Orlando CoGen Limited, L.P.

Facility ID No. 0950203

Orange County

Title V Air Operation Permit Renewal

Final Permit No. 0950203-009-AV

(Renewal of Title V Air Operation Permit No. 0950203-002-AV)

Permitting Authority

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Permitting Section

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Title V Air Operation Permit Renewal

Permit No. 0950203-009-AV

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PERMITTEE:
Orlando CoGen Limited, L.P.
8275 Exchange Drive
Orlando, Florida 32809-7651

Permit No. 0950203-009-AV
Orlando CoGen
Facility ID No. 0950203
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit and to incorporate construction permit 0950203-007-AC into the operation permit for the above referenced facility. The existing Orlando CoGen facility is located at 8275 Exchange Drive, Orlando, Orange County. UTM Coordinates are: Zone 17, 459.5 East (km), 3,146.1 North (km). Latitude is: 28° 26′ 23"; and, Longitude is: 81° 24′ 28".

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 shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2009
Renewal Application Due Date: May 20, 2013
Expiration Date: December 31, 2013

_____
Joseph Kahn, Director
Division of Air Resource Management

JK/tlv/jh/srm

Subsection A. Facility Description.

This facility consists of one 86.8 MW combustion turbine (CT) and one heat recovery steam generator (HRSG) equipped with one duct burner system. The HSRG powers a nominal 50 MW steam turbine (ST). Ancillary equipment includes one four-cell mechanical draft fresh water cooling tower, a chiller unit and a natural gas fired 150kW emergency generator (exempt from permitting). The facility's nominal output for the combined cycle unit including the CT and ST is 136.8 megawatts (MW). This facility utilizes natural gas as its only fuel.

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

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Combustion Turbine (CT)
002	Heat Recovery Steam Generator (HRSG) and Duct Burner (DB) System
Unregulated Emissions Units and Activities	
003	Emergency Generator

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Permit Renewal application received July 7, 2008, this facility is not a major source of hazardous air pollutants (HAPs). This facility is classified as a PSD major facility. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 002
40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines	001, 002
40 CFR 75 Acid Rain Monitoring Provisions	001, 002

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

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

Emissions and Controls

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

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

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

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 roads, parking areas, and yards;
b. Landscaping or planting of vegetation;
c. Confining abrasive blasting where possible; and,
d. Other techniques, as necessary

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received July 7, 2008]

Annual Reports and Fees

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

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

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

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

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

a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 1515, Lanham-Seabrook, MD 20703-1515, Telephone: 301/429-5018.

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

[40 CFR 68]

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

Subsection A. Emissions Unit 001

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

EU No.	Brief Description
001	Combustion Turbine (CT)

The combined cycle CT is an upgraded Alstom Model GT 11NMC (Permit No. 0950203-007-AC) with a nameplate rating of 86.8 MW at ISO conditions. The CT is allowed to burn only natural gas. The CT is equipped with dry low nitrogen oxides (NO_X) (DLN) combustors to control NO_X emissions. A continuous emissions monitoring system (CEMS) is utilized for NO_X. The CT began commercial operation on September 25, 1993. Stack height = 115 feet, exit diameter = 15.7 feet, exit temperature = 240 ºF, actual volumetric flow rate = 668,145 acfm.

{Permitting notes: The emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated August 17, 1992.}

Essential Potential to Emit (PTE) Parameters

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

Unit No.	Heat Input [based on the low heating value (LHV) of fuel at ISO conditions]	Fuel Type
EU001	980 MMBtu/hr	Natural Gas

[Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-296.405, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-214.330, F.A.C.; and, Permit No. 0950203-007-AC]

A.2. Hours of Operation. These emissions units may operate continuously (8760 hours/year). [Rule 62-210.200(Definitions - PTE), F.A.C., Permit No. AC48-206720 (PSD-FL-184)]

Control Technology

A.3. Control Equipment. DLN combustors shall be installed and maintained on the combustion turbine to control NO_X emissions. [AC48-20670 (PSD-FL-184), BACT determination dated August 17, 1992]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **A.4. - A.9**. is based on the specified averaging time of the applicable test method.

