Title V Air Operation Permit Renewal
Permit No. 0950203-011-AV

APPLICANT

The applicant for this project is Orlando CoGen Limited, L.P. The applicant's responsible official and mailing address are: Jim Murray, Plant Manager, Orlando CoGen – Northern Star Generating Services, 8275 Exchange Drive, Orlando, Florida, 32809.

FACILITY DESCRIPTION

The applicant operates the Orlando CoGen, which is located at 8275 Exchange Drive, Orlando, Florida.

The existing facility consists of one 86.8 MW combustion turbine and one heat recovery steam generator (HRSG) equipped with one duct burner (DB) system. The HRSG accepts exhaust from the combustion turbine and powers a 50 MW steam turbine. The combustion turbine is equipped with dry low nitrogen oxides (DLN) combustors to control nitrogen oxides (NO_X) emissions. The emissions from the DB system are uncontrolled. A continuous emissions monitoring system (CEMs) is utilized for NO_X. The CT and DB are allowed to burn only natural gas. The facility also operates a 150 kW natural gas emergency generator. The facility has the potential to emit nitrogen oxides, carbon monoxide, particulate matter, volatile organic compounds, and sulfur dioxides. The facility is subject to 40 CFR 75 Acid Rain Monitoring Provisions, CAIR, 40 CFR 60 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines, 40 CFR 60 Subpart A, General Provisions, 40 CFR 63 Subpart A, General Provisions, Appendix NESHAP Subpart ZZZZ, Standards for Stationary Reciprocating Internal Combustion Engines.

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

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility. This permit incorporates 40 CFR Part 63 NESHAP Subpart A and ZZZZ regulations to the existing natural gas fired emergency generator.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial Title V Air Operation Permit issued **January 1, 1999**
Title V Air Operation Permit Renewal issued **January 1, 2004**
Title V Air Operation Permit Revision issued on **January 24, 2006**
Title V Air Operation Permit Renewal issued **December 16, 2008**
Title V Air Operation Permit Revision issued on **March 30, 2009**
Application for a Title V Air Operation Permit Renewal received **May 15, 2013**
Title V Air Operation Permit Renewal Draft Permit issued **July 29, 2013**

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title IV: The facility operates units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

Proposed

NESHAP: The facility operates an emergency generator subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories of 40 Code of Federal Regulations (CFR) 63.

CAIR: The facility is subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility. The emissions are not subject to CAM because they do not meet all the applicability requirements of 40 CFR 64.2. Specifically, the unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit," as defined in §64.1, except that emission reductions achieved by the applicable control device shall not be taken into account. Additionally, the requirements for CAM shall not apply to emission limitations or standards for Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act.

PROJECT REVIEW

The Title V permit renewal for Orlando CoGen included the addition of the Clean Air Interstate Rule (CAIR) subsection which includes the CAIR application for renewal pursuant to Rule 62-213.420(1)(a)4, F.A.C. The facility's existing emergency natural gas generator is now regulated by National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Part 63, Subpart ZZZZ and was designated as an emissions unit to reflect the applicable regulations. The insignificant and unregulated emissions units and activities appendix was updated with the deletion of the emergency generator's due to the current rule applicability. A typographical error was made in the hourly carbon monoxide emission limit located in condition A.5 and was corrected reflecting the applicants requested emission limit of 23.3 lb/hr and 10 ppmvd at 15% oxygen. The applicant requested language in condition C.12 remains as part of the Title V renewal reflecting flexibility during tuning of the combustion turbine. Since the facility is no longer subject to NSPS Subpart GG and is now subject to NSPS Subpart KKKK the facility is no longer required to conduct compliance testing of the HRSG/Duct Burner separate and in addition to combustion turbine testing. Language was added in the renewal to reflect testing requirements. The applicant requested condition C.26 be removed from the permit as the facility has satisfied the requirement.

CONCLUSION

This project renews Title V air operation permit No. 0950203-009-AV, which was issued on December 16, 2008. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, 62-213 and 214, F.A.C. In accordance with the terms and conditions of this permit, the above named permittee is hereby authorized to operate the facility as shown on the application and approved drawings, plans, and other documents, on file with the permitting authority.

Proposed