62-210.200, F.A.C. (Definition - PTE) and Permit No. 0730003-005-AC / PSD-FL-343]

C.4. Hours of Operation. Each combustion turbine shall operate no more than 5,840 hours during any consecutive 12-month period, 4,000 of which may be on distillate fuel oil. The permittee shall measure and accumulate the hours of operation. [Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (PTE); and, Permit No. 0730003-005-AC / PSD-FL-343]

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Emissions Control Technology

C.5. Water Injection. The permittee shall calibrate, tune, operate and maintain a water injection system for the unit. The system shall be designed and operated so as to ensure that NO_X emissions prior to the SCR are sufficient to achieve the applicable NO_X emission limits**.**
[Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT; and, Permit No. 0730003-005-AC / PSD-FL-343)]

C.6. SCR/Oxidation Catalyst. To control NO_X and CO emissions, each combustion turbine has an SCR system and an oxidation catalyst. The SCR systems shall be operated and replenished with catalyst in order to achieve the applicable emission limits regardless of fuel being combusted.
[Rule 62-212.400, F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms (attached), summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: The averaging times for the following emission limits are based on the specified averaging time of the applicable test method.}

C.7. Carbon Monoxide (CO). CO emissions from the combustion turbine shall not exceed 6.0 ppmvd corrected to 15% oxygen for each fuel. The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with EPA Method 10 and the requirements of this permit.
[Rule 62-212.400, F.A.C. (PSD Avoidance) and Permit No. 0730003-005-AC / PSD-FL-343]

C.8. Nitrogen Oxides (NO_X). NO_X emissions from the combustion turbine shall not exceed 5.0 ppmvd corrected to 15% oxygen for each fuel. The permittee shall demonstrate compliance with this standard by conducting performance tests and emissions monitoring in accordance with 40 CFR Part 60 Subpart GG and based on a 24-hour block average for data collected from the continuous emissions monitor.
[Rule 62-212.400, F.A.C. (BACT)]

C.9. Ammonia. The ammonia slip rate shall be limited to 10 ppmvd @ 15% O_2.
[Rule 62-212.400, F.A.C. (BACT) and Permit No. 0730003-005-AC / PSD-FL-343]

C.10. Particulate Matter (PM/PM_{10}), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO_2). Fuel Specifications. Emissions of PM, PM_{10}, SAM, and SO_2 shall be limited by the use of pipeline-quality natural gas containing no more than 2 grain per 100 standard cubic feet, the use of 0.05% Sulfur oil, and good combustion techniques as specified in this permit. The permittee shall demonstrate compliance with the fuel sulfur limit by maintaining the records specified by this permit.
[Rule 62-212.400, F.A.C. (PSD Applicability) and Permit No. 0730003-005-AC /PSD-FL-343]

C.11. Visible Emissions. Visible emissions from the combustion turbine shall not exceed 10% opacity, based on a 6-minute average. This work practice standard is established as a means of ensuring the non-applicability of BACT. The permittee shall demonstrate compliance with this standard by conducting tests in accordance with EPA Method 9 and the performance testing requirements of this permit.
[Rule 62-212.400, F.A.C. (PSD Applicability) and Permit No. 0730003-005-AC / PSD-FL-343]

C.12. Volatile Organic Compounds (VOC). VOC emissions from the combustion turbine shall not exceed 3.0 ppmvd corrected to 15% oxygen for each fuel. The VOC emissions shall be measured and reported in terms of methane. The permittee shall demonstrate compliance with these standards by conducting **initial tests** in accordance with EPA Methods 25 and/or 25A and the performance testing requirements of this permit. Optional testing in accordance with EPA Method 18 may be conducted to account for the actual methane fraction of the measured VOC emissions. [Application, Design; Rule 62-4.070(3), F.A.C.; and, Permit No. 0730003-005-AC / PSD-FL-343]

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Excess Emissions

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

C.13. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited. These emissions shall be included in the calculation of the 24-hour averages to demonstrate compliance with the continuous NO_X emissions standard. [Rule 62-210.700(4), F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

C.14. Excess Emissions Allowed. Providing the permittee adheres to best operational practices to minimize the amount and duration of excess emissions, the following conditions shall apply:

a) During startup and shutdown, visible emissions excluding water vapor shall not exceed 20% opacity for more than 120 minutes in any 24-hour period.
b) The continuous emissions monitoring system (CEMS) shall monitor and record emissions during all periods of operation including startups, shutdowns, fuel switches, tuning sessions, and malfunctions.
c) Up to 45 minutes of NO_X CEMS data may be excluded due to a startup when demonstrating compliance with the NO_X BACT emissions standard.
d) Up to 15 minutes of NO_X CEMS data may be excluded due to a shutdown when demonstrating compliance with the NO_X BACT emissions standard.
e) Up to 15 minutes of NO_X CEMS data may be excluded due to a fuel switch when demonstrating compliance with the NO_X BACT emissions standard.
f) To maintain efficient operation, it is necessary to periodically tune the dry low-NO_X combustion, water injection, and/or selective catalytic reduction (SCR) systems. Provided the tuning sessions are performed according to manufacturer or industry specifications, NO_X CEMS data may be excluded due to such tuning sessions. A tuning session would occur after equipment replacement, repair, or as required to maintain proper operation of the combustor, water injection or SCR systems. At least one day prior to performing a tuning session, the permittee shall notify the Compliance Authority with details of the activity and the proposed schedule. The notice may be made by telephone, facsimile transmittal, or electronic mail.
g) Up to 120 minutes of NO_X CEMS data during any 24-hour period may be excluded due to documented malfunctions when demonstrating compliance with the NO_X BACT emissions standard. A documented malfunction means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile, or electronic mail. In case of malfunctions, the permittee shall notify the Compliance Authorities within one working day. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
h) As limited above, only those periods of data directly attributable to startup, shutdown, malfunction, fuel switching, or tuning shall be excluded from any compliance demonstration. No monitoring data shall be excluded when demonstrating compliance with the NSPS Subpart GG emissions standards. All valid data shall be used to report annual emissions.