A.4. Nitrogen Oxides (NO_X). NO_X emissions shall not exceed 15 ppmvd @ 15% O_2 [63.1 lbs/hr (24 hr rolling average); 251.4 TPY]. (See also Subsection C. Common Conditions, Specific Condition **C.5.)** [Permit Nos. 0950203-007-AC and AC48-206720 (PSD-FL-184); BACT Determination, dated August 17, 1992; and, 40 CFR 60.4320]

A.5. Carbon Monoxide (CO). CO emissions shall not exceed 10 ppmvd (22.3 lbs/hr; 92.1 TPY). [AC48-206720 (PSD-FL-184); and, BACT Determination, dated August 17, 1992]

A.6. Particulate Matter (PM/PM_{10}). PM/PM_{10} emissions shall not exceed 0.01 lb/MMBtu (9.9 lbs/hr; 43.3 TPY). [BACT Determination, dated August 17, 1992; Permit No. 0950203-007-AC]

A.7. Volatile Organic Compounds (VOC). VOC emissions shall not exceed 3.3 lbs/hr; 14.3 TPY. [BACT Determination, dated August 17, 1992; Permit No. 0950203-007-AC]

A.8. Visible Emissions (VE). VE from the CT shall not exceed 10% opacity. [Permit No. AC48-206720 (PSD-FL-184)]

A.9. Sulfur Dioxide (SO_2). See Subsection C. Common Conditions, Specific Condition **C.6.**

Excess Emissions

See Subsection C. Common Conditions.

Continuous Monitoring Requirements

See Subsection C. Common Conditions.

Test Methods and Procedures

See Subsection C. Common Conditions for additional test methods and procedures requirements.

A.10. Operating Capacity During Testing. Testing of emissions shall be conducted with the source operating at capacity, as defined below. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. 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. Permitted capacity is defined as 90-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. [Rules 62-297.31092), F.A.C. and 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

See Subsection C. Common Conditions.

Other Requirements

A.11. This emissions unit is also subject to conditions **C.1.** through **C.26.** contained in **Subsection C. Common Conditions**.

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

EU No.	Brief Description
002	Heat Recovery Steam Generator (HRSG) and Duct Burner (DB) System

The HRSG accepts exhaust from the CT. The HSRG powers a nominal 50 MW steam turbine (ST). The transition duct from the CT to the HRSG contains DBs manufactured by COEN Company Incorporated. The DB system is allowed to burn only natural gas. The emissions from the DB system are uncontrolled. The HRSG-DB System began commercial operation on September 25, 1993. The DB system shares a common stack with the CT. Stack height = 115 feet, exit diameter = 15.7 feet, exit temperature = 240 ºF, actual volumetric flow rate = 731.91 acfm.

{Permitting notes: The emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, adopted and incorporated by reference in Rule 62-204.800(8), F.A.C.; Rule 62-212.400(6), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated August 17, 1992.}

Essential Potential to Emit (PTE) Parameters

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

Unit No.	Heat Input [based on the low heating value (LHV) of fuel]		Fuel Type
002	122.0 MMBtu/hr	450,000 MMBtu/yr	Natural Gas

[Rules 62-4.160(2), F.A.C., 62-204.800, F.A.C., 62-296.405, F.A.C., 62-210.200(Definitions - PTE), F.A.C., 62-214.330, F.A.C.; and, Permit No. AC48-206720 (PSD-FL-184)]

B.2. Hours of Operation. The hours of operation for the DB shall not exceed 3,688 hours/year at maximum heat input (Note: The DB, however, may operate at lower heat input rates for more hours, up to 8,760, within the annual heat input limit). [Rule 62-210.200(Definitions - PTE), F.A.C., Permit No. AC48-206720 (PSD-FL-184).]

{Permitting Note: DB operation planned when ambient temperature is greater than 59 °F.}

Emission Limitations and Standards

B.3. Nitrogen Oxides (NO_X). NO_X emissions shall not exceed 0.1 lb/MMBtu, [12.2 lb/hr (24-hour rolling average); 22.5 TPY]. (See also Subsection C. Common Conditions, Specific Condition **C.5.)** [Permit No. AC48-206720 (PSD-FL-184); BACT Determination dated August 17, 1992.]

{Permitting Note: Continuous compliance with the NO_X emission limits is being demonstrated through the use of the continuous emissions monitor that is required in Specific Condition **C.13**.}

B.4. Carbon Monoxide (CO). CO emissions shall not exceed 0.1 lb/MMBtu (12.2 lb/hr; 22.5 TPY). [Permit No. AC48-206720 (PSD-FL-184); BACT Determination dated August 17, 1992.]

