Kissimmee Utility Authority

Cane Island Power Park

Facility ID No. 0970043
Osceola County

Title V Air Operation Permit Revision

FINAL Permit No. 0970043-019-AV

(First Revision of Title V Air Operation Permit No. 0970043-017-AV)

Permitting Authority:

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Permit No. 0970043-019-AV
Cane Island Power Park
Facility ID No. 0970043
Title V Air Operation Permit Revision

The purpose of this permit is to revise Title V air operation permit No. 0970043-017-AV for the above referenced facility. This Title V air operation permit revision is being issued to incorporate Unit 4, a nominal 300 MW combined cycle combustion turbine, and its auxiliary equipment contained in construction permit No. 0970043-014-AC (PSD-FL-400) issued on September 5, 2008. Also, to incorporate certain revised specific conditions established in construction permit No. 0970043-018-AC (PSD-FL-400A) for Unit 4, (which was issued concurrently with this Title V permit revision).

The existing Cane Island Power Park is located in Osceola County at 6075 Old Tampa Highway, Intercession City, Florida. UTM Coordinates are: Zone 17, 449.8 East and 3127.9 North. The Latitude is 28° 16' 31" North and the Longitude is 81° 31' 51" West.

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

0970043-017-AV Effective Date: January 1, 2010.
0970043-019-AV 1st Revision Effective Date: December 20, 2011.
Optional Renewal Application Due Date: May 20, 2013.
Renewal Application Due Date: May 20, 2014.
Expiration Date: December 31, 2014

Electronic Signature

JFK/jkh/tmh

Subsection A. Facility Description.

This facility is an electric power generating plant and consists of:

- Simple-Cycle Combustion Turbine Unit 1 (Emissions Unit 001), rated at 40 MW,
- Combined-Cycle Combustion Turbine Unit 2 (Emissions Unit 002), rated at 120 MW,
- Combined-Cycle Combustion Turbine Unit 3 (Emissions Unit 003), rated at 250 MW, with duct burner (Emissions Unit 005), and
- Combined-Cycle Combustion Turbine Unit 4 (Emissions Unit 009) rated at 300 MW, with auxiliary equipment (Emissions Units 010, 011 and 012).

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

Subsection B. Summary of Emissions Units.

E.U. ID No.	Brief Description
Regulated Emissions Units	
001	Simple-Cycle Combustion Turbine rated at 40 MW, 367 MMBtu/hr for natural gas and 372 MMBtu/hr for No. 2 fuel oil.
002	Combined-Cycle Combustion Turbine rated at 120 MW, 869 MMBtu/hr for natural gas and 928 MMBtu/hr for No. 2 fuel oil.
003 005	Combined-Cycle Combustion Turbine (Unit 003) with duct burner (Unit 005) rated at 250 MW combined, 1,696 MMBtu/hr for natural gas and 1,910 MMBtu/hr for No. 2 fuel oil.
004	No.2 Distillate Fuel Oil Storage Tank (one million gallon capacity).
009	Unit 4 is comprised of: a nominal 150 MW natural gas-fueled General Electric 7FA CTG equipped with evaporative inlet air cooling equipment; a supplementary-fired HRSG with a nominal 600 million Btu per hour (MMBtu) DB; a HRSG stack; and a nominal 150 MW STG.
010	Emergency fire pump diesel engine and Ultra Low Sulfur Distillate (ULSD) fuel oil storage tank.
011	Diesel electric generator for safe shutdown of Unit 4 and ULSD FO storage tank.
012	An eight-cell mechanical cooling tower with individual exhaust fans and drift eliminators.
Unregulated Emissions Units and Activities	
006	Cooling Tower.
007	Distillate Fuel Oil Tank No. 2 (700,000 gal. capacity).
008	Distillate Fuel Oil Tank No. 1 (300,000 gal. capacity).

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received May 14, 2009, 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.

This facility contains combustion turbines that meet the definition of an "affected source" with respect to 40 CFR 63, Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbine. According to the applicable rule at 40 CFR 63.6090(b)(4), "Existing combustion turbines in all subcategories do not have to meet the requirements of the subpart NESHAP YYYY and of Subpart A of this part.

No initial notification is necessary for any existing stationary combustion turbine, even if a new or reconstructed turbine in the same category would require an initial notification". Thus Subpart YYYY imposes no additional requirements on this facility unless the units are reconstructed or new units are added. In addition, EPA issued a final rule on August 18, 2004 staying the effectiveness of this rule for new lean premix gas-fired turbines and diffusion flame gas-fired turbines. Under this stay, new sources in the lean premix gas-fired turbines and diffusion flame gas-fired turbines subcategories, sources constructed or reconstructed after January 14, 2003, are temporarily relieved of the obligation to apply pollution controls and to comply with associated operating, monitoring, and reporting requirements. However, such sources must continue to submit Initial Notifications pursuant to 40 CFR 63.6145.

A summary of applicable regulations is shown in the following table.

APPLICABLE REGULATIONS	EU ID
Federal Rule Citations	
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 003, 005
40 CFR 60 Subpart Dc	005
40 CFR 60, Subpart GG - NSPS for New Stationary Gas Turbines	001, 002, 003
40 CFR 60, Subpart KKKK – NSPS for Gas Turbines and Duct Burners	009
40 CFR 60, Subpart YYYY – NESHAP for Gas Turbines	009
40 CFR 60, Subpart IIII – NSPS for Reciprocating Internal Combustion Engines	010, 011
40 CFR 60, Subpart ZZZZ – NESHAP for Reciprocating Internal Combustion Engines	010, 011
40 CFR 75, Acid Rain Monitoring Provisions	001, 002, 003, 009
State Rule Citations	
62-212-400, 62-296-470, BACT	001, 002, 003, 004, 005, 009, 010, 011, 012
62-204, F.A.C. (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	001, 002, 003, 004, 005 009, 010, 011
62-213, F.A.C., Title V Air Operation Permits for Major Sources of Air Pollution	001, 002, 003, 004, 005 009, 010, 011
62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	001, 002, 003, 004, 005 009, 010, 011
62-296.470, F.A.C., Implementation of Federal Clean Air Interstate Rule.	001, 002, 003, 009
62-297, F.A.C. (Stationary Sources - Emissions Monitoring)	001, 002, 003, 004, 005 009

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: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), 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. Maintenance of paved areas shall be performed as needed.
b. Worker and site vehicle movements shall be conducted on paved roads.
c. Delivery vehicle movements shall be conducted on paved roads.
d. Fuel oil delivery by truck shall be conducted on paved roads.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received May 14, 2009.]

Annual Reports and Fees

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

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

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 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). If, and when, the facility becomes subject to 112(r), the permittee shall:

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

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

Subsection A. Emissions Unit 001

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

EU No.	Brief Description
001	40 MW Simple-Cycle Combustion Turbine.

Emissions Unit 001 is a simple-cycle fossil fuel-fired combustion turbine, GE Model LM6000PA, rated at 40 MW. NO_X emissions are controlled by low-NO_X combustors, and by water injection, whereas SO_2 and sulfuric acid mist (H_2SO_4) emissions are controlled by firing 0.05% sulfur oil, for only limited time periods. This emissions unit is regulated under Acid Rain, Phase II; Rule 62-210.300, F.A.C., Permits Required; and, is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines (attached as Appendix GG). This unit underwent a BACT Determination dated April 7, 1993. BACT Limits were incorporated into the subsequent air construction/PSD permits including AC 49-205703 (PSD-FL-182) issued on April 9, 1993. Since this unit is located at a major source for hazardous air pollutants, this unit is also an affected source with respect to 40 CFR 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Combustion Turbines. 001 began commercial operation in 1994. Stack parameters: height = 40 feet; exit diameter = 10 feet; exit temperature = 718 °F; exit velocity = 95 feet/second; and, actual volumetric air flow rate = 450,000 acfm. The Compliance Assurance Monitoring (CAM) provisions of 40 CFR 64 do not apply to Unit 001 because the Acid Rain required NO_X CEMS are being used as a continuous compliance determination method.

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	367*	Natural Gas
	372*	No. 2 Fuel Oil

*Based on 101.3 kilopascals pressure, 288 Kelvin and 60% relative humidity (ISO standard day conditions), and lower heating value of the fuel fired.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC 49-205703 (PSD-FL-182); 0970043-007-AC (PSD-FL-182A)]

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

A.3. Methods of Operation - Fuels. The only fuels allowed to be fired in this unit are pipeline-quality natural gas and low sulfur No. 2 distillate oil. [Rule 62-213.410, F.A.C.; AC 49-205703 (PSD-FL-182), 0970043-007-AC (PSD-FL-182A)]

A.4. Hours of Operation. The operation of Unit No. 001 shall not exceed 5,000 hours during any consecutive 12 months. Of the total allowable hours of operation, Unit No. 1 shall fire distillate oil for no more than:

a. 800 hours during any consecutive 12 months if natural gas is available, or
b. 1,000 hours during any consecutive 12 months if natural gas is unavailable.

[Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, AC 49-205703 (PSD-FL-182) & 0970043-004-AC.]

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.}

{Permitting Note: The limitations of specific conditions A.3 and A.6 are more stringent than the NSPS sulfur dioxide limitation and thus assure compliance with 40 CFR 60.333 and 60.334}

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

A.5. Visible Emissions. Visible emissions shall not exceed 10 percent opacity, except for during startup, shutdown or periods of part load operation, at which time visible emissions shall not exceed 20 percent opacity. [AC 49-205703 (PSD-FL 182)]

A.6. Fuel Sulfur. The sulfur content of the No. 2 distillate oil shall not exceed 0.05% sulfur by weight. [AC 49-205703 (PSD-FL-182), 0970043-007-AC (PSD-FL-182A)]

A.7. Allowable Emissions. The maximum allowable emissions from Unit 001 shall not exceed the emission limitations listed below.

Emission Limits				
Pollutant	**Gas**	**Number 2 Fuel Oil**	**Equivalent Emissions Tons/Year [a, b]**	**Basis**
NO_X [c]	25 ppmvd at 15% oxygen on a dry basis	42 ppmvd at 15% oxygen on a dry basis	105.5 [c]	BACT
SO_2	nil	20 lb/hr	10.0	BACT
PM	0.0245lb/MMBtu	0.0323 lb/MMBtu	24.0	BACT
H_2SO_4	nil	2.2 lb/hr	1.1	BACT
VOC	1.4 lb/hr	3 lb/hr	4.3	BACT
CO	30 ppmvd	63 ppmvd	118.0	BACT
Opacity	10% (see A.5.)	10% (see A.5.)		BACT
Beryllium (Be) [d]	nil	2.5 E-6 lb/MMBtu	< 1	BACT
Arsenic (As) [d]	nil	4.2 E-6 lb/MMBtu	< 1	AC 49-205703
Mercury (Hg) [d]	nil	3.1 E-6 lb/MMBtu	< 1	AC 49-205703
Lead (Pb) [d]	nil	2.8 E-5 lb/MMBtu	< 1	AC 49-205703

a. Tons per year based on 4,000 hrs/yr for natural gas firing, 1000 hrs/yr for number 2 fuel oil firing.
b. Based on 372 MMBtu/hr for number 2 fuel oil and 367 MMBtu/hr for natural gas.
c. Original permit PSD-FL-182 limited NO_X emissions to 25 parts per million by volume dry (ppmvd) for gas firing to be reduced to 15 ppmvd. Project No. 0970043-007-AC (12/21/99) modified the PSD permit establishing the final NO_X emission limit as 25 ppmvd when firing natural gas with a corresponding reduction in hours of operation (5,000 hours per year) and a combined NO_X emissions cap (366.1 TPY) with Unit No. 2.
d. Limits based upon an approved emission factor, which is subject to change in the future.