[Rules 62-210.700(1) & (5), 62-4.130, F.A.C; Permit No. 0730003-005-AC / PSD-FL-343; and Permit No. 0730003-010-AC / PSD-FL-343A]

Continuous Monitoring Requirements

C.15. NO_X CEMS: The permittee shall have installed and calibrated, and shall operate and maintain a CEMS to measure and record NO_X and oxygen (O_2) concentrations in the combustion turbine exhaust stack. A monitor for carbon dioxide may be used in place of the oxygen monitor, but the system shall be capable of correcting the emissions to 15% oxygen. The NO_X monitoring devices shall comply with the requirements of 40 CFR 60.334(b) for 40 CFR Part 75 monitoring systems. A monitoring plan shall be maintained pursuant to 40

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CFR 75. The plan shall consist of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location. [Rule 62-212.400, F.A.C. (BACT); 40 CFR 75; and, Permit No. 0730003-005-AC / PSD-FL-343]

C.16. NO_X CEMS Data Requirements:

(a) *Installation*. The CEMS shall be installed, calibrated, and properly functioning prior to the initial performance tests. Each device shall comply with the applicable monitoring system requirements of 40 CFR 60.7(a)(5), 40 CFR 60.13, and 40 CFR 60.334(b).

(b) *Data Collection*. Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. Each valid 1-hour average shall be calculated using at least two valid data points at least 15 minutes apart.

(c) *Data Reporting*: Data collected by the CEMS shall be used to demonstrate compliance with the emissions standards specified for each 24-hour block average. Emissions shall be reported in units of ppmvd corrected to 15% oxygen for each hour of operation. The compliance averages shall be determined by calculating the arithmetic average of a 24-hour block of valid hourly emission rates. When a monitoring system reports emissions in excess of the standards allowed by this permit, the permittee shall notify the Compliance Authority within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. The Department may request a written report summarizing the excess emissions incident. The permittee shall also report excess emissions in a quarterly report as required in this permit.

(d) *Data Exclusion*. Unless prohibited by 62-210.700 F.A.C., valid hourly emission rates shall not include periods of start up, shutdown, or documented malfunction as described under the excess emissions requirements of this permit.

[Rules 62-4.130, 62-4.160(8), 62-204.800, 62-210.700, , F.A.C.; 40 CFR 60.7; and, Permit No. 0730003-005-AC / PSD-FL-343]

Test Methods and Procedures

{Permitting note: 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.17. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
ASTM D6522-00	Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers and Process Heaters Using Portable Analyzers, as specified in 40 CFR 60.335;
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip (or equivalent method)
10	Determination of Carbon Monoxide Emissions from Stationary Sources

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The above methods, except for the ASTM 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, and 62-297.620, F.A.C., AC No. 0730003-005-AC / PSD-FL-343]

C.18. 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.

C.19. Annual Performance Tests. During each federal fiscal year (October 1st to September 30th), each EU shall be tested to demonstrate compliance with the emissions standards for NO_X, CO, and visible emissions(VE) from the combustion turbine for each fuel. Testing for ammonia slip is required during the first scheduled annual performance tests after the cumulative hours of operation on each combustion turbine exceed 1,500 hours of oil firing or 5,000 hours of gas firing starting from the initial installation of the SCR catalysts. Thereafter, ammonia testing is required during the first scheduled annual performance tests after subsequent cumulative 1,500 hours of oil firing and 5,000 hours of gas firing in each combustion turbine or after regeneration, replacement or addition to the SCR catalyst system. If conducted at permitted capacity, NO_X emissions data collected during the annual NO_X continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). In the event that the operation of the CT is less than 400 hours per year on natural gas or distillate oil, annual testing is not required for that year and that fuel.
[Rule 62-297.310(7)(a), F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

C.20. Compliance Tests Prior to Permit Renewal. . In addition to the annual compliance tests specified above, compliance tests shall also be performed for NO_X, CO, and VE prior to obtaining a renewed operation permit to demonstrate compliance with the applicable emission limit**s** . VOC emission tests are not required prior to permit renewal provided the CO emission standards are met. Testing for ammonia slip meeting the requirements of Specific Condition **C.19.**, will meet the requirements of this condition. These tests shall be conducted within the 12-month period prior to renewing the air operation permit, except for amonia. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision.
[Rule 62-297.310(7)(a)3., F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

C.21. Additional Compliance Test Requirements After Major Repairs or Replacements. After major repairs or replacements, the Department may require that additional compliance testing be conducted within 90 days after major repairs or replacements are performed.
[Rule 62-297.310(7)(a)4., F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

Recordkeeping and Reporting Requirements

C.22. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	**Reporting Deadline**	**Related Condition(s)**
Hours of Operation	AOR reporting deadline	**C.4.**
Excess Emissions	Semi-annual	Appendix RR
Test Notification	15 days prior to test	Appendix TR
Test Reports	No later than 45 days after testing	Appendix RR

[Rule 62-213.440(1)(b), F.A.C., Permit No. 0730003-005-AC / PSD-FL-343]

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C.23. Fuel Records. The permittee shall demonstrate compliance with the fuel sulfur limits for natural gas and fuel oil specified in this permit by maintaining records required by 40 CFR 60.334 and 60.335. [Rules 62-4.070(3) & 62-4.160(15), F.A.C.; and, Permit No. 0730003-005-AC / PSD-FL-343]

C.24. Monthly Operations Summary. By the fifth calendar day of each month, the permittee shall record the hours of operation and amount of each fuel fired for the combustion turbine. The information shall be recorded in a written or electronic log and shall summarize the previous month of operation and the previous 12 months of operation. All hours of operation shall be included in the demonstration of compliance with the 12-month fuel usage limitations. Information recorded and stored as an electronic file shall be available for inspection and/or printing within at least one day of a request from the Compliance Authority. [Rule 62-4.160(15), F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

C.25. Excess Emissions Reporting and Semi-annual Reports. If excess NO_X or visible emissions occur due to malfunction, the permittee shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Following the NSPS format in 40 CFR 60.7(c), Subpart A, periods of startup, shutdown and malfunction, shall be monitored, recorded and reported as excess emissions when emission levels exceed the standards specified in this permit. Within thirty (30) days following each calendar semi-annual period, the permittee shall submit a report on any periods of excess emissions that occurred during the previous semi-annual to the Compliance Authority. [Rules 62-4.130, 62-204.800 & 62-210.700(6), F.A.C.; 40 CFR 60.7; and, Permit No. 0730003-005-AC / PSD-FL-343]

