Orlando Utilities Commission, Indian River Plant
Title V Air Operation Permit Revision
Permit No. 0090008-007-AV

APPLICANT

The applicant for this project is the Orlando Utilities Commission. The applicant's responsible official and mailing address are: Mr. Jan C. Aspuru, Vice President of Power Resources, Orlando Utilities Commission, Indian River Plant, Reliable Plaza, 100 West Anderson Street, Orlando, Florida 32801.

FACILITY DESCRIPTION

The applicant operates the existing Indian River Plant, which is located in Brevard County at US 1 and Kings Highway.

The existing facility consists primarily of four combustion turbines. Emissions units 004 and 007 (combustion turbines A and B) consist of simple cycle General Electric Frame 6 combustion turbines, each with a 35 megawatt (MW) rating. Although the turbines primarily fire natural gas, distillate oil may be fired during periods of curtailed or uneconomical natural gas supply. Nitrogen oxides emissions are reduced by using water injection. Both turbines began commercial operation on August 1, 1990.

Emissions units 005 and 006 (combustion turbines C and D) consist of simple cycle Westinghouse Model Number 501-D5 combustion turbines, each with a 129 MW rating. The turbines primarily fire natural gas. Distillate oil may be fired during periods of curtailed or uneconomical natural gas supply. Nitrogen oxides emissions are controlled by water injection. Both turbines began commercial operation on November 1, 1991.

This facility also consists of three boilers and a lime storage silo that were recently purchased from the adjacent facility formerly owned by GenOn. Emissions units 001, 002 and 003 are three Combustion Engineering steam generators (boilers). The existing boilers currently may burn a variable combination of natural gas, propane, No. 6 and No. 2 fuel oils, and on-specification used oil from facility operations. Emissions units 001 and 002 share a common stack, with a height of 300 feet. Emissions unit 003 has a separate 300 foot stack. Unit 001 began operation on February 1, 1960; Unit 002 on September 1, 1964; and Unit 003 on February 1, 1974.

The lime storage silo is located at the water treatment building and is an insignificant emissions unit.

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

A compliance assurance monitoring (CAM) plan is included in the facility's Title V permit for the water injection control of nitrogen oxides emissions.

PROJECT DESCRIPTION

The purpose of this permitting project is to revise the existing Title V air operation permit for the OUC Indian River Plant to: reflect the transfer of ownership of the emissions units formerly owned by GenOn Florida, LP. to OUC; merge all of the applicable requirements from Permit No. 0090196-013-AV with those in Permit No. 0090008-005-AV; and, incorporate the limitations from Permit No. 0090008-008-AC, which removes the authority to fire fuel oil in emissions units 001, 002 and 003.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Revision received on February 9, 2012.
Additional Information Request letter dated March 2, 2012.
Additional Information Response received on June 4, 2012.
Draft/proposed permit issued July 27, 2012.

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is now identified as a major source of hazardous air pollutants (HAP). When the operations from the GenOn Florida, LP site authorized under Permit No. 0090196-013-AV were combined with the operations from the OUC Indian River Plant site authorized under Permit No. 0090008-005-AV, the combined operations became a major source of HAP.

MATS: The facility does not operate units subject to the federal mercury and air toxics standards (MATS) for power plants as set forth in 40 Code of Federal Regulations (CFR) 60 and 63. This regulation applies to new and existing coal and oil-fired electric utility steam generating units (EGUs). Florida has not adopted MATS. Since the boilers at the facility are no longer oil-fired, MATS does not apply.

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.

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) applies to emissions units 004, 005, 006 and 007 (the four combustion turbines) at the facility. Nitrogen oxides emissions are reduced by using water injection.

GHG: The facility is identified as a major source of green house gas (GHG) pollutants.

PROJECT REVIEW

The following revisions are being made to permit No. 0090008-005-AV through this permitting project (~~Strikethrough~~ indicates deletions and double underline indicates new text).

1. To remove an extraneous requirement related to continuous opacity monitoring that applies to the boilers rather than the combustion turbines, Specific Condition C.7. is changed as follows:

   C.7. Reserved. ~~COMS for Periodic Monitoring. OUC shall have installed continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. OUC shall maintain and operate the COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. [Rule 62-213.440, F.A.C., and applicant request]~~

2. To incorporate the requirements from permit No. 0090196-013-AV related to the three boilers, Section III.D. has been added to the permit. The restrictions established in permit No. 0090008-008-AC to fire only natural gas and propane gas have also been reflected in Section III.D. With the removal of the authority to fire liquid fuels in these boilers, the allowances originally established pursuant to Rule 62-296.405, F.A.C., for pre-NSPS oil and coal-fired boilers are no longer appropriate. Therefore, the existing visible emissions limitation of 40% has been changed to 20% (pursuant to Rule 62-296.320(4)(b)1., F.A.C.) and the exceptional emissions provisions for particulate matter and visible emissions relating to soot-blowing operations have been deleted. In addition, the existing sulfur dioxide (SO_2) limitations and testing requirements are no longer applicable and have been deleted, as Rule 296.405, F.A.C., does not limit SO_2 emissions from the firing of gaseous fuels.

3. To reflect the newly applicable requirements related to the existing reciprocating internal combustion engine-driven emergency generator in use at the Indian River facility, Section III.E. has been added to the permit.

4. Sections IV and V of the permit have been revised to include the Acid Rain and CAIR forms for the three boilers previously owned by GenOn.

5. Revised Appendix I, List of Insignificant Emissions Units and/or Activities, to reflect miscellaneous units previously owned by GenOn, to recognize that the lime storage silo is an insignificant emissions unit even though it was previously improperly listed as a regulated emissions unit in the GenOn permit, and to clarify that the existing 800 horsepower "limited use" engines are exempt from the RICE rules. Also incorporated items previously listed in Appendix U, List of Unregulated Emissions Units and/or Activities (from both GenOn and OUC), as the applicant has confirmed that these activities qualify for insignificant status pursuant to Rule 62-213.430(6), F.A.C.
6. Deleted Appendix U, List of Unregulated Emissions Units and/or Activities.
7. Appendices RR and TV have been replaced with the latest versions.

CONCLUSION

This project revises Title V air operation permit No. 0090008-005-AV, which was effective on January 1, 2010. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210, 62-213 and 62-214, F.A.C.