[AC49-205703 (PSD-FL-182); 0970043-007-AC (PSD-FL-182A)]

A.8. Annual NO_X Cap. Emissions Units 001 and 002 are required to comply with an annual NO_X cap of 366.1 tons. In order to comply with this cap, monthly NO_X emissions as recorded by the installed CEMS shall be maintained at the facility. These records shall demonstrate that the cap is complied with during each consecutive 12-month period. Additionally, the annual submittal of each AOR shall include such data and calculations. [0970043-007-AC (PSD-FL-182A)]

A.9. NO_X Compliance Averaging Time. Compliance with the NO_X standard shall be determined on a rolling 24-hour average using the data recorded by the continuous emissions monitor and reported semi-annually to the Central District (see Specific Condition A.26.). [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

Excess Emissions

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

A.10. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing: (1) Best operational practices to minimize emissions are adhered

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

A.11. 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.]

Continuous Monitoring Requirements

A.12. Continuous Fuel Monitoring. A continuous monitoring system shall be maintained to record fuel consumption. The system shall meet the requirements of 40 CFR Part 60.334, Subpart GG; except that the monitoring of water to fuel ratio and fuel bound nitrogen is waived as long as the permittee will report excess emissions using the data collected by the continuous monitoring system in accordance with the requirements of Specific Condition **A.13.a., b. and c.** [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

A.13. Continuous NO_X Monitoring. A continuous monitoring system shall be maintained to record emissions of nitrogen oxides in accordance with the requirements of 40 CFR 75. Data collected from this system shall be used for continuous compliance purposes. While water injection is being utilized for NO_X control, water to fuel ratio and fuel bound nitrogen is not required to be continuously monitored as long as the permittee will report excess emissions using the data collected by the continuous monitoring system in accordance with the following conditions:

a. Each NO_X CEMS must be capable of calculating NO_X emissions concentrations corrected to 15% O_2 and ISO conditions.
b. Monitor data availability shall be no less than 95 percent on a quarterly basis.
c. NO_X CEMS should provide at least 4 data points for each hour and calculate a one-hour average.

To implement Specific Condition **A.13.a.**, Kissimmee Utility Authority (KUA) shall use ambient data (temperature, relative humidity, pressure) to correct excess emissions data to ISO conditions if requested by the Department. If monitor availability drops below 95% on a quarterly basis as prescribed in Specific Condition **A.13.b.**, KUA shall use water to fuel ratio and fuel-bound nitrogen data to monitor excess emissions in subsequent quarters until the minimum CEMS monitor availability is above 95%. The use of CEMS to monitor excess emissions is more stringent than the surrogate parameter monitoring in 40 CFR 60.334 since the CEMS directly measures NO_X emissions. The CEMS also provides monitoring when no water injection is used to control NO_X emissions (i.e., when firing natural gas, dry low NO_X burners are used). [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

A.14. Excess Emissions by CEMS. The CEMS shall be used to determine periods of excess emissions as per 40 CFR 60.334. Excess emissions are defined for this emissions unit as any 60-minute period during which the average emissions exceed the emission limits of Specific Condition **A.7.** of this permit. Periods of startup, shutdown and malfunction shall be monitored, recorded and reported with excess emissions following the format and requirements of 40 CFR 60.7. [AC 49-205703 (PSD-FL-182)]

Test Methods and Procedures

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

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

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5 or 17	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM_{10}.)
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources

Method	Description of Method and Comments
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [62-297.401, F.A.C.; AC 49-205703 (PSD-FL-182)]

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. During each federal fiscal year (October 1st to September 30th), this EU shall be tested to demonstrate compliance with the emissions standards for VE, SO_2 (see Specific Condition **A.20.**), NO_X and CO. [Rule 62-297.310(7), F.A.C.; 49-205703-AC (PSD-FL-182) and 0970043-003-AC]

A.18. Compliance Tests Prior To Renewal. Compliance tests shall be performed for NO_X, PM, SO_2, H_2SO_4, VOC, CO, VE, Be, As, Hg and Pb once every 5 years. For Be, As, Hg and Pb, the tests are only required for demonstrating compliance with the emissions limits while firing oil. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **A.5. – A.9.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

A.19. VE and NO_X Testing. Emission testing for visible emissions and NO_X shall be performed annually, in accordance with Specific Condition **A.15.**, with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using the following EPA reference methods in accordance with 40 CFR 60, Appendix A:

a. Method 9 for VE;
b. Method 7E or Method 20 for NO_X.

Annual compliance with the NO_X standard may be determined by using data collected as part of the annual Relative Accuracy Test Audit (RATA) testing as described in 40 CFR 60 Appendix B, Performance Specification 2. Section 7.1.2. instead of performing Methods 7E and 20 as separate tests. EPA Method 10 will be conducted simultaneously with the NO_X/O_2 RATA tests. The 20-30 minute tests conducted for the RATA testing will be strung together in a manner that fulfills additional requirements of EPA Methods 10 and 20 as to test run time (3 one hour runs). The collected data will be bias corrected to comply with the RATA test requirements, but will not be bias corrected for compliance with NSPS so as to meet the requirements of methods 10 and 20 (the NSPS test methods). No less than eight test points will be used for the RATA testing which will comply with both the RATA test requirements and the NSPS test requirements. The NO_X span for methods 20 and 7E should not exceed 50 parts per million (ppm) instead of a span of 300 ppm as required by Subpart GG. Mass emissions of NO_X and CO shall be determined pursuant to the

procedures in 40 CFR 60, Appendix A, Method 19 or 40 CFR 75, Appendix F. If the unit is not operating because of scheduled maintenance outages and emergency repairs, it will be tested within thirty days of returning to service.
Note: Measured NO_X emissions will be ISO corrected for comparison with NSPS, but will not be ISO corrected for comparison with the BACT standard.
[Rules 62-297.401 and 62-213.440, F.A.C.; AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

A.20. Fuel Sampling & Analysis - Sulfur/Nitrogen and Lower Heating Value. The following fuel sampling and analysis program can also be used to demonstrate compliance with the sulfur dioxide and sulfuric acid mist standards:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, D1552-01, D5453-06, or the latest editions, to analyze a representative sample of the blended fuel following each fuel delivery. ASTM D3246-81, or its latest edition, shall be used for sulfur content of gaseous fuel.
b. Record daily the amount of each fuel fired, density of each fuel, heating value, nitrogen content and the percent sulfur content by weight of fuel oil as specified in 40 CFR 60.334.

[Rule 62-213.440, F.A.C.; AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

A.21. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the SO_2 limit by EPA test method 8 or fuel sampling and analysis. The permittee shall demonstrate compliance with the gaseous fuel sulfur limit via record keeping. Excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05% sulfur, by weight. [AC 49-205703 (PSD-FL-182).]

A.22. Additional Compliance Test Requirements. Test results shall be the average of three valid runs, each to be of at least one hour in duration to comply with EPA Method 10. Each 60-minute test may be divided into segments that conform with RATA test run times (20-30 minutes). Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90-100 percent of the maximum heat input rate allowed by this permit, achievable for the average ambient air temperature during the test. If it is impracticable to test at permitted capacity, the emissions unit may be tested at less than permitted capacity. In such cases, subsequent operation is limited by adjusting downward the entire heat input vs. inlet temperature curve by the increment equal to the difference between the maximum permitted heat input value and 110 percent of the value reached during the test. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

Recordkeeping and Reporting Requirements

A.23. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Excess Emissions - Malfunctions	Quarterly (if requested)	A.25.
Excess Emissions	Semi-Annually	A.26.

A.24. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

A.25. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

A.26. Excess Emission Reports. Semi-annual excess emission reports shall be submitted to the DEP's Central

District Office. These reports shall be postmarked by the 30th day following the end of each calendar half. Each excess emission report shall include the information required in 40 CFR 60.7(c) and 60.334. Excess emissions for NO_X shall be reported using data collected by the continuous emissions monitors. Since CEM data will be used for the reporting of excess emissions for NO_X, the monitoring of water/fuel ratio and fuel-bound nitrogen required by 40 CFR 60, Subpart GG is waived. [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

A.27. Natural Gas Sulfur Content Records Required. The owner or operator shall receive and maintain records of sulfur content of natural gas provided by the natural gas supplier, as per 40 CFR 60.334. The records shall report total sulfur content in terms of grains of sulfur per hundred cubic feet (standard conditions). [AC 49-205703 (PSD-FL-182)]

A.28. Additional Reports Required. The owner or operator shall report the following with the Annual Operating Report (AOR) by April 1st of each calendar year: sulfur and nitrogen contents, by weight, of the fuels being fired; lower heating value of the fuels being fired; annual fuel consumption of No. 2 fuel oil and natural gas; hours of operation per fuel usage; and, air emission limits. As it may become available, the permittee shall also provide the Department with information regarding documented enhancements to the LM6000PA, dual-fuel class, combustion turbine machine, which have demonstrated in the field the ability to achieve a continuous NO_X emission rate of 15 ppmvd while firing natural gas. [Rule 62-210.370(3), F.A.C.; AC49-205703 (PSD-FL-182) and 0970043-007-AC]

Other Requirements

A.29. Maintain Capability to install an SCR. This emissions unit is permitted for maximum NO_X emission levels of 25 (gas)/42 (oil) ppmv. The Department will revise permitted emission levels for NO_X if the manufacturer achieves an even lower NO_X emission, pursuant to Rule 62-4.080, F.A.C. The permittee shall maintain capability for future installation of a selective catalytic reduction (SCR) system. This is required in the event that the permittee is unable to comply with the permitted NO_X levels and the Department requires an SCR to be installed. In the event an SCR system is required to be installed, the emission limitations shall be established at the time of installation by stack test results and through a revised determination of BACT. [AC 49-205703 (PSD-FL-182)]

Subsection B. Emissions Unit 002

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

EU No.	Brief Description
002	120 MW Combined-Cycle Combustion Turbine.

Emissions Unit 002 is a combined-cycle fossil fuel-fired combustion turbine, GE Model PG7111EA, and non-fired heat recovery steam generator, rated at 120 MW combined. NO_X emissions are controlled by low-NO_X combustors, and by water injection, whereas SO_2 and H_2SO_4 emissions are controlled by firing 0.05% S oil, for only limited time periods. This emissions unit is regulated under Acid Rain, Phase II; Rule 62-210.300, F.A.C., Permits Required; and, is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines (attached as Appendix GG). This unit underwent a BACT Determination dated April 7, 1993. BACT Limits were incorporated into the subsequent air construction/PSD permits including AC 49-205703 (PSD-FL-182) issued on April 9, 1993. Since this unit is located at a major source for hazardous air pollutants, this unit is also an affected source with respect to 40 CFR 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Combustion Turbines. Unit 002 began commercial operation in 1995. Stack parameters: height = 65 feet; exit diameter = 10 feet; exit temperature = 718 °F; exit velocity = 95 feet/second; and, actual volumetric air flow rate = 450,000 acfm. The Compliance Assurance Monitoring (CAM) provisions of 40 CFR 64 do not apply to Unit 002 because the Acid Rain required NO_X CEMS are being used as a continuous compliance determination method.