C.26. Records Retention. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request.
[Rules 62-4.160(14) & 62-213.440(1)(b)2., F.A.C. and Permit No. 0730003-005-AC / PSD-FL-343]

Other Requirements

C.27. NSPS – Subpart GG. These emissions units are regulated under New Source Performance Standards (NSPS) - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines.
[Permit No. 0730003-005-AC / PSD-FL-343]

C.28. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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Subsection D. This section addresses the following emissions unit:

EU No.	Brief Description
-033	Combined Cycle Unit 2A (Phase II Acid Rain Unit)

CT and Duct Burner The unit consists of a General Electric 7FA combined cycle combustion turbine, an automated combustion turbine control system, a heat recovery steam generator (HRSG), a gas-fired duct burner system, a HRSG stack, a bypass stack, and carbon monoxide (CO) and nitrogen oxides (NO_X) continuous emissions monitoring systems (CEMS). The combustion turbine produces a nominal 188 megawatts (MW) and the HRSG is used to re-power the permanently retired Unit 2 steam turbine-electrical generator to produce a nominal 272 MW in combined cycle(without the duct burner) at 25 ° F. The gas fired duct burner can increase the combined cycle output to a total of approximately 346 MW at 25 ° F. In the combustion turbine, natural gas is fired as the primary fuel and distillate oil is fired as a restricted alternative fuel from on-site storage tanks.

Controls Nitrogen oxide emissions are controlled by a selective catalytic reduction (SCR) system plus the dry low-NO_X (DLN) combustion system when firing natural gas and water injection when firing distillate oil. Emissions of carbon monoxide and volatile organic compounds are minimized by the firing of natural gas or distillate fuel oil and the high combustion temperatures of the combustion turbine. Emissions of particulate matter are minimized by efficient combustion. Emissions of sulfuric acid mist and sulfur dioxide are minimized by the firing of natural gas and low sulfur distillate oil.

Stack Parameters When firing natural gas and duct firing, exhaust gas at 188° F leaves the HRSG and exits a stack that is 18 feet in diameter and 150 feet tall with a volumetric flow rate of approximately 1,016,100 actual cubic feet per minute (acfm). When firing distillate oil and duct firing, exhaust gas at 204° F leaves the HRSG at volumetric flow rate of approximately 1,090,210 acfm. When operating in simple cycle mode with the blanking plate installed, exhaust gas at 1114° F exits an emergency bypass stack that is also 18 feet in diameter and 150 feet tall with a volumetric flow rate of approximately 2,433,700 acfm. Temperatures and gas flows are based on a compressor inlet temperature of 59° F. Initial startup of the unit occurred on May 2, 2008.

Fuel Tanks The existing plant includes two 10,000 barrel (bbl) diesel storage tanks, a 55,000 bbl No. 6 oil storage tank, and a 180,000 bbl No. 6 oil storage tank. As part of the project to construct this unit, the permittee was authorized to convert the 180,000 bbl No. 6 oil storage tank to store diesel fuel (distillate oil).

{*Permitting notes: Unit 2A is regulated under New Source Performance Standards (NSPS) - 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C; Air Construction Permit No. 0730003-009-AC; Prevention of Significant Deterioration (PSD) was not triggered by the original construction of this unit due to netting. Unit 2A is an affected Acid Rain Phase II unit}*

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity**.**

a. *Combustion Turbine*: The design maximum heat input rates are 1,899 MMBtu per hour for gas firing and 2,079 MMBtu per hour for oil firing based on the higher heating value of each fuel, a compressor inlet temperature of 25° F, and full load operation. Heat input rates will vary depending upon combustion turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

b. *Duct Burner*: The design maximum heat input rate to the duct burner system is 765 MMBtu per hour. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 9.]

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D.2. Methods of Operation.

a. *Fuels*: The combustion turbine shall fire only natural gas and distillate oil. The maximum sulfur content of distillate oil shall not exceed 0.05% by weight. The duct burner system shall fire only natural gas. [Permit No. 0730003-009-AC, Specific Condition 8; Rule 62-210.200(PTE), F.A.C.]

b. Other:

i. *Combined Cycle Operation*: When operating as a combined cycle unit, the combustion turbine is authorized to fire natural gas or distillate oil and operate the gas-fired duct burners. For this permit, "combined cycle" shall mean operation of the combustion turbine during which heat is recovered from the combustion turbine exhaust in the HRSG to generate steam. This includes operation when the HRSG and SCR system are functioning, but the steam produced is dumped to a condenser.

ii. *Simple Cycle HRSG/SCR Bypass Operation*: The combustion turbine shall fire only natural gas with no duct firing when operating as a simple cycle unit with the exhaust bypassing the HRSG and SCR system. To operate in this manner, the unit must be cooled and a blanking plate installed to direct exhaust gases to the bypass stack. This method of operation will be an infrequent occurrence, most likely due to problems or maintenance of the HRSG, SCR system or steam turbine-electrical generator system.

D.3. Hours of Operation.

a. The hours of operation of the combustion turbine are not limited (8,760 hours per year).

b. Distillate oil firing in the combustion turbine shall not exceed 6,926,500 MMBtu during any consecutive 12 months (equivalent to 3,500 hours of full load oil firing).

c. The duct burner shall fire no more than 2,598,800 MMBtu of natural gas during any consecutive 12 months (equivalent to 3,650 hours of full load duct firing). [Permit No. 0730003-009-AC, Specific Condition 10 &11; and Rule 62-210.200(PTE), F.A.C.]

Control Technology

D.4. DLN Combustion. The permittee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_X emissions from the combustion turbine when firing natural gas. The system shall be maintained and tuned in accordance with the manufacturer's recommendations or industry standards. [Permit No. 0730003-009-AC, Specific Condition 4.]**.**

D.5. Water Injection Technology. The permittee shall operate and maintain a water injection (WI) system to reduce NO_X emissions when firing distillate oil. Initially, the water injection system was tuned without the SCR in operation to achieve a target NO_X level of 42 parts per million by volume dry (ppmvd) @ 15% oxygen, which represents the vendor's specification for oil firing. Thereafter, the system shall be maintained and tuned in accordance with the manufacturer's recommendations or industry standards. [Permit No. 0730003-009-AC, Specific Condition 5.]

