GenOn Florida, LP.
Osceola Power Plant

Permit No. 0970071-012-AV
Title V Air Operation Permit Renewal

APPLICANT

The applicant for this project is GenOn Florida, LP. The applicant's responsible official and mailing address are: Mr. Jams Sanford, Plant Manager, GenOn Florida, LP, Osceola Power Plant, 5200 Holopaw Road, Saint Cloud, Osceola County, Florida 34773.

FACILITY DESCRIPTION

The applicant operates the existing Osceola Power Plant, which is located in Osceola County at 5200 Holopaw Road**,** Saint Cloud, Florida 34773.

The facility consists of three dual-fuel nominal 170 megawatts (MW) simple-cycle General Electric PG7241 FA combustion turbine-electrical generators with three 75-foot stacks. Emissions from each combustion turbine are controlled by dry low nitrogen oxides (NO_X) DLN-2.6 combustion technology when operating on natural gas and wet injection when firing fuel oil. The three combustion turbines are equipped with continuous emission monitoring system (CEMS) for monitoring NO_X emissions. Inherently clean fuels and good combustion practices are employed to control all pollutants. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel. The units operate in intermittent duty. Emissions Units 001 and 002 began operation in 2001; Emissions Unit 003 began operation in 2002. The emissions units are regulated under Acid Rain, Phase II; New Source Performance Standards(NSPS) - 40 CFR 60, Subpart GG, Standard of Performance for Stationary Gas Turbine, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Determination (PSD); Rule 62-212.400, F.A.C., Best available Control Technology (BACT) Determination, dated December 28, 1999.

The facility also has an emergency diesel generator (EU 006) rated at 218 horsepower (hp) and an emergency diesel-fired fire pump engine (EU 007) rated at 140 hp, which are regulated under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62-204.800(11)(b), F.A.C.

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.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

A complete application for a Title V Air Operation Permit Renewal received May 17, 2012.
Draft proposed permit issued on July 3, 2012.
Public Notice published on July 18, 2012.
Applicant comments received on August 17, 2012.

PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 4911 - Electrical Generation.

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 major source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: The gas turbines are subject to applicable provision NPSP portions of the New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations: Subpart A (General Provisions) and Subpart GG (Stationary Gas Turbines).

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

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

Compliance Assurance Monitoring (CAM): Each combustion turbine is equipped with dry low-NO_X (DLN-2.6) combustors burner technology system to control NO_X emissions while firing natural gas and water injection system to control NO_X emissions while firing No. 2 or superior grade distillate fuel oil however, compliance is continuously demonstrated by CEMS. There are no other add on control equipment. Therefore, a CAM Plan is not required for any of the emissions units.

GHG: The facility is a potential major source of greenhouse gas (GHG) emissions as defined by federal regulations.

PROJECT REVIEW

No revisions were requested by the applicant as part of this project; however, the permit has been reformatted to reflect the current permit style.

In addition, the facility operates an existing emergency diesel generator (EU-006) rated at 218 hp and an emergency diesel fire pump engine (EU-007) rated at 140 hp, which were previously included in the Title V permit as an unregulated units; however, these engines are now subject to NESHAP Subpart ZZZZ in 40 CFR 63, for Stationary Reciprocating Internal Combustion Engines adopted in Rule 62-204.800(11)(b), F.A.C.. Therefore, a new emissions unit section (Section III, Subsection B.) has been added to the permit to reflect the new applicable requirements for these engines.

CONCLUSION

This project renews Title V air operation permit No. 0970071-009-AV, which was effective on January 1, 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.