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	869*	Natural Gas
	928*	No. 2 Fuel Oil

*Based on 101.3 kilopascals pressure, 288 Kelvin and 60% relative humidity (ISO standard day conditions), and lower heating value of the fuel fired.
[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.; and AC 49-205703 (PSD-FL-182)]

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

B.3. Methods of Operation - Fuels. The only fuels allowed to be fired in this unit are pipeline-quality natural gas and low sulfur No. 2 distillate oil. [Rule 62-213.410, F.A.C.; AC 49-205703 (PSD-FL-182), 0970043-007-AC (PSD-FL-182A)]

B.4. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). Of the total allowable hours of operation, Unit No. 2 shall fire distillate oil for no more than:
a. 800 hours during any consecutive 12 months if natural gas is available, or
b. 1,000 hours during any consecutive 12 months if natural gas is unavailable.
[Rules 62-213.440 and 62-210.200(PTE), F.A.C.; and, AC 49-205703 (PSD-FL-182) and 0970043-004-AC.]

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 **B.5.** through **B.9.** are based on the specified averaging time of the applicable test method.

B.5. Visible Emissions. Visible emissions shall not exceed 10 percent opacity, except for during startup, shutdown or periods of part load operation, at which time visible emissions shall not exceed 20 percent opacity. [AC 49-205703 (PSD-FL-182)]

B.6. Fuel Sulfur. The sulfur content of the No. 2 distillate oil shall not exceed 0.05% sulfur by weight. [AC 49-205703 (PSD-FL-182), 0970043-007-AC (PSD-FL-182A)]

B.7. Allowable Emissions. The maximum allowable emissions from Unit 2 shall not exceed the emission limitations listed below.

Emission Limits				
Pollutant	**Gas**	**Number 2 Fuel Oil**	**Equivalent Emissions Tons/Year [a, b]**	**Basis**
NO_X	15 ppmvd at 15% oxygen on a dry basis	42 ppmvd at 15% oxygen on a dry basis	290.6	BACT
SO_2	nil	52 lb/hr	26	BACT
PM	0.010 lb/MMBtu	0.0162 lb/MMBtu	41.2	BACT
H_2SO_4	nil	5.72 lb/hr	2.86	BACT
VOC	2 lb/hr	5 lb/hr	10.26	BACT
CO	20 ppmvd	20 ppmvd	242	BACT
Opacity	10% (see B.5.)	10% (see B.5.)		BACT
Be [c]	nil	2.5e-6 lb/MMBtu	< 1	BACT
As [c]	nil	4.2e-6 lb/MMBtu	< 1	AC 49-205703
Hg [c]	nil	3.0e-6 lb/MMBtu	< 1	AC 49-205703
Pb [c]	nil	2.8e-5 lb/MMBtu	< 1	AC 49-205703

a. Tons per year based on 7,760 hrs/yr for natural gas firing, 1,000 hrs/yr for number 2 fuel oil firing.
b. Based on 928 MMBtu/hr for number 2 fuel oil and 869 MMBtu/hr for natural gas.
c. Limits based upon an approved emission factor, which is subject to change in the future.
[AC49-205703 (PSD-FL-182); 0970043-007-AC (PSD-FL-182A)]

B.8. Annual NO_X Cap. Emissions Units 001 and 002 are required to comply with an annual NO_X cap of 366.1 tons. In order to comply with this cap, monthly NO_X emissions as recorded by the installed CEMS shall be maintained at the facility. These records shall demonstrate that the cap is complied with during each consecutive 12-month period. Additionally, the annual submittal of each AOR shall include such data and calculations. [0970043-007-AC (PSD-FL-182A)]

B.9. NO_X Compliance Averaging Time. Compliance with the NO_X standard shall be determined on a rolling 24-hour average using the data recorded by the continuous emissions monitor and reported semi-annually to the Central District (see Specific Condition B.26.). [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

Excess Emissions

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

B.10. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing: (1) Best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

B.11. 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.]

Continuous Monitoring Requirements

B.12. Continuous Fuel Monitoring. A continuous monitoring system shall be maintained to record fuel consumption. The system shall meet the requirements of 40 CFR Part 60.334, Subpart GG; except that the monitoring of water to fuel ratio and fuel bound nitrogen is waived as long as the permittee will report excess emissions using the data collected by the continuous monitoring system in accordance with the requirements of Specific Condition **B.13.a., b. and c.** [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

B.13. Continuous NO_X Monitoring. A continuous monitoring system shall be maintained to record emissions of nitrogen oxides in accordance with the requirements of 40 CFR 75. Data collected from this system shall be used for continuous compliance purposes. While water injection is being utilized for NO_X control, water to fuel ratio and fuel bound nitrogen is not required to be continuously monitored as long as the permittee will report excess emissions using the data collected by the continuous monitoring system in accordance with the following conditions:

a. Each NO_X CEMS must be capable of calculating NO_X emissions concentrations corrected to 15% O_2 and ISO conditions.
b. Monitor data availability shall be no less than 95 percent on a quarterly basis.
c. NO_X CEMS should provide at least 4 data points for each hour and calculate a one-hour average.

To implement Specific Condition **B.13.a.**, Kissimmee Utility Authority (KUA) shall use ambient data (temperature, relative humidity, pressure) to correct excess emissions data to ISO conditions if requested by the Department. If monitor availability drops below 95% on a quarterly basis as prescribed in Specific Condition **B.13.b.**, KUA shall use water to fuel ratio and fuel-bound nitrogen data to monitor excess emissions in subsequent quarters until the minimum CEMS monitor availability is above 95%. The use of CEMS to monitor excess emissions is more stringent than the surrogate parameter monitoring in 40 CFR 60.334 since the CEMS directly measures NO_X emissions. The CEMS also provides monitoring when no water injection is used to control NO_X emissions (i.e., when firing natural gas, dry low NO_X burners are used). [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

B.14. Excess Emissions by CEMS. The CEMS shall be used to determine periods of excess emissions as per 40 CFR 60.334. Excess emissions are defined for this emissions unit as any 60-minute period during which the average emissions exceed the emission limits of specific condition **B.7.** of this permit. Periods of startup, shutdown and malfunction shall be monitored, recorded and reported with excess emissions following the format and requirements of 40 CFR 60.7. [AC 49-205703 (PSD-FL-182)]

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.15. Test Methods. 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
5	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM_{10}.)
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources

Method	Description of Method and Comments
	{Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)

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

B.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.]

B.17. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), this EU shall be tested to demonstrate compliance with the emissions standards for VE, SO_2 (see Specific Condition **B.20.**), NO_X and CO. [Rule 62-297.310(7), F.A.C.; 49-205703-AC (PSD-FL-182) and 0970043-003-AC]

B.18. Compliance Tests Prior To Renewal. Compliance tests shall be performed for NO_X, PM, SO_2, H_2SO_4, VOC, CO, VE, Be, As, Hg and Pb once every 5 years. For Be, As, Hg and Pb, the tests are only required for demonstrating compliance with the emissions limits while firing oil. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **B.5. – B.9.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

B.19. VE and NO_X Testing. Emission testing for visible emissions and NO_X shall be performed annually, in accordance with Specific Condition **B.15.**, with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using the following EPA reference methods in accordance with 40 CFR 60, Appendix A:

a. Method 9 for VE;
b. Method 7E or Method 20 for NO_X.

Annual compliance with the NO_X standard may be determined by using data collected as part of the annual Relative Accuracy Test Audit (RATA) testing as described in 40 CFR 60 Appendix B, Performance Specification 2. Section 7.1.2. instead of performing Methods 7E and 20 as separate tests. EPA Method 10 will be conducted simultaneously with the NO_X/O_2 RATA tests. The 20-30 minute tests conducted for the RATA testing will be strung together in a manner that fulfills additional requirements of EPA Methods 10 and 20 as to test run time (3 one hour runs). The collected data will be bias corrected to comply with the RATA test requirements, but will not be bias corrected for compliance with NSPS so as to meet the requirements of methods 10 and 20 (the NSPS test methods). No less than eight test points will be used for the RATA testing which will comply with both the RATA test requirements and the NSPS test requirements. The NO_X span for methods 20 and 7E should not exceed 50 ppm instead of a span of 300 ppm as required by Subpart GG. Mass emissions of NO_X and CO shall be determined pursuant to the procedures in 40 CFR 60, Appendix A, Method 19 or 40 CFR 75, Appendix F. If the unit is not operating because of scheduled maintenance outages and emergency repairs, it will be tested within thirty days of returning to service. Note: Measured NO_X emissions will be ISO corrected for comparison with NSPS, but will not be ISO corrected for comparison with the BACT standard.

[Rules 62-297.401 and 62-213.440, F.A.C.; AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

B.20. Fuel Sampling & Analysis - Sulfur/Nitrogen and Lower Heating Value. The following fuel sampling and analysis program can also be used to demonstrate compliance with the sulfur dioxide and sulfuric acid mist standards:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, D1552-01, D5453-06, or the latest editions, to analyze a representative sample of the blended fuel following each fuel delivery. ASTM D3246-81, or its latest edition, shall be used for sulfur content of gaseous fuel.

b. Record daily the amount of each fuel fired, density of each fuel, heating value, nitrogen content and the percent sulfur content by weight of fuel oil as specified in 40 CFR 60.334.

[Rule 62-213.440, F.A.C.; AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

B.21. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the SO_2 limit by EPA test method 8 or fuel sampling and analysis. The permittee shall demonstrate compliance with the gaseous fuel sulfur limit via record keeping. Excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05% sulfur, by weight. [AC 49-205703 (PSD-FL-182).]

B.22. Additional Compliance Test Requirements. Test results shall be the average of three valid runs, each to be of at least one hour in duration to comply with EPA Method 10. Each 60-minute test may be divided into segments that conform with RATA test run times (20-30 minutes). Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90-100 percent of the maximum heat input rate allowed by this permit, achievable for the average ambient air temperature during the test. If it is impracticable to test at permitted capacity, the emissions unit may be tested at less than permitted capacity. In such cases, subsequent operation is limited by adjusting downward the entire heat input vs. inlet temperature curve by the increment equal to the difference between the maximum permitted heat input value and 110 percent of the value reached during the test. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

Recordkeeping and Reporting Requirements

B.23. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Excess Emissions-Malfunctions	Quarterly (if requested)	B.25.
Excess Emissions	Semi Annually	B.26.