D.6. SCR System. The permittee shall operate and maintain a selective catalytic reduction (SCR) system to control NO_X emissions from the combustion turbine when firing either natural gas or distillate oil during combined cycle operation (including periods when steam is dumped to a condenser). The SCR system consists of an ammonia injection grid, catalyst, ammonia storage, monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to achieve the permitted levels for NO_X emissions. The SCR system shall be designed to achieve an ammonia slip level of 5 ppmvd @ 15% oxygen. [Permit No. 0730003-009-AC, Specific Condition 6.]

{Permitting Note: In accordance with 40 CFR 60.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.}

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Emissions Limitations and Standards

{Permitting note: Table 1, Summary of Air Pollutant Standards and Terms (attached), 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 times are based on the specified averaging time of the applicable test method.

D.7. Emissions Standards. Emissions from the combined cycle unit shall not exceed the following standards:

Pollutant	Fuel	Operating Method [a]	Emission Standard ppmvd @ 15% O2	Equivalent lb/hour [b]	Averaging Period	Compliance Method
CO [c]	Gas	Combined Cycle	16.8	96.8	30-day rolling avg.	CO CEMS
		SC/Bypass	10.0	41.7	4-hour test avg.	EPA Method 10 [e]
	Oil	Combined Cycle	21.4	142.9	30-day rolling avg.	CO CEMS
	All Fuels	All methods	340.10 tons	---	12-month rolling total	CO CEMS
NO_X [d]	Gas	Combined Cycle	5.0	47.8	30-day rolling avg. [c]	NO_X CEMS
		SC/Bypass	9.0	61.8	4-hour test avg.	EPA Method 7E [e]
	Oil	Combined Cycle	10.0	108.4	30-day rolling avg. [c]	NO_X CEMS
Opacity	All Fuels	All Methods	10 % Opacity		6-minute block avg.	EPA Method 9

a. "SC/Bypass" means operation as a simple cycle unit with the blanking plate installed to bypass the HRSG and SCR system and exhaust directly to the bypass stack.
b. Mass emissions rates represent the maximum equivalent "lb/hour" for the highest emitting method of operation, which includes duct firing for most cases. Mass emissions rates are based on a compressor inlet temperature of 25° F and the higher heating value of each fuel. Maximum mass emission rates will vary based on the actual test conditions in accordance with the performance curves and/or equations. For the combustion turbine, it is not necessary to continuously report hourly mass emissions rates with the CEMS data. See Appendix F of the attachments for a summary of equivalent mass emissions rates.
c. To determine compliance with the emissions standards based on a 30-day rolling average, each fuel will have a separate 30-day rolling emissions standard based on CEMS data. To determine compliance with the CO emissions cap based on a 12-month rolling total, the mass emissions rate shall be determined from all valid hourly emissions data including periods such as startup, shutdown, malfunction, fuel switching, and tuning. Mass emissions may be determined from the CEMS data by using the appropriate F-Factor for each fuel.
d. To determine compliance with the NO_x emissions standards based on a 30-day rolling average, each fuel will have a separate 30-day rolling emissions standard based on NO_X CEMS data.
e. In addition to the methods specified above, data gathered by the CO CEMS and NO_X CEMS may be used to demonstrate compliance in accordance with Specific Condition **D.16**..

{Permitting Note: Potential annual emissions from the combustion turbine system are: 340.1 tons/year of CO, 332 tons/year of NO_X, 112 tons/year of PM/PM10, 212 tons/year of SO2, 40 tons/year of SAM, and 47 tons/year of VOC. Note that the original construction project for Unit 2A required the shutdown of the existing Unit 2 boiler, which provided emissions decreases and allowed the project to avoid PSD preconstruction review.}

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[Permit No. 0730003-009-AC, Specific Condition 12; Rule 62-4.070(3), F.A.C; Rule 62-212.400(12)(Source Obligation), F.A.C., for the CO Emissions Cap]

D.8. Ammonia Slip. The SCR system shall be designed to achieve a maximum ammonia slip of 5 ppmvd @ 15% oxygen. Actual ammonia slip levels shall not exceed 10 ppmvd @ 15% oxygen as determined by EPA Method CTM-027 based on the average of three test runs. If tests indicate an ammonia slip level greater than 5 ppmvd @ 15% oxygen, the permittee shall:

a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
b. Before the ammonia slip exceeds 10 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and
c. Test and demonstrate that the ammonia slip is less than 5 ppmvd corrected to 15% oxygen within 45 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is less than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis. [Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 13.]

D.9. Applicable NSPS Provisions. In addition to the above standards, the combustion turbine system shall be designed, operated, and maintained to achieve the following federal New Source Performance Standards (NSPS) in 40 CFR 60: Subpart A (General Provisions) and Subpart KKKK (New Combustion Turbines and Duct Burners). In summary the emissions standards are:

a. Pursuant to §60.4320 and Table 1, the NSPS Subpart KKKK NO_x standard for **gas firing** is 15 ppmvd @ 15% oxygen based on a 30-day rolling average for combined cycle operation and 15 ppmvd @ 15% oxygen based on a 4-hour rolling average for simple cycle HRSG/SCR bypass operation.
b. Pursuant to §60.4320 and Table 1, the NSPS Subpart KKKK NO_x standard for **oil firing** is 42 ppmvd @ 15% oxygen based on a 30-day rolling average for combined cycle operation.
c. Pursuant to §60.4330(a)(2), SO_2 emissions are limited in NSPS Subpart KKKK by a prohibition on the firing of any fuels that contain total potential sulfur emissions in excess of 0.060 lb SO_2/MMBtu heat input.

See Appendix KKKK of the attachments of this permit for the full NSPS requirements. [40 CFR 60, Subparts A and KKKK; and Permit No. 0730003-009-AC, Specific Condition 14.]