B.5. Particulate Matter (PM/PM_{10}). PM/PM_{10} emissions shall not exceed 0.01 lb/MMBtu (1.2 lb/hr; 2.2 TPY). [Permit No. AC48-206720 (PSD-FL-184); BACT Determination dated August 17, 1992.]

B.6. Volatile Organic Compounds (VOCs). VOC emissions shall not exceed 3.7 lb/hr; 6.8 TPY. [Permit No. AC48-206720 (PSD-FL-184).]

B.7. Visible Emissions (VE). VE from the DB shall not exceed 10% opacity. [Permit No. AC48-206720 (PSD-FL-184).]

B.8. Sulfur Dioxide (SO_2). See Subsection C. Common Conditions, Specific Condition **C.6.**

Excess Emissions

See Subsection C. Common Conditions.

Test Methods and Procedures

See Subsection C. Common Conditions.

Recordkeeping and Reporting Requirements

See Subsection C. Common Conditions.

Common Conditions

B.9. This emissions unit is also subject to conditions **C.1.** through **C.26.** contained in **Subsection C. Common Conditions**.

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

EU No.	Brief Description
001	Combustion Turbine (CT)
002	Heat Recovery Steam Generator (HRSG) and Duct Burner (DB) System

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

General

C.1. Definitions. For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR 60 shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

C.2. Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]

Essential Potential to Emit (PTE) Parameters

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

C.4. Methods of Operation. Natural gas shall only be burned in these units. The burning of other fuels shall require review, public notice, and approval by the Department through the pre-construction process. [Rules 62-213.410, F.A.C. and 62-210.200, F.A.C.; Applicant's request in Title V permit renewal application received July 7, 2008; and, Permit No. AC48-206720 (PSD-FL-184)]

Emission Limitations and Standards

C.5. Nitrogen Oxides (NO_X). When both the CT and DB are operating, NO_X emissions shall not exceed 15 ppmvd (30 unit day rolling average) @ 15% O_2 .[Permit No. 0950203-007-AC; and, BACT Determination dated August 17, 1992; 40 CFR 60.4320]

{Permitting Note: Continuous compliance with the NO_X emission limits is being demonstrated through the use of the continuous emissions monitor that is required in Specific Condition **C.13**.}

C.6. Sulfur Dioxide (SO_2). The owner or operator must not discharge into the atmosphere for the CT any gases which contain SO_2 in excess of 0.90 pounds per megawatt-hour (lb/MWh) [(110 nanograms per Joule (ng/J)] gross output. The owner or operator must not burn in the CT any fuel which contains total potential sulfur emissions in excess of 0.060 pounds SO_2 per MMBtu (26 ng SO_2/J) heat input. [Permit No. 0950203-007-AC, 40 CFR 60.4330]

Emissions Controls

C.7. Combustion Control. Combustion control shall be utilized for CO control. The permittee shall have designed the facility to allow for future installation of an oxidation catalyst. Once the performance testing has been completed, the decision to require an oxidation catalyst will be based on a cost/benefit analysis of using such control. [Permit No. AC48-206720 (PSD-FL-184)]

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

C.9. Preventable Excess Emissions. 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.]

C.10. NO_X Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.4380. For purposes of identifying excess emissions from CEMS, CEMS data shall meet the criteria according to 40 CFR 60.4350. [40 CFR 4380, 40 CFR 4350, Permit No. 0950203-007-AC]

C.11. SO_2 Excess Emissions. Excess emissions and monitor downtime that must be reported shall be defined as described in 40 CFR 60.4385. [Permit No. 0950203-007-AC, 40 CFR 60.4385]

C.12. CEMS Data Exclusion – DLN Tuning. CEMS data collected during initial or other 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 completion of initial construction, a combustor change-out, a major repair or major maintenance to a combustor. Prior to performing any major tuning session, the permittee shall provide the Department's Central District Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal or electronic mail. [Rule 62-4.070(3), F.A.C., Applicant's Request dated July 7, 2008]

{Permitting Note: The addition of the requested Specific Condition **C.12.** is limited to the duration of this permit and will expire on December 31, 2013. If the company desires to make this a permanent condition, an air construction permit revision will be required at some point. Otherwise, this condition will need to be specifically requested and approved with each future Title V permit renewal.}