B.24. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

B.25. Excess Emissions – Malfunctions. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

B.26. Excess Emission Reports. Semi-annual excess emission reports shall be submitted to the DEP's Central District Office. These reports shall be postmarked by the 30th day following the end of each calendar half. Each excess emission report shall include the information required in 40 CFR 60.7(c) and 60.334. Excess emissions for NO_X shall be reported using data collected by the continuous emissions monitors. Since CEM data will be used for the reporting of excess emissions for NO_X, the monitoring of water/fuel ratio and fuel-

bound nitrogen required by 40 CFR 60, Subpart GG is waived. [AC 49-205703 (PSD-FL-182) and 0970043-003-AC]

B.27. Natural Gas Sulfur Content Records Required. The owner or operator shall receive and maintain records of sulfur content of natural gas provided by the natural gas supplier, as per 40 CFR 60.334. The records shall report total sulfur content in terms of grains of sulfur per hundred cubic feet (standard conditions). [AC 49-205703 (PSD-FL-182)]

B.28. Additional Reports Required. The owner or operator shall report the following with the Annual Operating Report (AOR) by April 1st of each calendar year: sulfur and nitrogen contents, by weight, of the fuels being fired; lower heating value of the fuels being fired; annual fuel consumption of No. 2 fuel oil and natural gas; hours of operation per fuel usage; and, air emission limits. [Rule 62-210.370(3), F.A.C.; and AC 49-205703 (PSD-FL-182)]

Other Conditions

B.29. Maintain Capability to install an SCR. This emissions unit is permitted for maximum NO_X emission levels of 15 (gas)/42 (oil) ppmv. The Department will revise permitted emission levels for NO_X if the manufacturer achieves an even lower NO_X emission, pursuant to Rule 62-4.080, F.A.C. The permittee shall maintain capability for future installation of a selective catalytic reduction (SCR) system. This is required in the event that the permittee is unable to comply with the permitted NO_X levels and the Department requires an SCR to be installed. In the event an SCR system is required to be installed, the emission limitations shall be established at the time of installation by stack test results and through a revised determination of BACT. [AC 49-205703 (PSD-FL-182)]

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

EU Nos.	Brief Description
003	167 MW Combined-Cycle Combustion Turbine.
005	80 – 90 MW Supplementary Gas-Fired Heat Recovery Steam Generator (HRSG) With Duct Burner.

Emissions Unit 003 is a combined-cycle fossil fuel-fired combustion turbine, General Electric Model MS7241FA, rated at a nominal 167 MW. Emissions Unit 005 is a supplementary gas-fired heat recovery steam generator (HRSG) with duct burner, rated at a nominal 80 – 90 MW. The two units combined are rated at 250 MW. NO_X emissions are controlled by low-NO_X selective catalytic reduction (SCR) when operating in combined-cycle mode. NO_X emissions are controlled by dry low NO_X combustors when operating in simple-cycle mode. In addition, water injection is used when firing 0.05% S fuel oil. This emissions unit is regulated under Acid Rain, Phase II; Rule 62-210.300, F.A.C., Permits Required; and, is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines (Unit 003); and 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units Which Construction is Commenced After September June 9, 1989 (Unit 005). These units underwent a BACT Determination dated January 7, 1999. The BACT Limits were incorporated into the subsequent PSD permit No. PSD-FL-254, issued on November 24, 1999. Since this unit is located at a major source for hazardous air pollutants, this unit is also an affected source with respect to 40 CFR 63, Subpart YYYY, National Emissions Standards for Hazardous Air Pollutants for Combustion Turbines. These units began commercial operation on January 1, 2001. Combined-cycle stack parameters: height = 130 feet; exit diameter = 18 feet; exit temperature = 173°F; exit velocity = 41.6 feet/second; and, actual volumetric air flow rate = 635,155 acfm. Simple-cycle stack parameters: height = 100 feet; exit diameter = 18 feet; exit temperature = 173°F; exit velocity = 41.6 feet/second; and, actual volumetric air flow rate = 635,155 acfm. The Compliance Assurance Monitoring (CAM) provisions of 40 CFR 64 do not apply to these units because the Acid Rain required NO_X CEMS are being used as a continuous compliance determination method.

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

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
003	1,696*	Natural Gas
	1,910*	No.2 Fuel Oil
005	44*	Natural Gas

*The maximum heat input rates, based on the lower heating value (LHV) of each fuel to this Unit at ambient conditions of 19°F temperature, 55% relative humidity, 100% load, and 14.7 psi pressure.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C.; PSD-FL-254]

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. The only fuels allowed to be fired are pipeline-quality natural gas and low sulfur No. 2 distillate oil. The sulfur content of the No. 2 distillate oil shall not exceed 0.05% sulfur by weight. The plant may be operated in simple-cycle mode. Different limits apply depending upon whether simple-cycle operation is of an intermittent nature (e.g., caused by maintenance of equipment following the combustion turbine, or temporary electrical demand fluctuations), or long-term electrical demand situations. [PSD-FL-254, Specific Condition 17]

C.4. Hours of Operation. Maximum allowable hours of operation for the 250 MW Combined-Cycle Unit are 8,760 hours per year (continuous operation) while firing natural gas. No. 2 distillate fuel oil firing of the

combustion turbine is permitted for a maximum of 720 hours per year. [Rule 62-210.200(PTE), F.A.C. (Definitions - Potential Emissions); PSD-FL-254, Specific condition 16]

Control Technology

C.5. Dry Low NO_X (DLN) combustors are installed on the stationary combustion turbine to comply with the simple-cycle NO_X emissions limits listed in Specific Conditions **C.14.** and **C.15.** [Rules 62-4.070 and 62-212.400, F.A.C.; and PSD-FL-254, Specific Condition 18.]

C.6. A water injection system is installed for use when firing No. 2 or superior grade distillate fuel oil for control of NO_X emissions. [Rules 62-4.070 and 62-212.400, F.A.C.; and PSD-FL-254, Specific Condition 19.]

C.7. A selective catalytic reduction (SCR) system is installed to comply with the combined-cycle NO_X limit listed in Specific Condition **C.14.** [PSD-FL-254, Specific Condition 20.]

C.8. These units are designed to accommodate adequate testing and sampling locations for compliance with the applicable emission limits (per each unit) listed in Specific Conditions **C.12.** through **C.18.** [Rules 62-4.070 and 62-204.800, F.A.C.; 40 CFR60.40a(b); and PSD-FL-254, Specific Condition 21.]

C.9. The permittee provided manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems prior to their installation. DLN systems were tuned upon initial operation to optimize emissions reductions and shall be maintained to minimize simple-cycle NO_X emissions and CO emissions. If subsequent tuning is performed that changes the manufacturer's emissions performance versus load diagrams for the DLN and wet injection systems, new performance versus load diagrams shall be submitted to the compliance authority. [Rules 62-4.070, 62-210.650 and 62-213.440, F.A.C.; and PSD-FL-254, Specific Condition 22.]

C.10. Drift eliminators are installed on the cooling tower to reduce PM/PM_{10} emissions. [PSD-FL-254, Specific Condition 23.]

C.11. Selective Catalytic Reduction System (SCR) Compliance Procedures.

a. The SCR equipment shall operate at all times that the combustion turbine is operating in combined-cycle operation mode. The permittee shall, whenever possible, operate the facility in a manner so as to optimize the effectiveness of the SCR unit, while minimizing ammonia slip to below the emission limit.
b. The permittee shall operate an ammonia flow meter to measure and record the ammonia injection rate to the SCR system of the CT/HRSG set. The flow meter shall be maintained and calibrated according to the manufacture's specifications. During the required stack tests, the permittee at each load condition shall determine the minimum ammonia flow rate required to meet the emissions limitations. During NO_X CEMS downtimes or malfunctions, the permittee shall operate at greater or equal to 100% of the ammonia injection rate determined during the most recent stack test.

[PSD-FL-254, Specific Condition 52.]

Emission Limitations and Standards

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

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **C.12.** through **C.18.** are based on the specified averaging time of the applicable test method.

C.12. NSPS Requirements. In addition to the Specific Conditions listed below, these units shall also comply with the applicable requirements of the attached Appendix NSPS Dc, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units and Appendix NSPS GG, 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines. [PSD-FL-254]

C.13. Visible Emissions. VE emissions shall serve as a surrogate for PM/PM_{10} emissions from the combustion turbine operating with or without the duct burner, and shall not exceed 10 percent opacity from the stack in use. [Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.; and PSD-FL-254, Specific Condition 28.]

C.14. Allowable Emissions. The maximum allowable emissions for Unit 3 Combined-Cycle Gas Turbine, with Heat Recovery Steam Generator (HRSG) and duct burner, rated at 250 MW shall not exceed the emission limitations listed below:

Allowable Emissions					
Pollutant	**Fuel(s)**	**Hours per Year**	**Standard(s)**	**lb/hr**	**TPY**
VE	No 2 Oil or Natural Gas		10 percent opacity		
SO_2	No. 2 Fuel Oil	720	Maximum 0.05% sulfur by weight		38.1
	Natural Gas	8760	20 grains per 100 scf		
NO_X	No. 2 Fuel Oil	720	15 ppmvd	108	
	Natural Gas		3.5 ppmvd	26	
VOC	No. 2 Fuel Oil	720			
	(duct burner off)		10 ppm	21.4	
	(duct burner on)		10 ppm	21.4	
VOC	Natural Gas				
	(duct burner off)		1.4 ppm	3	
	(duct burner on)		4 ppm	8.5	
CO	No. 2 Fuel Oil burner	720			
	(duct burner off)		20 ppm	71	
	(duct burner on)		30 ppm	108	
CO	Natural Gas				
	(duct burner off)		12 ppm	43	
	(duct burner on)		20 ppm	71	

[Rule 62-212.400, F.A.C. and PSD-FL-254]

C.15. NO_X Emissions.

a. *Combined-Cycle Operation.*

(1) The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on gas and the duct burner on or off, shall not exceed 3.5 ppmvd @ 15% O_2 on a 3-hr block average. Compliance shall be determined by the continuous emission monitor (CEMS). Emissions of NO_X calculated as NO_2 in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 26 pounds per hour (lb/hr) with the duct burner on or off.

(2) The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil and the duct burner on or off, shall not exceed 15 ppmvd @ 15% O_2 on a 3-hr block average. Compliance shall be determined by the continuous emission monitor (CEMS). Emissions of NO_X calculated as NO_2 in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 108 pounds per hour (lb/hr) with the duct burner on or off.

(3) The concentration of ammonia in the exhaust gas from each combustion turbine shall not exceed 5 ppmvd @ 15% O_2. The compliance procedures are described in Specific Condition **C.11.**

(4) When NO_X monitoring data are not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.

b. *Intermittent Simple-Cycle Operation.*

(1) The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on gas shall not exceed 12 ppmvd at 15% O_2 (24-hr block average). Emissions of NO_X in the stack exhaust

gas (at ISO conditions) with the combustion turbine operating shall not exceed 86 pounds per hour (lb/hr).

(2) The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil shall not exceed 42 ppmvd at 15% O_2 (24-hr block average). Emissions of NO_X in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 310 pounds per hour (lb/hr).