D.10. Applicable NESHAP Provisions. In addition to the above standards, the combustion turbine system shall be designed, operated, and maintained to achieve the following federal National Emissions Standards for Hazardous Air Pollutants (NEHSAP) in 40 CFR 63: Subpart A (General Provisions) and Subpart YYYY (Combustion Turbines). [40 CFR 63, Subparts A and YYYY; and Permit No. 0730003-009-AC, Specific Condition 15.]

{Permitting Note: On August 18, 2004, EPA stayed the effectiveness of NESHAP Subpart YYYY for lean premix and diffusion flame combustion turbines. When the stay is lifted, the regulation may be revised and the permittee must request a permit revision to add these requirements.}

Excess Emissions

{Permitting Note: The following conditions apply only to the SIP-based emissions standards specified in Condition D.7. of this section. Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal NSPS, NESHAP, or Acid Rain provision.}

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D.11. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 16.]

D.12. Definitions. Rule 62-210.200(Definitions), F.A.C., defines the following terms.

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

[Permit No. 0730003-009-AC, Specific Condition 17.]

D.13. Excess Emissions Allowed. As specified in this condition, excess emissions resulting from startup, shutdown, malfunction, fuel switches, and DLN/SCR/WI tuning are allowed provided that operators employ the best operational practices to minimize the amount and duration of emissions during such events. For excess emissions events that last less than the maximum duration allowed, only those minutes attributable to excess emissions from the event shall be excluded. When authorized, excess emissions data shall be excluded from a compliance determination as a continuous block attributed to the event.

a. *Startup*:
   1) Steam Turbine Generator Cold Startup: No more than the first 600 minutes of CEMS data shall be excluded due to excess emissions from a steam turbine generator cold startup. A "steam turbine generator cold startup" is defined as startup after the steam turbine generator has been offline for 24 hours or more, or the first stage turbine metal temperature is 250ºF or less.
   2) Steam Turbine Generator Warm Startup: No more than the first 300 minutes of CEMS data shall be excluded due to excess emissions from a steam turbine generator warm startup. A "steam turbine generator warm startup" is defined as startup to combined cycle operation when the gas turbine has been shut down for a period of time and the first stage steam turbine metal temperature is greater than 250°F.
   3) Steam Turbine Generator Hot Startup: No more than the first 240 minutes of CEMS data shall be excluded due to excess emissions from a steam turbine generator hot startup. A "steam turbine generator hot startup" is defined as startup of the steam turbine generator while the unit has been operating in the combined cycle mode with the steam being dumped to the condenser.
   4) Simple Cycle HRSG/SCR Bypass Startup: No more than the first 30 minutes of CEMS data shall be excluded due to excess emissions from a simple cycle gas turbine startup in which exhaust is directed to the HRSG/SCR bypass stack.
b. *Shutdown*: No more than the first 30 minutes of CEMS data shall be excluded due to excess emissions from a combustion turbine shutdown. For shutdowns of less than 30 minutes in duration, only those minutes attributable to excess emissions from shutdown shall be excluded.
c. *Malfunction*: No more than 120 minutes of CEMS data shall be excluded in a 24-hour period due to excess emissions from malfunction. Within one (1) working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data.
d. *Fuel Switch*: No more than the first 30 minutes of CEMS data shall be excluded due to excess emissions from a fuel switch. For fuel switches less than 30 minutes in duration, only those minutes attributable to excess emissions from fuel switching shall be excluded.
e. *DLN/SCR/WI Tuning*: No more than 72 hours of CEMS data during any consecutive 12 months shall be excluded from the CEMS compliance demonstration due to excess emissions from the necessary tuning of the dry low-NO_x (DLN) combustion system, the selective catalytic reduction (SCR) system, or the water

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injection (WI) system. Tuning sessions shall be performed in accordance with the manufacturer's recommendations or industry standards. Prior to performing any DLN, SCR, or WI tuning session, the permittee shall provide the Compliance Authority with an advance notice (telephone, facsimile transmittal, or electronic mail) that details the activity and proposed tuning schedule.

{Permitting Note: DLN tuning sessions are typically required after completion of initial construction, a combustor change-out, a major repair, a unit overhaul, maintenance to a combustor, or other similar circumstances. During DLN or water injection tuning, the SCR system is turned off and the combustion turbine is sequentially stepped through numerous loads (including low load levels) to gather actual emissions data and operational information for use in adjusting the combustion turbine and control system.}

The CEMS data shall only be excluded in accordance with the procedures described in Specific Condition **D.16.** (CEMS Data Requirements). As authorized by Rule 62-210.700(5), F.A.C., the above conditions allow excess emissions only for the specifically defined periods. Data exclusion does not apply to the CO emissions cap based on a 12-month rolling total. [Permit No. 0730003-009-AC, Specific Condition 18.; and Rule 62-210.700(5), F.A.C.]

D.14. Alternate Visible Emissions Standard. Visible emissions due to startup shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity. [Rule 62-210.700(5), F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 19.]

Monitoring of Operations

D.15. CEMS: The permittee shall calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO and NO_X from the combustion turbine HRSG exhaust stack in a manner sufficient to demonstrate continuous compliance with the CEMS-based emission standards of this section.

a. *CO Monitor:* The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The annual and required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.

b. *NO_X Monitor:* The NO_X monitor shall be certified pursuant to the specifications of 40 CFR 75. Quality assurance procedures shall conform to the requirements of 40 CFR 75. The annual and required RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.

c. *Diluent Monitor:* The oxygen (O_2) or carbon dioxide (CO_2) content of the flue gas shall be monitored at the location where CO and NO_X are monitored to correct the measured emissions rates to 15% oxygen. If a CO_2 monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. The monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Rules 62-4.070(3), , and, F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 20.]