Continuous Monitoring Requirements

C.13. Continuous Emissions Monitor (CEM). The permittee shall calibrate, maintain and operate a CEM in the stack to measure and record the NO_X emissions from this source. The CEM must comply with 40 CFR 60, Appendix B, Performance Specification 2. The CEM shall meet the requirements in 40 CFR 60.4345. [Permit No. 0950203-007, 40 CFR 60 Subpart KKKK]

C.14. CEM Compliance Demonstration. The permittee shall calibrate, maintain and operate a continuous emission monitor (CEM) in the stack to measure and record the nitrogen oxide (NO_X) emissions from this source. The continuous emission monitor must comply with 40 CFR 60, Appendix B, Performance Specification 2. For the purpose of demonstrating ongoing compliance with the applicable NO_X emission limitations in **A.4., B.3., and C.5.,** using the stack CEM, compliance is considered to occur when the NO_X emissions are less than or equal to 63.1 lb/hr when only the CT is operating and less than or equal to 69.6 lb/hr when both the CT and DB are operating. The 24-hour rolling average compliance level is calculated based on the proportion of hours in any 24-hour period that the CT only or the CT/DB are operating. Any portion of an hour that the DB operates is recognized as an hour period on the rolling average.

For example, in a given contiguous 24-hour period, with 20 hours of CT operation only and 4 hours of CT/DB operation:

Calculated Emission Limitation = [(63.1 lb/hr x 20 hrs) + (69.6 lb/hr x 4 hrs)]/24 hrs
24 hour rolling average-compliance NO_X level = 65.4 lb/hr

Compliance with the permitted NO_X emission limitation is considered satisfied as long as the NO_X emissions from the stack CEM are less than or equal to the calculated NO_X emissions, averaged over the same 24-hour period.
[Permit Nos. AC 48-206720/PSD-FL-184 and 0950203-007-AC]

Test Methods and Procedures

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

Method	Description of Method and Comments
1	Sample and Velocity Traverses for Stationary Sources
3A	Determination of Oxygen and Carbon Dioxide Concentrations in Emission from Stationary Sources (Instrumental Analyzer Procedure)
5	Determination of Particulate Emissions from Stationary Sources
6	Determination of Sulfur Dioxide Emissions From Stationary Sources
6C	Determination of Sulfur Dioxide Emissions from Station Sources (Instrumental Analyzer Procedure)
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
17	Determination of Particulate Emissions from Stationary Sources (In-Stack Filtration Method)
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate, Sulfur Dioxide and Nitrogen Oxides Emission Rates
20	Determination of Nitrogen Oxides, Sulfur Dioxide, Diluent Emissions from Stationary Gas Turbines
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
ASTM D5287	Standard Practice for Automatic Sampling of Gaseous Fuels
ASTM D1072	Standard Test Method for Total Sulfur in Fuel Gases by Combustion and Barium Chloride Titration

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.
[Permit Nos. AC48-206720 (PSD-FL-184) and 0950203-007-AC, Rules 62-297.310, F.A.C, 62-204.401, F.A.C., 40 CFR 60 Subpart A, 40 CFR 60 Subpart KKKK]

C.16. Annual Compliance Tests.

a. *Pollutants*. During each federal fiscal year (October 1st to September 30th), the emission units shall be tested to demonstrate compliance with the emissions standards for NO_X, CO and VE. Annual tests may be required for volatile organic carbons (VOC) and particulate matter (PM).

b. *Units*. Tests shall be conducted for the CT only, DB only, and the CT plus the DB.

c. *Methods*. Required annual tests shall be conducted concurrently, and shall be conducted using the EPA reference methods in accordance with 40 CFR 60 Subpart KKKK, 40 CFR 60 Subpart A, and this permit.

[Rule 62-297.310(7), F.A.C. and Permit Nos. AC48-206720 (PSD-FL-184), 0950203-007-AC]

C.17. Visible Emissions (VE) Compliance. The test method for VE shall be EPA Method 9. There shall be two one-hour VE tests while firing gas at maximum load, one hour with the DB on and one hour with the DB off. [Rules 62-213.440(1) & (1)(b)1.b., F.A.C.]