(3) Notwithstanding the applicable NO_X limit during simple-cycle operation, reasonable measures shall be implemented to maintain the concentration of NO_X in the exhaust gas at 9 ppmvd at 15% O_2 or lower. Any tuning of the combustors for Dry Low NO_X operation while firing gas shall result in initial subsequent NO_X concentrations of 9 ppmvd @ 15% O_2 or lower.

(4) When NO_X monitoring data are not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.

c. *Continuous Simple-Cycle Operation.*

(1) The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on gas shall not exceed 9 ppmvd at 15% O_2 (24-hr block average). Emissions of NO_X in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 65 pounds per hour (lb/hr).

(2) The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil shall not exceed 42 ppmvd at 15% O_2 (24-hr block average). Emissions of NO_X in the stack exhaust gas (at ISO conditions) with the combustion turbine operating shall not exceed 310 pounds per hour (lb/hr).

(3) Notwithstanding the applicable NO_X limit during simple-cycle operation, reasonable measures shall be implemented to maintain the concentration of NO_X in the exhaust gas at 9 ppmvd at 15% O_2 or lower. Any tuning of the combustors for Dry Low NO_X operation while firing gas shall result in initial subsequent NO_X concentrations of 9 ppmvd @ 15% O_2 or lower.

(4) When NO_X monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.

[Rule 62-212.400, F.A.C. and PSD-FL-254, Specific Condition 24.]

C.16. Carbon Monoxide. Emissions of CO in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on gas (fuel oil) shall neither exceed 12 (20) ppm, nor exceed 43 (71) lb/hr, with the duct burner off, and neither exceed 20 (30) ppm, nor exceed 71 (108) lb/hr, with the duct burner on, to be demonstrated by stack test using EPA Method 10. [Rule 62-212.400, F.A.C.; and PSD-FL-254, Specific Condition 25.]

C.17. Volatile Organic Compounds. Emissions of VOC in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on gas (fuel oil) shall neither exceed 1.4 (10) ppm, nor exceed 3 (21.4) lb/hr, with the duct burner off, and neither exceed 4 (10) ppm, nor exceed 8.5 (21.4) lb/hr, with the duct burner on, to be demonstrated by *initial* stack test using EPA Method 18, 25 or 25A. No annual testing is required. [Rule 62-212.400, F.A.C.; and PSD-FL-254, Specific Condition 26.]

C.18. Sulfur Dioxide. SO_2 emissions shall be limited by firing pipeline natural gas (sulfur content less than 20 grains per 100 standard cubic foot), or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur, by weight, for no more than 720 hours per year. Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedule in Specific Conditions **C.25.** and **C.26.** will demonstrate compliance with the applicable NSPS SO_2 emissions limitations from the duct burner or the combustion turbine. Emissions of SO_2 shall not exceed 38.1 tons per year. [40 CFR 60 Subpart GG and Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C. to avoid PSD Review; and PSD-FL-254, Specific Condition 27.]

Excess Emissions

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

C.19. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period. During any calendar day in which a start-up or shutdown occurs with natural gas as the exclusively fired fuel, an alternative NO_X limit of 86 lb/hr (310 lb/hr if fuel oil is fired during the calendar day) on the basis of a 24-hour average shall apply. [Rule 62-210.700(1), F.A.C.; and PSD-FL-254, Specific Condition 29., as modified on November 26, 2002.]

C.20. 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 pursuant to Rule 62-210.700, F.A.C. These emissions shall be included in the 24-hr average for NO_X. [Rule 62-210.700(4), F.A.C.; and PSD-FL-254, Specific Condition 30.]

Continuous Monitoring Requirements

C.21. Continuous Monitoring System. The permittee shall calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the emissions of NO_X from these units. Periods when NO_X emissions (ppmvd @ 15% oxygen) are above the permitted limits, listed in Specific Conditions **C.14.** and **C.15.** (other than those allowed for in Specific Condition **C.19.**) shall be reported to the DEP Central District Office within one working day (verbally) followed up by a written explanation not later than three (3) working days (alternatively by facsimile within one working day). [Rules 62-204.800, 62-210.700, 62-4.130, 62-4.160(8), F.A.C.; 40 CFR 60.7 (1998 version); and PSD-FL-254, Specific Condition 44., as modified on November 26, 2002.]

C.22. CEMS for reporting excess emissions. The NO_X CEMS shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 version). Upon request from DEP, the CEMS emission rates for NO_X on the combustion turbine (CT) shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332. [EPA approval letter dated February 10, 1999; and PSD-FL-254, Specific Condition 45.]

C.23. CEMS in Lieu of Water to Fuel Ratio. The NO_X CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 version). Subject to EPA approval, the calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1998 version) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. Upon request from DEP, the CEMS emission rates for NO_X on this Unit shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332. [EPA Approval dated February 10, 1999; and PSD-FL-254, Specific Condition 46.]

C.24. Continuous Monitoring System Reports. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. [PSD-FL-254, Specific Condition 47.]

C.25. Natural Gas Monitoring Schedule. A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met:

a. The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 20 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).
b. Each unit shall be monitored for SO_2 emissions using methods consistent with the requirements of 40 CFR 75, and certified by the USEPA.

This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO_2 emissions must be accounted for as required pursuant to 40 CFR 75.11(d). [PSD-FL-254, Specific Condition 48.]

C.26. Fuel Oil Monitoring Schedule. The following monitoring schedule for No. 2 or superior grade fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at this facility an analysis which reports the sulfur content and nitrogen content of the fuel shall be provided by the fuel vendor. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d). [PSD-FL-254, Specific Condition 49.]

Test Methods and Procedures

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

C.27. Test Methods. 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
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25	Determination of Total Gaseous Nonmethane Organic Emissions as Carbon
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
26A	Ammonia Sample Collection
206	Ion Chromatographic Analysis for Ammonia
CTM-027	Conditional EPA Test Method 027, Measurement of Ammonia Slip (or equivalent method)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [62-297.401, F.A.C. and PSD-FL-254, Specific Condition 33.]

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

C.29. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), this EU shall be tested to demonstrate compliance with the emissions standards for VE, NO_X, CO. [Rule 62-297.310(7), F.A.C. and Permit No. 49-205703-AC (PSD-FL-182)]

C.30. Compliance Tests Prior To Renewal. Compliance tests shall be performed for VE, CO, VOC, NO_X, and ammonia once every 5 years. The tests shall occur prior to obtaining a renewed air operating permit in order to demonstrate compliance with the emission limits in Specific Conditions **C.12. – C.18.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Additional Compliance Test Requirements.

C.31. Continuous compliance with the NO_X emission limits. Continuous compliance with the NO_X emission limits shall be demonstrated with the CEM system on a 3-hr average basis (a 24-hour block average shall be used to demonstrate compliance with the NO_X limits when operating under Intermittent Simple-Cycle Operation or Continuous Simple-Cycle Operation). Based on CEMS data, a separate compliance determination is conducted at the end of each 3-hr period and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous 3-hr period. Valid hourly emission rates shall not include periods of start up, shutdown, or malfunction unless prohibited by 62-210.700, F.A.C. A valid hourly emission rate shall be calculated for each hour in which at least two NO_X concentrations are obtained at least 15 minutes apart. These excess emissions periods shall be reported as required in Specific Condition **C.38.** [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., 40 CFR 75; and PSD-FL-254, Specific Condition 34.]

C.32. Compliance with the SO_2 and PM/PM_{10} emission limits. Notwithstanding the requirements of Rule 62-297.310(7), F.A.C., the use of pipeline natural gas, is the method for determining compliance for SO_2 and PM_{10}. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1998 version). [PSD-FL-254, Specific Condition 35.]

{Permitting Note: If later or equivalent versions of the test methods specified in 40 CFR 60.335 or 40 CFR 75 Appendix D are available, they may be used in order to comply with the requirements of 40 CFR 60.333.}

C.33. Compliance with CO emission limit. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual RATA testing for the NO_X CEMS required pursuant to 40 CFR 75. As an alternative to annual testing in a given year, periodic tuning data shall be provided to demonstrate compliance in the year the tuning is conducted. [PSD-FL-254, Specific Condition 36.]

C.34. Compliance with VOC emission limit. The CO emissions limit is employed as a surrogate for VOC compliance. As long as the CO emissions limit is met, no annual VOC testing is required. [PSD-FL-254, Specific Condition 37.]

Recordkeeping and Reporting Requirements

C.35. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Excess Emissions	Semi-annually	C.37.
Excess Emissions - Malfunctions	Varied	C.38.

C.36. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

C.37. Semi-Annual Reports. Semi-annual excess emission reports, in accordance with 40 CFR 60.7(c), shall be submitted to the DEP's Central District Office. [PSD-FL-254, Specific Condition 14, in Section II.]

C.38. Excess Emissions Report - Malfunctions. If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify DEP's Central District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition **C.15.** [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; 40 CFR 60.7 (1998 version); and PSD-FL-254, Specific Condition 31.]

Subsection D. Emissions Unit 004

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

E.U. No.	Brief Description
004	No. 2 Distillate Fuel Oil Storage Tank (one million gallon)

This fuel storage unit, consisting of a 1.0 million gallon distillate fuel oil storage tank (Unit 004), shall comply with all applicable provisions of 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, adopted by reference in Rule 62-204.800, F.A.C. [PSD-FL-254, Specific Condition 5.]

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. This emissions unit is allowed to operate continuously (8,760 hours/year). [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Recordkeeping Requirements

D.2. The permittee shall maintain records on site for storage vessel identification number 004 to include the date of construction, the material storage capacity, and type of material stored for the life of this storage vessel. [40 CFR 60.116b(b).]

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

E.U. No.	Brief Description
009	Unit 4 is comprised of: a nominal 150 MW natural gas-fueled General Electric combustion turbine generator equipped with evaporative inlet air cooling equipment; a supplementary-fired HRSG with a nominal 600 MMBtu/hr DB; a HRSG stack; and a nominal 150 MW STG.

Unit 4 consists of: one nominal 150 megawatts (MW) General Electric 7241 FA combustion turbine-electrical generator (CTG) equipped with evaporative inlet air cooling equipment; a supplementary fired heat recovery steam generator (HRSG) with a nominal 600 MMBtu/hr natural gas fueled duct burners (DB); and a nominal 150 MW steam turbine generator (STG) for an overall nominal rating of 300 MW. This unit includes highly automated controls, described as the GE Mark VI (or more recent version) Gas Turbine Control System to fulfill all of the gas turbine control requirements. The stack height is 160 feet, exit diameter is 18 feet (±1 foot), stack exit temperature is 166 degrees Fahrenheit (°F) and volumetric flow rate is 1,047,783 actual cubic feet per minute (acfm).

Unit 4 uses only natural gas. Carbon monoxide (CO) and particulate matter ($PM/PM_{10}/PM_{2.5}$) emissions are minimized by the efficient combustion of the clean natural gas. Emissions of sulfuric acid mist (SAM) and sulfur dioxide (SO_2) are also minimized by the use of clean natural gas with a sulfur fuel specification less than 2 grains of sulfur per 100 standard cubic feet of natural gas (< 2 gr/100 SCF). Nitrogen oxide (NO_X) emissions are reduced with dry low-NO_X (DLN) combustion technology. In combination with these NO_X controls, a selective catalytic reduction (SCR) system further reduces NO_X emissions during combined cycle operation.