D.16. CEMS Data Requirements. The CEMS shall be calibrated, maintained, and operated in the combustion turbine exhaust stacks to measure and record the emissions of CO, and NO_x in a manner sufficient to demonstrate compliance with the CEMS-based emission limits standards of this section. The CEMS shall express the results in units of parts per million by volume dry (ppmvd) corrected to 15% oxygen.

a. *Valid Hourly Averages for Compliance:* Each CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. Except for allowable emissions data exclusions, all valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour. Each 1-hour block average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit

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combusted fuel during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid. Also, if an allowable exclusion episode should occur over two separate hourly averages, only those minutes attributed to the specific episode shall be excluded from each hour.

b. *30-day Rolling Averages*: A 30-day rolling average shall be calculated from all valid hourly averages collected during the given operating day and the previous 29 operating days. For purposes of determining compliance with the 30-day rolling NO_x standard, the missing data substitution methodology of 40 CFR Part 75, Subpart D, shall not be utilized. Instead, the 30-day rolling average shall be determined using the remaining hourly data and periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance reports. *{Permitting Note: Specific Condition **D.7.** defines the use of "maximum permitted emission levels" for use when the combustion turbine operates in simple cycle mode.}*

c. *12-Month Rolling Total*: By the end of each month, the CO CEMS shall also determine a 12-month rolling total of CO emissions from the combustion turbine. The 12-month rolling total shall be based on all valid CO CEMS data collected (including startups, shutdowns, and malfunctions) for the given month and the previous 11 months.

d. *Data Exclusion*: Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, malfunctions, and DLN tuning. Limited amounts of CEMS emissions data recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Specific Condition **E.17.** The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.

e. *Monitor Availability:* Monitor availability for each CEMS used to demonstrate compliance shall be 95% or greater in any calendar quarter. Monitor availability shall be calculated consistent with Subpart KKKK in 40 CFR 60 and reported in the SIP and NSPS excess emissions reports required in Specific Condition **E.33.** In the event that 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

[Rules 62-4.070(3) and 62-212.400(12), F.A.C.; 40 CFR 75; and Permit No. 0730003-009-AC, Specific Condition 21.]

D.17. Simple Cycle HRSG/SCR Bypass Operation. Because the bypass stack will only be used in emergency situations where the HRSG, SCR and/or steam turbine-generator are unavailable, the permittee is not required to install CO/NO_X CEMS or permanent test ports on the bypass stack. When an emergency situation occurs, the permittee shall ensure that the unit is firing only natural gas and is properly operating with lean premix combustion (Mode 6). The permittee shall monitor the hours of operation in simple cycle HRSG/SCR bypass mode and use the following methods to determine CO and NO_X emissions.

a. Compliance with the NO_X and CO emission standards for the simple cycle HRSG/SCR bypass mode of operation shall be demonstrated by conducting annual tests as required by Specific Condition **D.20.**

b. Compliance with the 12-month rolling CO emissions cap, the maximum CO mass emission rate of 41.7 lb/hour shall be used to represent each hour of operation in this mode.

If the unit operates in simple cycle mode for a substantial period of time, the Compliance Authority may request additional CO and NO_X testing to demonstrate compliance with the standards. [Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C. ; and Permit No. 0730003-009-AC, Specific Condition 22.]

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{Permitting Note: The above sampling method is similar to the method allowed under the Acid Rain program for bypass stack situations as described in 40 CFR 75.17(d)(2). The permittee does not normally utilize the Bypass Operation each year and testing pursuant to Specific Condition D.20.b. is only required during years where this bypass operation has been utilized.}

D.18. Ammonia Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. The permittee shall document the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NO_X emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NO_X monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the combustion turbine load condition. [Rules 62-4.070(3), F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 23.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.19. Continuous Compliance. Continuous compliance with the CO and NO_X emissions standards shall be demonstrated with data collected from the required continuous emissions monitoring systems (CEMS). [Rules 62-4.070(3) and 62-297.310(7)(a) and (b), F.A.C. ; and Permit No. 0730003-009-AC, Specific Condition 24.]

D.20. Annual Compliance Testing. During each federal fiscal year (October 1st to September 30th), annual compliance tests shall be conducted in accordance with the test method specified in this section.

a. The HRSG stack shall be tested on natural gas in combined cycle mode to demonstrate compliance with the standards for ammonia slip and visible emissions. For each required test, emissions of CO and NO_X recorded by the CEMS shall also be reported. If distillate oil is fired for more than 400 hours during the federal fiscal year, the HRSG stack shall also be tested on oil in combined cycle mode to demonstrate compliance with the standards for ammonia slip and visible emissions.

b. The simple cycle HRSG/SCR bypass operation shall be tested when firing natural gas in simple cycle mode to demonstrate compliance with the permitted CO and NO_x emissions standards. For this method of operation, tests may be conducted by taking the SCR system out of service and sampling at the HRSG stack. In addition, the installed and certified CO and NO_x CEMS may be used to provide the compliance test data. These tests shall consist of at least four, 1-hour test runs to determine the 4-hour average.
[Rules 62-4.070(3) and 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8; and Permit No. 0730003-009-AC, Specific Condition 27.]

D.21. Test Notification. The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. [Rule 62-297.310(7)(a)9, F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 28.]

D.22. Test Methods. Any required stack tests shall be performed in accordance with the following methods.

Method	Description of Method and Comments
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental)
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

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The 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 for compliance testing unless prior written approval is received from the Department. Tests shall be conducted in accordance with the appropriate test method and the applicable NSPS and NESHAP in 40 CFR Parts 60 and 63, respectively. [Rules 62-204.800 and 62-204, F.A.C.; 40 CFR Parts 60 and 63; and Permit No. 0730003-009-AC, Specific Condition 29.]

D.23. 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.24. Annual Compliance Tests Required. Unless otherwise specified in Appendix TR and specific conditions above, including Specific Condition **D.20**, annual tests shall performed during each federal fiscal year (October 1st to September 30th), for each unit to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(7), F.A.C.]

D.25. Compliance Tests Prior To Renewal. In addition to the annual compliance tests specified above, compliance tests shall also be performed for VE prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Condition D.7. [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

{Permitting Note: Tests which are only required once during the term of a permit prior to obtaining a renewed permit should be performed roughly five years from the previous test.}

Reporting and Record Keeping Requirements

D.26. Monitoring of Capacity. The permittee shall monitor and record the operating rate of the combustion turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown, malfunction, and DLN tuning). This shall be achieved through monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D, and recording the data using a monitoring component of the CEMS system required above. [Rule 62-4.070(3), F.A.C.; 40 CFR 75; and Permit No. 0730003-009-AC, Specific Condition 31.]