C.18. Nitrogen Oxides (NO_X) Compliance. Compliance with NO_X emission limits shall be demonstrated by CEMS and in accordance with the requirements of 40 CFR Subpart 60.4400. [40 CFR 60.4400, Permit No. 0950203-007-AC]

C.19. Carbon Monoxide (CO) Compliance. The test method for CO shall be EPA Method 10. [Permit No. AC48-206720]

C.20. Particulate Matter (PM/PM_{10}) Compliance. When required, the test method for PM/PM_{10} shall be EPA Method 5. An opacity test at maximum load for the CT may be substituted for the annual PM/PM_{10} emissions test. If, however, opacity values exceed 10%, then an EPA Method 5 or Method 17 PM/PM_{10} emissions test must be conducted on the CT at maximum load to demonstrate compliance with the PM/PM_{10} emissions standard. [Permit No. AC48-206720]

C.21. Volatile Organic Compounds (VOCs) Compliance. Specific VOC compliance testing is not required. Compliance with the total VOC emission limits will be assumed, provided the CO allowable emission rate is achieved. When required, the test method for VOCs shall be EPA Method 25A. [Permit No. AC48-206720]

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

Recordkeeping and Reporting Requirements

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

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

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emissions and Monitor Downtime	Reporting frequency of document	40 CFR 60.4375
Annual Performance Test Results	Close of business of 60th day following completion of test	40 CFR 60.4375
Reports required by 40 CFR 60.7(c)	Postmarked by 30th day following each 60 month period	40 CFR 60.4395

C.24. Testing Notifications. The owner or operator shall notify the Orange County Environmental Protection Department, in writing, at least 15 days prior to the date on which each formal compliance test is to begin, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9., F.A.C.]

C.25. Notification of Malfunction Excess Emissions. In case of excess emissions resulting from malfunctions, Orlando CoGen Limited shall notify the Orange County Environmental Protection Department in accordance with 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.]

C.26. Future Actual CO/NO_X Emissions Reporting:

a. *Reporting Frequency and Content*. For a period of five years following completion of the gas turbine upgrade (including heat input increase) authorized in Permit No. 0950203-007-AC, the permittee shall submit an annual report demonstrating, in accordance with Rule 62-212.300(1)(e), F.A.C., and using the emissions computation and reporting procedures in Rule 62-210.370, F.A.C., that the project did not result in a increase in CO and NO_X emissions that would equal or exceed the respective significant emission rate as defined in Rule 62-210.200, F.A.C. The baseline emissions for operation prior to the project are 3 tons per year of CO and 233 tons per year of NO_X.

b. *Submittal Due Date*. The first report shall be submitted for the first full calendar year after completing the gas turbine upgrade. Reports shall be submitted by March 1st of each year and may be submitted along with the required Annual Operating Report.

c. *Allowable Emission Exclusions.* When calculating any increase in emissions resulting from the project, the permittee shall exclude that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the project, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

[Rules 62-210.200(11)(d), F.A.C., and 62-212.300(1)(e), F.A.C; 40 C.F.R.52.21(b)(33); Permit Nos. 0950203-005-AC, 0950203-007-AC.]

{Permitting Note: These reports are required only after completion of the gas turbine upgrade.}

Orlando CoGen
Operated by: Orlando CoGen Limited, L.P.
ORIS Code: 54466

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

E.U. ID No.	Brief Description
001	Combustion Turbine (CT)
002	Heat Recovery Steam Generator (HRSG) and Duct Burner (DB) System

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:

a. DEP Form No. 62-210.900(1)(a), dated 07/01/08, received 07/07/08.

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

A.2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2009	2010	2011	2012	2013
001	1	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	0*	0*	0*	0*	0*
002	1	SO_2 allowances, under Table 2 or 3 of 40 CFR 73	0*	0*	0*	0*	0*

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

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

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

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

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

A.5. 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.

Plant name **Orlando Cogen**	State **Florida**	**54466** ORIS/Plant Code

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

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

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

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

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Plant Name (from STEP 1) **Orlando Cogen**

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,

Plant Name (from STEP 1) **Orlando Cogen**

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

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

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

Liability.

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

Effect on Other Authorities.

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

STEP 4
For SO_2 Opt-in units only.

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

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

In column "h" enter the hours.

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

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Plant Name (from STEP 1) **Orlando Cogen**

STEP 5

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

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

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

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

STEP 6

For SO_2 Opt-in units only.

Attach additional requirements, certify and sign.

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

Signature | Date

STEP 7

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

Certification (for designated representative or alternate designated representative only)

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

Name	Title
James T. Murray	**Plant Manager**

Owner Company Name: **Orlando Cogen Limited, L.P.**

Phone	E-mail address
(407) 851-1350	**jim.murray@northernstargen.com**

Signature: James T Murray | Date: 07-01-2008

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SECTION V. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.