Unit 4 is required to continuously monitor NO_X emissions in accordance with the acid rain provisions. The same CEMS as well as CO CEMS are employed for demonstration of continuous compliance with certain Best Available Control Technology (BACT) determinations. Flue gas oxygen content or carbon dioxide content are monitored as a diluent gas.

Unit 4 is subject to the requirements of Phase II of the federal Acid Rain Program. This unit holds ORIS code 007238. This emissions unit is not subject to compliance assurance monitoring (CAM) because the NO_X CEMS is used for continuous compliance determination. Thus, no CAM plan is included in this permit for this unit. Unit 4 began commercial operation on July 12, 2011.

{*Permitting Note: This emissions unit and its auxiliary equipment were reviewed under the rules for the Prevention of Significant Deterioration (PSD), Rule 62-212.400, F.A.C. implemented through the issuance of the following permits: Permit No. 0970043-014-AC/PSD-FL-400, issued on September 5, 2008, and Permit No. 0970043-018-AC/PSD-FL-400A (minor revisions to permit No. 0970043-014-AC/PSD-FL-400), issued concurrently with this permit revision. Best Available Control Technology (BACT) determinations were made for nitrogen oxides (NO_X), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter ($PM/PM_{10}/PM_{2.5}$), sulfuric acid mist (SAM), and sulfur dioxide (SO_2)in accordance with Rule 62-210.200 (Definitions). This unit is also regulated under Acid Rain-Phase II and 40 CFR 60 - NSPS, Subpart KKKK. Because the existing facility is a major source of hazardous air pollutants (HAP), Unit 4 is potentially subject to 40 CFR63 - NESHAP, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. However, the applicability of this rule has been stayed for lean premix and diffusion flame gas-fired combustion turbines such as planned for this project.*}

Applicable Standards and Regulations

E.1. BACT Determinations. The emission unit addressed in this section is subject to a BACT determination for carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfuric acid mist (SAM), and sulfur dioxide (SO_2). [Rule 62-212.400, F.A.C. and Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.1.]

E.2. NSPS Requirements. The combustion turbine shall comply with all applicable requirements of 40 CFR 60, listed below, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Department determines that

compliance with the BACT emissions performance requirements also assures compliance with the NSPS for Subpart KKKK. Some separate reporting and monitoring may be required by these subparts.

a. Subpart A, General Provisions, including:
   (1) 40 CFR 60.7, Notification and Record Keeping
   (2) 40 CFR 60.8, Performance Tests
   (3) 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
   (4) 40 CFR 60.12, Circumvention
   (5) 40 CFR 60.13, Monitoring Requirements
   (6) 40 CFR 60.19, General Notification and Reporting Requirements
b. Subpart KKKK, Standards of Performance for Stationary Gas Turbines. These provisions include standards for combustion gas turbines and duct burners.

[40 CFR 60, Subpart A; 40 CFR 60, Subpart KKKK; and, Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.2.]

Equipment

E.3. CTG. The permittee shall, tune, operate, and maintain one natural gas-fueled GE Model 7FA CTG with a nominal generating capacity of 150 MW. The CTG will be equipped with Dry Low NO_X (DLN) combustors and an inlet air filtration system with evaporative coolers. The unit is equipped with the Speedtronic™ Mark VI (or more recent version) automated gas turbine control system. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.3.]

E.4. HRSG. The permittee shall operate and maintain one HRSG with a HRSG exhaust stack. The HRSG shall be designed to recover heat energy from the gas turbine and deliver steam to the steam turbine electrical generator with a nominal generating capacity of 150 MW. The HRSG will be equipped with a supplemental gas-fired DB having a nominal heat input rate of 600 MMBtu per hour (High Heating Value or HHV). [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.4.]

Control Technology

E.5. DLN Combustion. The permittee shall operate and maintain the GE DLN 2.6 combustion system (or more recent upgrade) to control NO_X emissions from the CTG. The system shall be maintained and tuned in accordance with the manufacturer's recommendations to achieve the permitted levels for CO and sufficiently low NO_X values to meet the NO_X limits with the additional SCR control technology described below. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.5.]

E.6. Selective Catalytic Reduction (SCR) System. The permittee shall tune, operate, and maintain an SCR system to control NO_X emissions from the CTG and DB. The SCR system consists of an ammonia (NH_3) 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 and NH_3 emissions. In accordance with 40 CFR 68.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A. 6.]

Performance Restrictions

E.7. Permitted Capacity.

a. CTG. The nominal heat input rating of the CTG is 1,900 MMBtu per hour based on a compressor inlet air temperature of 59° F, International Organization for Standardization (ISO) conditions, the higher heating value (HHV) of natural gas and 100% load. Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The permittee shall maintain manufacturer's performance curves (or equations) that correct for site conditions. 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. DB. The nominal heat input rating of the DB located within the HRSG is 600 MMBtu per hour based on the HHV of natural gas. Only natural gas shall be fired in the DB.

[Permit Nos. 0970043-014-AC/PSD-FL-400, Specific Conditions III.A.7. & 8., and 0970043-018-AC/PSD-FL-400A, Specific Condition 3]

E.8. 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.]

E.9. Authorized Fuel. The CTG turbine shall fire only natural gas, which shall contain no more than 2 grains (gr) of sulfur per 100 standard cubic feet (SCF) of natural gas. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.9.]

E.10. Methods of Operation. Subject to the restrictions and requirements of this permit, the gas turbine may operate under the following methods of operation:

a. *Combined Cycle Operation*. The CTG/HRSG system may operate to produce direct, shaft-driven electrical power and steam-generated electrical power from the steam turbine-electrical generator as a combined cycle unit subject to the restrictions of this permit. In accordance with the specifications of the SCR and HRSG manufacturers, the SCR system shall be on line and functioning properly during combined cycle operation or when the HRSG is producing steam.

b. *Pseudo Simple Cycle Operation*. The CTG/HRSG system may operate in a pseudo simple cycle mode whereby steam from the HRSG bypasses the steam turbine-electrical generator and is dumped directly to the condenser. The same emission limits apply as when operating in combined cycle mode.

c. *Evaporative Cooling*. Evaporative cooling is the injection of fine water droplets into the gas turbine compressor inlet air, which reduces the gas temperature through evaporative cooling. Lower compressor inlet temperatures result in a higher mass flow rate through the gas turbine with a boost in electrical power production. The emissions performance remains within the normal profile of the gas turbine for the lower compressor inlet temperatures. Evaporative cooling will be implemented at ambient temperatures of 60° F or higher.

d. *DB Firing*. The HRSG system may fire natural gas in the DB to provide additional steam-generated electrical power.

[Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.11.]

E.11. Hours of Operation. The CTG and the DB may operate throughout the year (8,760 hours per year). [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.9.]

Emission Limitations and Standards

E.12. Emission Standards. Emissions from the CTG/HRSG system shall not exceed the following standards:

Pollutant	Method of Operation	Annual Stack Test 3-Run Average		CEMS Average
		ppmvd @15% O_2	lb/hr [f]	ppmvd @ 15% O_2
CO [a]	CTG Normal	4.1	16.7	8.0, 24-hr block
	CTG & DB	7.6	40.8	6.0, 12-month rolling
NO_X [b]	CTG Normal	2.0	13.4	2.0, 24-hr block and 15, 30 days rolling [g]
	CTG & DB	2.0	17.6	
PM/PM_{10} [c]	All Modes	2 gr S/100 SCF of gas		
		Visible emissions shall not exceed 10% opacity for each 6-minute block average.		
SAM/SO_2 [d]	All Modes	2 gr S/100 SCF of gas		
Ammonia [e]	CTG, All Modes	5.0	NA	NA

a. Continuous compliance with the 24-hour CO standards shall be demonstrated based on data collected by the required continuous emissions monitoring system (CEMS). The annual EPA Method 10 tests

associated with the certification of the CEMS instruments shall also be used to demonstrate compliance with the individual standards for normal natural gas and the duct burner mode.

b. Continuous compliance with the 24-hr NO_X standards shall be demonstrated based on data collected by the required CEMS. The annual EPA Method 7E or Method 20 tests associated with demonstration of compliance with 40 CFR 60, Subpart KKKK or certification of the CEMS instruments shall also be used to demonstrate compliance with the individual standards for normal natural gas and duct burner modes during the time of those tests. NO_X mass emission rates are defined as oxides of nitrogen expressed as nitrogen dioxide (NO_2).

c. The sulfur fuel specification combined with the efficient combustion design and operation of the gas turbine represents BACT for PM/PM_{10} emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.

d. The fuel sulfur specification effectively limits the potential emissions of SAM and SO_2 from the CT. Compliance with the fuel sulfur specifications shall be determined by the ASTM methods for determination of fuel sulfur or by fuel supplier/vendor reports as detailed in Specific Condition **E.34.**

e. Compliance with the ammonia slip standard shall be demonstrated by conducting annual tests in accordance with EPA Method CTM-027 or EPA Method 320.

f. The mass emission rate standards are based on a turbine inlet condition of 59 °F, and may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.]

g. Compliance with the 40 CFR 60, NSPS, Subpart KKKK as described in 60.4380(b)(1).

[Permit Nos. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.12., and 0970043-018-AC/PSD-FL-400A, Specific Condition 4.]

Excess Emissions

*{Permitting Note: The following conditions apply only to the SIP-based emissions standards specified in Specific Condition **E.12.** of this section. Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS, or Acid Rain programs.}*

E.13. Operating Procedures. BACT determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and ensure maintenance of the CTG, DB, HRSG, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods for minimizing excess emissions. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.13.]

E.14. Definitions.

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. [Rule 62-210.200(245), F.A.C.]

b. *Shutdown* is the cessation of the operation of an emissions unit for any purpose. [Rule 62-210.200(230), F.A.C.]

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. [Rule 62-210.200(159), F.A.C.]

[Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.14.]

E.15. 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. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.15.]

E.16. Alternate Visible Emissions Standard. Visible emissions due to startups, shutdowns, and malfunctions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.16.]

E.17. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown, and documented malfunctions shall be permitted, provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. For the CTG/HRSG system, excess emissions of NO_X and CO emissions resulting from startup, shutdown, or documented malfunctions shall not exceed the following specified time periods in any 24-hour period (for the purposes of this condition, "any 24-hour period" means a calendar day, midnight to midnight).

a. *STG/HRSG System Cold Startup.* For cold startup of the STG/HRSG system, excess NO_X and CO emissions from the CTG/HRSG system shall not exceed six hours in any 24-hour period. A "cold startup of the STG/HRSG system" is defined as startup of the combined cycle system following a shutdown of the steam turbine lasting at least 48 hours.
{Permitting Note: During a cold startup of the steam turbine system, the CTG/HRSG system is brought on line at low load to gradually increase the temperature of the STG and prevent thermal metal fatigue.}

b. *STG/HRSG System Warm Startup.* For warm startup of the STG/HRSG system, excess NO_X and CO emissions shall not exceed four hours in any 24-hour period. A "warm startup of the STG/HRSG system" is defined as a startup of the combined cycle system following a shutdown of the steam turbine lasting at least 8 hours and less than 48 hours.

c. *STG/HRSG System Hot Startup*. For hot startup of the STG/HRSG system, excess NO_X and CO emissions shall not exceed two hours in any 24-hour period. A "hot startup of the STG/HRSG system" is defined as a startup of the combined cycle system following a shutdown of the steam turbine lasting less than 8 hours.

d. *Shutdown.* For shutdown of the combined cycle operation, excess NO_X and CO emissions from the CTG/HRSG system shall not exceed three hours in any 24-hour period.

e. *Documented Malfunction.* For the CTG/HSRG system, excess emissions of NO_X and CO resulting from documented malfunctions shall not exceed two hours in any 24-hour period. A "documented malfunction" means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail.

[Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.17.]

E.18. Ammonia Injection. Ammonia injection shall begin as soon as operation of the CTG/HRSG system achieves the operating parameters specified by the manufacturer. As authorized by Rule 62-210.700(5), F.A.C., the above condition allows excess emissions only for specifically defined periods of startup, shutdown, DLN tuning and documented malfunction of the CTG/HRSG system including the pollution control equipment. [Permit Nos. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.18., and 0970043-018-AC/PSD-FL-400A, Specific Condition 5.]

E.19. DLN Tuning. CEMS data collected during major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after a combustor change-out, a major repair or maintenance to a combustor, or circumstances as identified or requested by the equipment vendor. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least 14 days that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail. [Permit Nos. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.19., and 0970034-018-AC/PSD-FL-400A, Specific Condition 5.]

Monitoring of Operations

E.20. 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 and periodically update 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. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.27.]

E.21. Monitoring of Capacity. The permittee shall monitor and record the operating rate of the CTG and HRSG DB system on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat content of the natural gas in accordance with the provisions of 40 CFR 75, Appendix D. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.28.]

Continuous Monitoring Requirements

E.22. CEMS. The permittee shall calibrate, maintain, and operate CEMS to measure and record the emissions of CO and NO_X from the combined cycle gas turbine in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. Each monitoring system shall be calibrated, and properly functioning prior to conducting any tests. Within one working day of discovering emissions in excess of a CO or NO_X standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority.

a. *CO Monitor.* The CO monitor shall be properly operated and maintained in order to retain the certification 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, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The RATA tests required for the CO monitor 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, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The 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. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.25.]

E.23. CEMS Data Requirements.

a. *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. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be expressed as ppmvd corrected to 15% oxygen. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO_X as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Upon request by the Department, the CEMS emissions rates shall be corrected to ISO conditions.

b. *Valid Hour.* Hourly average values shall begin at the top of each hour. Each hourly average value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit

combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, the hourly average value is not valid. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly average values.

c. *24-Hour Block Averages*. A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of all available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, the missing data substitution methodology of 40 CFR Part 75, Subpart D, shall not be utilized. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. [Rule 62-212.400(BACT), F.A.C.]
{Permitting Note: There may be more than one 24-hour compliance demonstration required for CO and NO_X emissions depending on the use of alternate methods of operation.}

d. *12-Month Rolling Averages.* Compliance with the long-term emission limit for CO shall be based on a 12-month rolling average. Each 12-month rolling average shall be the arithmetic average of all valid hourly averages collected during the current calendar month and the previous 11 calendar months.

e. *30 Unit Operating Day Rolling Average.* Compliance with this rolling average is as described in 40 CFR 60.4380(b)(1). (See Appendix NSPS KKKK, 40 CFR 60, Subpart KKKK - Requirements for Gas Turbines and Duct Burners.)

f. *Data Exclusion.* Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction and DLN tuning. Some of the CEMS emissions data recorded during these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of Specific Conditions. **E.15.** and **E.17.** All periods of data excluded shall be consecutive for each such episode and only data obtained during the described episodes (startup, shutdown, malfunction, DLN tuning) may be used for the appropriate exclusion periods. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable. Data recorded during such episodes shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during such episodes. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

g. *Availability*. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. The quarterly excess emissions report shall be used to demonstrate monitor availability. In the event 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 Department's Compliance Authority.

[Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.26.]

Emissions Performance Testing

E.24. Test Methods. 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
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source. {Notes: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}
or	
320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train. The ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps.}
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A; and, Permit Nos. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.20.]

E.25. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

E.26. Annual Compliance Tests. During each federal fiscal year (October 1st, to September 30th), the CTG shall be tested to demonstrate compliance with the emission standard for visible emissions and ammonia slip. NO_X and CO emissions data collected during the required continuous monitor RATA may be used to demonstrate compliance with the CO and NO_X standards. NO_X emissions recorded by the CEMS shall be reported for each ammonia slip test run. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period. [Rules 62-212.400 (BACT) and 62-297.310(7)(a)4, F.A.C.; and, Permit Nos. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.22., and 0970034-018-AC/PSD-FL-400A, Specific Condition 6.]

E.27. Additional Compliance Determinations. The Department may, for good reason, require the permittee to conduct additional tests after major replacement or major repair of any air pollution control equipment, such as the SCR catalyst, DLN combustors, etc. The CTG shall be stack tested to demonstrate compliance with the emission standards for CO, NO_X, visible emissions, and ammonia slip. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after restarting the unit. The unit shall be tested when firing natural gas and when using the duct burners. For each run during tests for visible emissions and ammonia slip, emissions of CO and NO_X recorded by the CEMS shall also be reported. NO_X and CO emissions data collected during the required continuous monitor Relative Accuracy Test Audits (RATAs) may be used to demonstrate ~~initial~~ compliance with the CO and NO_X standards. With appropriate flow measurements (or fuel measurements and approved F-factors), CEMS data may be used to demonstrate compliance with the CO and NO_X mass rate emissions standards. [Rule 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8; and, Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.21.]

E.28. Continuous Compliance. The permittee shall demonstrate continuous compliance with the 24-hour block and 12-month rolling average CO emissions standards and with the 24-hour block and 30 unit operating day rolling average NO_X emission standards based on data collected by the certified CEMS for each pollutant. Within 45 days of conducting any RATA on a CEMS, the permittee shall submit a report to the Compliance Authority summarizing results of the RATA. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of particulate matter. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.23.]

E.29. Compliance for SAM, SO_2 and PM/PM_{10}. In stack compliance testing is not required for SAM, SO_2 and PM/PM_{10}. Compliance with the limits and control requirements for SAM, SO_2 and PM/PM_{10} is based on the recordkeeping required in Specific Condition **E.34.**, visible emissions testing and CO continuous monitoring. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.24.]

Recordkeeping and Reporting Requirements

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

Report	Reporting Deadline	Related Condition
Excess Emissions Reporting.	1 day, quarterly, semi-annually	**E.32.**

[Rule 62-213.440, F.A.C.]

E.31. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

E.32. Excess Emissions Reporting.

a. *Malfunction Notification.* If emissions in excess of a standard (subject to the specified averaging period) 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.

b. *SIP Quarterly Permit Limits Excess Emissions Report.* Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of CO and NO_X emissions in excess of the BACT permit standards 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. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter.

c. *NSPS Semi-Annual Excess Emissions Reports*. 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 period to the Compliance Authority. *{Note: If there are no periods of excess emissions as defined in NSPS Subpart KKKK, a statement to that effect may be submitted with the SIP Quarterly Report to suffice for the NSPS Semi-Annual Report.}*

[Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; 40 CFR 60.7 and 60.332(j)(1); and, Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.32.]

E.33. Monthly Operations Summary. By the fifth calendar day of each month, the permittee shall record the following for the natural gas fuel in a written or electronic log for the gas turbine for the previous month of operation: fuel consumption, hours of operation, hours of duct firing, and the updated 12-month rolling totals for each. 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. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75, Appendix D. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.29.]

E.34. Fuel Sulfur Records. The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D4468-85, D5504-01, D6228-98 and D6667-01, D3246-81 or more recent versions. These methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.A.30.]

Subsection F. Emissions Unit 010

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

E.U. No.	Brief Description
010	Emergency fire pump diesel engine and ULSD Fuel Oil storage tank.

This emissions unit consists of diesel engine driven fire pump with a rating less than 300 horsepower (hp) and an associated nominal 500 gallon ULSD Fuel Oil storage tank that serves Unit 4. It is subject to 40 CFR 63, Subpart ZZZZ, National Emission Standards for Reciprocating Internal Combustion Engines, as a major source of hazardous air pollutants which meets/exceeds the emission standards in Table 4 of 40 CFR 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. This unit commenced operation on July 12, 2011.

The following table provides important details for this emissions unit:

Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Engine Configuration #
220	12/1/2008	2008	Diesel	Emergency Fire Pump	1.6	D313001CX03

{Permitting Note: This compression ignition (CI) reciprocating internal combustion engine (RICE) is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. and 40 CFR 60, Subpart IIII, NSPS. This RICE is used for fire pump service. This permit section addresses a fire pump engine manufactured as a certified National Fire Protection Association (NFPA) fire pump after July 1, 2006. This emissions unit was reviewed under the rules for the Prevention of Significant Deterioration (PSD), Rule 62-212.400, F.A.C. This unit is regulated under Rule 62-04.070 (3), and Rule 62-212.400, F.A.C.}

Equipment Specifications

F.1. Equipment. The permittee is authorized to operate, and maintain one model year 2009 (or later) fire pump diesel engine with a rating less than 300 horsepower (hp) and an associated nominal 500 gallon ULSD Fuel Oil storage tank. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.B.2.]

{Permitting Note: The emergency fire pump engine which was installed was manufactured in 2008, rather than 2009, or later as specified. However, it is certified to EPA Tier 3 emission limits for stationary non-road engines, which are more stringent than the limits imposed in Permit No. 0970043-014-AC/PSD-FL-400.}

Essential Potential to Emit (PTE) Parameters

F.2. Hours of Operation.

a. *Pursuant to PSD.* The fire pump may operate in response to emergency conditions and 80 non-emergency hours per year for maintenance testing.

b. *Pursuant to NSPS.*

(1) Emergency Situations. There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) Maintenance and Testing. This unit 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 the unit is limited to 100 hours per year.

(3) Non-emergency Situations. This engine 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 60.4211(f) and Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.B.3.]

F.3. Authorized Fuel. This unit shall fire ULSD FO (or superior fuel) that meets the following requirements:
a. *Sulfur Content.* The sulfur content shall not exceed 15 parts per million (ppm).
b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

The permittee shall maintain a file of the certified fuel sulfur analyses from the fuel vendor containing the most recent 5 years of records. [40 CFR 60.4207(b) and 80.510(b); and, Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.B.4.]

