Florida Power Corporation
d.b.a. Progress Energy Florida, Inc.
Higgins Power Plant
Title V Air Operation Permit Renewal
Permit No. 1030012-007-AV

APPLICANT

The applicant for this project is Florida Power Corporation d.b.a. Progress Energy Florida, Inc. The applicant's responsible official and mailing address are: Reginald Anderson, Plant Manager, Florida Power Corporation d.b.a. Progress Energy Florida, Inc., Higgins Power Plant, 299 First Avenue North, PEF-903, St. Petersburg, Florida 33701.

FACILITY DESCRIPTION

The applicant operates the existing Higgins Power Plant, which is located in Pinellas County at 998 East Shore Drive in Oldsmar, Florida 34677.

The Higgins Power Plant consists of four simple-cycle combustion turbine peaking units (CTP) identified as CTP 1 (EU 004), CTP 2 (EU 005), CTP 3 (EU 006) and CTP 4 (EU 007). Each CTP unit consists of two Pratt & Whitney Twin-Pac combustion turbines, one common generator, and one common stack. The plant electric generation equipment consists of eight combustion turbines, four generators, and four stacks. Each CTP is fired with pipeline quality natural gas containing no more than 1.0 grain of sulfur per one hundred standard cubic feet (dscf), or with No. 2 distillate fuel oil containing no more than 0.5% percent sulfur by weight.

CTP 1 and CTP 2 have a maximum heat input of 566 million British thermal units per hour (MMBtu/hour) at 59 degree Fahrenheit (°F) and each powers a generator rated at 37.0 megawatts (MW) of electricity. CTP 3 and CTP 4 have a maximum heat input of 631 MMBtu/hour at 59°F temperature and each powers a generator rated at 42.9 MW of electricity. Emissions are not controlled and each Twin-Pac set exhausts through a common stack. These emissions units were constructed prior to the federal New Source Performance Standards (NSPS) and are not subject to the Acid Rain Program. CTP 1, CTP 2, CTP 3, and CTP 4 began commercial service on March 15, 1969, April 12, 1969, December 1, 1970, and January 9, 1971, respectively.

The three fossil fuel-fired steam generators (Emission Unit ID Numbers 001, 002 and 003) were torn down, permanently ceased operation on October 20, 2006, and were retired on January 1, 2007.

This facility also includes miscellaneous insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The purpose of this 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 17, 2012.
Public Notice published on August 1, 2012.
Applicant comments received on August 29, 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 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 existing facility is a major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

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. The following permitting documents were changed as a result of this Title V air operation permit renewal and are included in this package:

- Removing EU 010, fuel storage tanks (405,000 gallons) No. 2 fuel oil from unregulated emissions unit and qualified as an insignificant emissions unit activity in Appendix I. Also, includes several small (550 gallon) false-start No. 2 fuel oil storage tanks to insignificant activity in Appendix I.
- Deleting of appendix U from the renewed Title V air operation permit, since there are no unregulated emissions units located at the facility.
- Adding specific condition A.20 in Section III, Subsection A regarding the temporary use of replacement combustion turbines for routine maintenance/overhauls (proposed by applicant in Title V air operation permit renewal application received May 17, 2012).
- Removing the re-locatable diesel fired Generator (EU No. 7775047-001) from the renewed Title V air operation permit (proposed by applicant in Title V air operation permit renewal application received May 17, 2012).

CONCLUSION

This project renews Title V air operation permit No. 1030012-005-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 and 62-213, 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.