D.27. Monthly Operations Summary. By the fifth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the previous month and the previous consecutive 12 months: total heat input rate to the combustion turbine from each fuel (MMBtu); the total heat input rate to the duct burner (MMBtu); and the 12-month rolling total of CO emissions (tons). Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. Fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D. [Rules 62-4.070(3), F.A.C. ; and Permit No. 0730003-009-AC, Specific Condition 32.]

D.28. Fuel Sulfur Records. The sulfur content of the distillate oil shall be determined by ASTM Methods D-129, D-1552, D-2622, D-4294, or equivalent methods approved by the Department. For each fuel oil delivery, the permittee shall record and retain the following information: the date; gallons delivered; and a fuel oil analysis including the heat content in MMBtu/gallon, the density in pounds/gallon, the sulfur content in percent by weight, and the name of the test method used. A certified analysis supplied by the fuel oil vendor is acceptable. Alternatively, the monitoring methods specified in § 60.4370 are sufficient to demonstrate compliance with the maximum fuel sulfur levels for distillate oil established in this permit. [Rule 62-4.070(3), F.A.C.; 40 CFR 60.4370 and Permit No. 0730003-009-AC, Specific Condition 33.]

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D.29. CEMS RATA Reports. At least 15 days prior to conducting any Relative Accuracy Test Assessments (RATA) on a CEMS, the permittee shall notify the Compliance Authority of the schedule (letter, email, fax, or phone call). In addition to filing reports with the Department's Bureau of Air Monitoring and Mobile Sources, a summary of the RATA reports shall be submitted to the Compliance Authority within 45 days of completing the RATA.
[Rules 62-4.070(3), F.A.C.; and Permit No. 0730003-009-AC, Specific Condition 35.]

D.30. Excess Emissions Reporting.

a. *Malfunction Notification:* If NO_X data will be excluded due to a malfunction, the permittee shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Compliance Authority may request a written summary report of the incident.

b. *SIP Excess Emissions Report*: Within 30 days following the end of June and December of each year, the permittee shall submit a report to the Compliance Authority summarizing the following for the combustion turbine for the period: a summary of the CO and NO_X compliance periods; a summary of CO and NO_X data excluded due to malfunctions; a summary of the 12-month rolling CO emissions totals; a summary of any RATA tests performed; and a summary of the CEMS systems monitor availability for each quarter during the period.

c. *NSPS Excess Emissions Reports*: Within thirty (30) days following the end of June and December of each year, the permittee shall submit a report including any applicable periods of excess emissions and monitoring systems performance as defined in 40 CFR 60 Subpart KKKK that occurred during the previous semi-annual period to the Compliance Authority. *{Permitting Note: If there are no periods of excess emissions as defined in Subpart KKKK, a statement to that effect may be submitted with the SIP Quarterly Report to suffice for the NSPS Semi-Annual Report.}*

[Rules 62-4.070(3), 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; 40 CFR 60.7, 60.4375, 60.4395; and Permit No. 0730003-009-AC, Specific Condition 36.]

D31. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

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

E.U. ID No.	Brief Description
006	Emergency Diesel-Fired Fire Pump Engine
035	Black Start Diesel CT-1 and Black Start Diesel CT-2 engines

Emissions unit, EU006, is a diesel-fired reciprocating internal combustion engine (RICE), Caterpillar Model 3208 DIT, used to drive an emergency fire pump. EU035 are two existing black start diesel engines used to start CT-1 and CT-2.

The following table provides important details for the above emission units:

Engine Brake Horsepower (HP)	Date of Construction	Primary Fuel	Type of Engine	Displacement (liters/cylinder)
260	1/1/2000	diesel	Emergency, Fire Pump	Less than 10
480	1/1/1999	diesel	Black Start CT-1	Less than 10
635	9/1/1972	diesel	Black Start CT-2	Less than 10

{Permitting Note: These emissions units, compression ignition (CI) engines, are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. These RICE are designated emergency engines with limited operation. This permit section addresses "existing" stationary CI RICE less than or equal to 500 HP that are located at a major source of HAP and that have not been modified or reconstructed after 6/12/2006. If a RICE is modified or reconstructed after 7/11/2005, then NSPS 40 CFR 60, Subpart IIII will apply to this engine. The permittee shall comply with the following emissions and operating limitations no later than May 3, 2013.}

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]

b. *Maintenance and Testing*. Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 63.6640(f)(1)]

c. *Non-emergency Situations*. Each RICE is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(1)]

d. *Other Situations*. Each RICE generator cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine

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operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(f)(1)]

e. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

Emission Limitations and Operating Requirements

E.2. Work or Management Practice Standards

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(a)]

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(b)]

c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Table 2c(1)(c)]

d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e)]

e. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

Monitoring of Operations

E.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

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Compliance

E.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

E.5. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Recordkeeping Requirements

E.6. Notification, Performance and Compliance Records.

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
b. The owner or operator must keep the records of required maintenance from Table 6(item 9) to show continuous compliance with each emission limitation or operating requirement.
c. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655]

E.7. Maintenance Records.

a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
b. (The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655]

E.8. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

Reporting Requirements

E.9. Emergency Situation. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63 Table 2c, footnote 1]

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General Provisions

E.10. 40 CFR 63 Subpart A, General Provisions. This engine shall comply with all applicable requirements of 40 CFR 63 Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. This engine shall comply with the applicable portions of Appendix 40 NESHAP Subpart A included with this permit, as specified below.

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(d)(4)	Progress Reports
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses

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Operated by: City of Tallahassee
ORIS Code: 0688

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

EU No.	EPA Unit ID	Brief Description
001	1	Boiler Number 1: 903 million British thermal units per hour (MMBtu/hour) (Unit 1)
003	3	Combustion Turbine (CT-2): 446 MMBtu/hour
031	HC3	Combustion Turbine (HC3): 445 MMBtu/hour
032	HC4	Combustion Turbine (HC4): 445 MMBtu/hour
033	2A	General Electric 7FA Combined Cycle Combustion Turbine to repower boiler Unit 2 (Unit 2A)

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 04/24/12, received 05/21/12.