Control Technology

F.4. Manufacturer's Requirements. The owner shall operate and maintain the engine and controls according to the manufacturer's emission-related written instructions. [40 CFR 60.4211(a)(1)]

Emission Limitations and Standards

F.5. Emissions Limits: The following emissions limits must be met over the entire life of the engine:
a. *Pursuant to PSD.*
(1) Carbon Monoxide (CO). CO emissions shall not exceed 2.6 grams per brake horsepower-hour (gm/bhp-hr).
(2) Sulfur Dioxide (SO_2). ULSD fuel oil.
(3) Non-Methane Hydrocarbons (NMHC) + Nitrogen Oxides (NO_X). NMHC + NO_X emissions shall not exceed 3.0 gm/bhp-hr. Note: Non-Methane Hydrocarbons (NMHC) are surrogate for VOC.
(4) Particulate Matter (PM). PM emissions shall not exceed 0.15 gm/bhp-hr.
b. *Pursuant to NSPS.*
(1) NMHC + NO_X shall not exceed 10.5 grams/kW-hr (7.8 grams/HP-hr).
(2) CO shall not exceed 3.5 grams/KW-hr (2.6 grams/HP-hr).
(3) PM shall not exceed 0.54 grams/kW-hr (0.40 grams/HP-hr).

[40 CFR 60.4203, 40 CFR 60.4205(c) & 40 CFR 60 Subpart IIII, Table 4; and, Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.B.5.]

{Permitting Note: The EPA Tier 3 emission limits for stationary non-road engines impose the following limits: CO – 1.19 grams/HP-hr, NMOC+NO_X – 0.28 grams/HP-hr, and PM – 0.13 grams/HP-hr. Because this engine is certified to EPA Tier 3 emission limits for stationary non-road engines, compliance with both the PSD and the NSPS, Subpart III limits is assured.}

Test Methods and Procedures

F.6. Compliance, Testing and Certification Requirements. The permittee shall adhere to the compliance testing and certification requirements listed in 40 CFR 60.4211 and maintain records demonstrating use of ULSD FO. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.B.6.]

F.7. Compliance. Compliance with the emissions limits in Specific Condition **F.5.** is met by purchasing an engine certified by the manufacturer to meet the emission standards specified in 40 CFR 60.4205(c). [40 CFR 60.4211(c)]

{Permitting Note: The emergency fire pump engine installed meets the more stringent limitations of EPA Tier 3 emission standards for stationary non road engines.}

General Provisions

F.8. NSPS Subpart A Requirements. The owner or operator must comply with the general provisions in 40 CFR 60 Subpart A (except 40 CFR 60.11) contained in Appendix NSPS Subpart A – General Provisions. [40 CFR 60.4218]

Subsection G. Emissions Unit 011

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

E.U. No.	Brief Description
011	Diesel electric generator for safe shutdown of Unit 4 and ULSD FO storage tank.

This emissions unit consists of a 750 kilowatts (kW) diesel-powered emergency generator and a 1,000 gallon ultra low sulfur diesel (ULSD) fuel oil tank that serves Unit 4. This unit is used to supply power when needed for the safe shutdown of Unit 4. The engine is a Cummins 4 cycle, 12 cylinder turbocharged and intercooled diesel engine which uses ultra-low sulfur diesel fuel oil. The engine has a nameplate rating of 1,490 horsepower (HP). This unit commenced operation on July 12, 2011.

{*Permitting Note: This emissions unit was reviewed under the rules for the Prevention of Significant Deterioration (PSD), Rule 62-212.400, F.A.C. This unit is regulated under Rule 62-04.070 (3), and Rule 62-212.400, F.A.C.*}

The following table provides important details for this emissions unit:

Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Serial #	Date of last mod. or reconst.
1,490	11/01/2007	2007	Diesel	Emergency	2.5	37241875	N/A

{Permitting Note: This compression ignition (CI) engine, is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. and 40 CFR 60, Subpart IIII, NSPS. This RICE is not used for fire pumps.}

Equipment Specifications

G.1. Equipment. The permittee is authorized to operate and maintain a nominal 750 kW diesel electric generator and an associated nominal 1,000 gallon ULSD FO storage tank. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.C.3.]

Essential Potential to Emit (PTE) Parameters

G.2. Allowable Fuel. The Stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content.* The sulfur content shall not exceed = 15 ppm = 0.0015% weight.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

The permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.C.5.]

G.3. Hours of Operation.

a. *Pursuant to PSD.* The safe shutdown generator may operate as needed with 200 non-emergency hours per year for maintenance testing. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.C.4.]

{Permitting Note: In order to meet the newer federal definition of an emergency, the applicant has elected to comply with the more restrictive hours of operation imposed by NSPS Subpart IIII.}

b. *Pursuant to NSPS.*

(1) *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)]

(2) *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 60.4211(f)]

(3) *Other Situations*. Each RICE 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. [40 CFR 60.4219]

(4) *Non-emergency operation time limits*. Emergency stationary RICE may 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, any operation above the 100 hours/year permitted in this section is prohibited. [40 CFR 60.4211(f)]

Emission Limitations and Standards

G.4. BACT Emissions Limits. The Safe Shutdown Generator shall not exceed the following BACT Emissions Limits in gm/bhp-hr and (gm/kW-hr).

a. NMHC + NO_X Emissions. Non-Methane Hydrocarbons and Nitrogen oxide emissions shall not exceed 4.8 gm/bhp (6.4 g/KW-hr). Note: Non-Methane Hydrocarbons (NMHC) are surrogate for VOC. [40 CFR 60.4205(b)]

b. CO Emissions. Carbon monoxide emissions shall not exceed 2.6 gm/bhp (3.5 g/KW-hr). [40 CFR 60.4205(b)]

c. PM emissions. Particulate matter emissions shall not exceed 0.15 gm/bhp (0.2 g/KW-hr). [40 CFR 60.4205(b)]

[40 CFR 60.4205(b) and Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.C.6.]

{Permitting Note: The NMHC+NO_X and PM BACT limits are equal to the values corresponding to the size class indicated above and cited in 40 CFR 60, Subpart IIII.}

G.5. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)]

Compliance

G.6. Compliance, Testing and Certification Requirements. The owner or operator must demonstrate compliance according to one of the methods below:

a. *Testing*. The permittee shall adhere to the compliance testing and certification requirements listed in 40 CFR 60.4211 and maintain records demonstrating use of ULSD FO.

b. *Certification*. Have purchased an engine certified according to 40 CFR Part 89 or Part 94, as applicable, for the same model year and maximum engine power.

[40 CFR 60.4211(b) and Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.C.7.]

General Provisions

G.7. NSPS Subpart Requirements. The owner or operator must comply with the general provisions in 40 CFR 60 Subpart A. [40 CFR 60.4218]

Subsection H. Emissions Unit 012

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

E.U. No.	Brief Description
012	Unit 4 Cooling Tower – consisting of eight cells with eight individual exhaust fans

This emissions unit is a eight-cell mechanical draft cooling tower, equipped with drift eliminators, that serves Unit 4. This unit commenced operation on July 12, 2011.

{*Permitting Note: This emissions unit was reviewed under the rules for the Prevention of Significant Deterioration (PSD), Rule 62-212.400, F.A.C. This unit is regulated under Rule 62-04.070 (3), and Rule 62-212.400, F.A.C.}*

Equipment

H.1. Cooling Tower. The permittee is authorized to operate one 8-cell linear mechanical draft cooling tower with the following nominal design characteristics: an air volumetric flow rate of 1,004,800 actual cubic feet per minute per cell; cell height of 56 feet; cell diameter of 30 feet; and drift eliminators with a drift rate of no more than 0.0005 percent of the circulating water flow. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.D.1.]

Emissions and Performance Requirements

H.2. Drift Rate. The permittee shall maintain the cooling tower to achieve the specified design drift rate of no more than 0.0005 percent of the circulating water flow rate. [Permit No. 0970043-014-AC/PSD-FL-400, Specific Condition III.D.2.]

{Permitting Note: This work practice standard is established as BACT for PM/PM_{10} emissions from the cooling tower. Based on this design criteria, potential emissions are expected to be less than 3 tons of PM/PM_{10} per year.}

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

Operated by: Kissimmee Utility Authority
Plant: Cane Island Power Park
ORIS Code: 007238

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

EU No.	EPA Unit ID#	Brief Description
001	001	40 MW Simple Cycle Combustion Turbine
002	002	120 MW Combined Cycle Combustion Turbine
003	003	250 MW Combined Cycle Combustion Turbine with Duct burner
009	009	300 MW Combined Cycle Combustion Turbine with Duct burner

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 listed below:

DEP Form No. 62-210.900(1)(a), dated 05/01/2009, received 05/14/2009.

[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: None.

Acid Rain Part Application

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

This submission is: ☐ New ■ Revised ☐ Renewal

STEP 1

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

name	Plant	State	ORIS/Plant Code
Cane Island Power Park		FL	7328

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

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

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

a	b	c	d	e
Unit ID#	SO_2 Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO_2 Opt-in Units Commence Operation Date	New or SO_2 Opt-in Units Monitor Certification Deadline
**1	No	Yes		
2	No	Yes		
3	No	Yes		
4	No	Yes	2/7/2011	8/6/2011
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

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Effective: 3/16/08

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Cane Island Power Park Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Cane Island Power Park
Plant Name (from STEP 1)

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

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

Effect on Other Authorities.

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

STEP 4
For SO_2 Opt-in units only.

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

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

In column "h" enter the hours.

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

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Cane Island Power Park
Plant Name (from STEP 1)

STEP 5

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

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

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

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

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 N/A	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.

Larry Mattern Name	Vice President of Power Supply Title
Kissimmee Utility Authority Owner Company Name	
(407)933-7777 Phone	lmattern@kua.com E-mail address
Signature Larry Mattern	Date 7/29/2011

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SECTION V. CAIR PART.

Clean Air Interstate Rule (CAIR) Provisions

Operated by: Kissimmee Utility Authority
Plant: Cane Island Power Park
ORIS Code: 007238

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

EU No.	EPA Unit ID#	Brief Description
001	001	40 MW Simple Cycle Combustion Turbine
002	002	120 MW Combined Cycle Combustion Turbine
003	003	250 MW Combined Cycle Combustion Turbine with Duct burner
009	009	300 MW Combined Cycle Combustion Turbine with Duct burner

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 May 1, 2009, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

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: Florida	ORIS or EIA Plant Code:
Cane Island Power Park		7238

STEP 2

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

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

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

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO_X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO_2) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO_X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
**1	X	X	X		
2	X	X	X		
3	X	X	X		
4	X	X	X	2/7/2011	8/6/2011

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Effective: 3/16/08

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Cane Island Power Park

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.

Cane Island Power Park
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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.

Cane Island Power Park
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.

Cane Island Power Park
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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.

Larry Mattern Name	Vice President of Power Supply Title
Kissimmee Utility Authority Company Owner Name	
(407) 933-7777 Phone	lmattern@kua.com E-mail Address
Signature Larry Mattern	Date 7/29/2011

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

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SECTION VI. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.

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

Appendix NESHAP YYYY, 40 CFR 63, Subpart YYYY - Requirements for Gas Turbines.

Appendix NSPS A, 40 CFR 60, Subpart A – General Conditions.

Appendix NSPS Dc, 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

Appendix NSPS GG, 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines.

Appendix NSPS KKKK, 40 CFR 60, Subpart KKKK - Requirements for Gas Turbines and Duct Burners.

Appendix RR, Facility-wide Reporting Requirements (Version dated 1-5-11).

Appendix TR, Facility-wide Testing Requirements.

Appendix TV, Title V General Conditions (Version dated 11-1-10).

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

Appendix XS, Semiannual NSPS Excess Emissions Report.