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

A.2. Sulfur Dioxide (SO_2) Emission Allowances. SO_2 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.3. Comments, Notes, and Justifications: Combined cycle, Unit 2A, utilized the steam turbine from retired boiler, Unit 2.

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Acid Rain Part Application

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

This submission is: ☐ New ☐ Revised ☒ Renewal

STEP 1

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

Plant name **Arvah B. Hopkins Generating Station**	State **Florida**	ORIS/Plant Code **688**

STEP 2
Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO_2 Opt-in unit, enter "yes" in column "b".

For new units or SO_2 Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO_2 Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO_2 Opt-in Units Commence Operation Date	New or SO_2 Opt-in Units Monitor Certification Deadline
1		Yes		
HC3		Yes		
HC4		Yes		
2A		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

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

1

Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

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

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

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

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4
For SO_2 Opt-in units only.

In column "f" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" of STEP 2.

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

In column "h" enter the hours.

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

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Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 5

For SO_2 Opt-in units only.
(Not required for SO_2 Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" (and in column "f").

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

i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO_2 Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO_2 Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO_2 Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO_2 Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

STEP 6

For SO_2 Opt-in units only.

Attach additional requirements, certify and sign.

A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
D. Attach a complete compliance plan for SO_2 under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature	Date

STEP 7

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

Certification (for designated representative or alternate designated representative only)

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

Triveni Singh	Manager – Electric Production
Name	Title

City of Tallahassee
Owner Company Name

(850) 891-5532	Triveni.Singh@talgov.com
Phone	Email

Signature Triveni Singh	Date 4/24/12

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

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Clean Air Interstate Rule (CAIR).

Operated by: City of Tallahassee
Plant: Arvah B. Hopkins Generating Station
ORIS Code: 0688

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

EU No.	EPA Unit ID	Brief Description
001	1	Boiler Number 1: 903 million British thermal units per hour (MMBtu/hour) (Unit 1)
003	3	Combustion Turbine (CT-2): 446 MMBtu/hour
031	HC3	Combustion Turbine (HC3): 445 MMBtu/hour
032	HC4	Combustion Turbine (HC4): 445 MMBtu/hour
033	2A	General Electric 7FA Combined Cycle Combustion Turbine to repower boiler Unit 2 (Unit 2A)

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.]

DRAFT/PROPOSED

Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

This submission is: ☐ New ☐ Revised ■ Renewal

STEP 1

Identify the source by plant name and ORIS or EIA plant code

Plant Name:	State:	ORIS or EIA Plant Code:
Arvah B. Hopkins Generating Station	**Florida**	**0688**

STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO_X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO_2) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO_X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
Boiler No. 1 – EU001	X	X	X		
Combustion Turbine No. 2 – EU003	X	X	X		
Combustion Turbine HC3 – EU031	X	X	X		
Combustion Turbine HC4 – EU032	X	X	X		
Combined Cycle Combustion Turbine No. 2A – EU033	X	X	X		

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

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Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

CAIR NO_X ANNUAL TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_X source and each CAIR NO_X unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

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

NO_X Emission Requirements.

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

Excess Emissions Requirements.

If a CAIR NO_X source emits NO_X during any control period in excess of the CAIR NO_X emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_X unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program.
(2) The CAIR designated representative of a CAIR NO_X source and each CAIR NO_X unit at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 3, Continued

Liability.

(1) Each CAIR NO_X source and each CAIR NO_X unit shall meet the requirements of the CAIR NO_X Annual Trading Program.
(2) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X source or the CAIR designated representative of a CAIR NO_X source shall also apply to the owners and operators of such source and of the CAIR NO_X units at the source.
(3) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X unit or the CAIR designated representative of a CAIR NO_X unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

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

CAIR SO_2 TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO_2 source and each SO_2 CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96 ,Subpart HHH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO_2 source with the following CAIR SO_2 Emission Requirements.

SO_2 Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO_2 allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO_2 Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.
(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR SO_2 allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO_2 unit.

Excess Emissions Requirements.

If a CAIR SO_2 source emits SO_2 during any control period in excess of the CAIR SO_2 emissions limitation, then:
(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 3, Continued

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.
(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO_2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO_2 Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO_2 Trading Program or to demonstrate compliance with the requirements of the CAIR SO_2 Trading Program.
(2) The CAIR designated representative of a CAIR SO_2 source and each CAIR SO_2 unit at the source shall submit the reports required under the CAIR SO_2 Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO_2 source and each CAIR SO_2 unit shall meet the requirements of the CAIR SO_2 Trading Program.
(2) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 source or the CAIR designated representative of a CAIR SO_2 source shall also apply to the owners and operators of such source and of the CAIR SO_2 units at the source.
(3) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 unit or the CAIR designated representative of a CAIR SO_2 unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO_2 Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO_2 source or CAIR SO_2 unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR NO_X Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_X Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

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

NO_X Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_X emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_X Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.
(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
(5) A CAIR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_X Ozone Season allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_X Ozone Season unit.

Arvah B. Hopkins Generating Station
Plant Name (from STEP 1)

STEP 3, Continued

Excess Emissions Requirements.

If a CAIR NO_X Ozone Season source emits NO_X during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Ozone Season Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Ozone Season Trading Program.
(2) The CAIR designated representative of a CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall submit the reports required under the CAIR NO_X Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall meet the requirements of the CAIR NO_X Ozone Season Trading Program.
(2) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season source or the CAIR designated representative of a CAIR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_X Ozone Season units at the source.
(3) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season unit or the CAIR designated representative of a CAIR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

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

STEP 4

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

Certification (for designated representative or alternate designated representative only)

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

Triveni Singh Name	**Manager – Electric Production** Title
City of Tallahassee Owner Company Name	
(850) 891-5532 Phone	**Triveni.Singh@talgov.com** Email
Signature	Date 4/24/12

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

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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 NESHAP, Subpart A– General Provisions.
Appendix NSPS, Subpart A – General Provisions.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix NSPS, Subpart GG
Appendix NSPS, Subpart KKKK
Appendix NESHAP, Subpart YYYY (for new combustion turbines)
Appendix F, Emission Summary for Unit 2A
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix U, List of Unregulated Emissions Units and/or Activities.
Table H, Permit History.

DRAFT/PROPOSED