FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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PERMITTEE

Oleander Power Project, L.P.
555 Townsend Road
Cocoa, Florida 32926

Authorized Representative:
E. Scott Dial, Plant Manager

Air Permit No. 0090180-007-AC
Permit Expires: January 1, 2014
Minor Air Construction Permit

Oleander Power Project
Miscellaneous Revisions

PROJECT

This is the final air construction permit, which revises Permit No. 0090180-001-AC (PSD-FL-258) and Permit No. 0090180-003-AC (PSD-FL-377) for the following items: The purpose of this revision is to clarify the testing requirements for gas and oil upon permit renewal and to clarify that testing on fuel oil for Units 1 to 5 is not required when operating on fuel oil less than 400 hours annually. Oleander Power Project is an electric power generator categorized under Standard Industrial Classification No. 4911. The existing facility is located in Brevard County at 555 Townsend Road in Cocoa, Florida. The UTM coordinates are Zone 17, 520.12 km E, 3137.58 km N.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions).

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit Revision) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. E. Scott Dial, Oleander Power Project, L.P. (esdial@southernco.com)
Ms. Susan Kennedy, Gulf Power Company (skennedy@southernco.com)
Mr. Gregory Terry, P.E., Gulf Power Company (gnterry@southernco.com)
Mr. Tom Lubozynski, Central District Office (tom.lubozynski@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Ceron, US EPA Region 4 (ceron.heather@epa.gov)
Ms. Barbara Friday, DEP OPC: (barbara.friday@dep.state.fl.us)
Ms. Lynn Scearce, DEP OPC: (lynn.scearce@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

FACILITY DESCRIPTION

The existing facility is a electric power generating plant, which consists of the following emissions units and activities: This facility consists of five, dual-fuel (natural gas and fuel oil), nominal 190 megawatt (MW) General Electric Frame 7FA simple-cycle combustion turbine-electrical generators with five 60-foot stacks, two 1.8-million gallon capacity fuel oil storage tanks, and one 900,000 gallon distillate fuel oil storage tank. Emissions from the combustion turbine units are controlled by Dry Low NO_X (DLN) combustors when operating on natural gas and wet injection when firing fuel oil. Inherently clean fuels and good combustion practices are employed to control all pollutants.

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility operates units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

PROPOSED PROJECT

The purpose of this revision is to clarify the testing requirements for gas and oil upon permit renewal and to clarify that testing on fuel oil for Units 1 to 5 is not required when operating on fuel oil less than 400 hours annually and to remove the mass emissions limits for NO_X from the requirements for Unit 5. These changes will require revisions to existing specific conditions in Permit No. 0090180-001-AC (PSD-FL-258) and Permit No. 0090180-003-AC (PSD-FL-377).

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

Permit Being Modified: Permit No. 0090108-001-AC (PSD-FL-258)

Affected Emissions Units: EU-001, EU-002, EU-003 and EU-004

Subsection III, Specific Condition 29: This condition is revised as follows.

Initial (I) performance tests shall be performed on each unit while firing natural gas as well as while firing fuel oil. Initial tests shall also be conducted after any modifications (and shake down period not to exceed 100 days after starting the CT) to air pollution control equipment, including low NO_X burners or Hot SCR. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on each unit as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.

- EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A). If normal operation on fuel oil is less than 400 hours per calendar year, then subsequent compliance testing (annual or renewal) on fuel oil is not required for that year.
- EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
- EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG and (I, A) short-term NO_X BACT limits (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual and renewal test requirements). If normal operation on fuel oil is less than 400 hours per calendar year, then subsequent compliance testing (annual or renewal) on fuel oil is not required for that year. If data collected from the reference method during the required CEMS quality assurance RATA test are substituted for annual or renewal compliance tests for NO_X, then no separate annual or renewal compliance testing for the fuel fired while conducting the CEMS quality assurance RATA test shall be required.
- EPA Reference Method 18, and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only. [Applicants Request]

Affected Emissions Units: EU-001, EU-002, EU-003 and EU-004

Subsection III, Specific Condition 32: This condition is revised as follows.

Compliance with CO emission limit: An initial test for CO shall be conducted concurrently with the initial NO_X test, as required. The initial NO_X and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted concurrent with the annual RATA testing for NO_X required pursuant to 40 CFR 75 and is ~~(~~required for gas only~~)~~. Such annual compliance test may be used for CO renewal test requirements, and is required for gas only. [Applicants Request]

Affected Emissions Units: EU-001, EU-002, EU-003 and EU-004

Subsection III, Specific Condition 33: This condition is revised as follows.

Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the BACT VOC emission limit. Thereafter, CO emission limit will be employed as surrogate and no annual or renewal testing is required. [Applicants Request]

Permit Being Modified: Permit No. 0090108-003-AC (PSD-FL-377)

Affected Emissions Unit: EU-005

Subsection IIIA, Specific Condition 10: This condition is revised as follows:

Emission Standards: Emissions from the combustion turbine shall not exceed the following standards.

Pollutant	Emission Standard ~~c~~	Averaging Time	Compliance Method	Basis
NO_X (Gas)	9.0 ppmvd @ 15% O_2	24-hr rolling	CEMS	BACT
	~~62.5 lb/hr~~	~~3 1-hr runs~~	~~Stack Test~~	
NO_X (Oil)	42.0 ppmvd @ 15% O_2	4-hr rolling	CEMS	NSPS
	~~336.8 lb/hr~~	~~3 1-hr runs~~	~~Stack Test~~	
PM/PM_{10} [a]	10 % Opacity	6-minute block	Visible Emissions Test	BACT
	1.5 gr S/100 SCF of gas/ 0.05 % S fuel oil	N/A	Record Keeping	
SO_2 [b]	1.5 gr S/100 SCF of gas/ 0.05 % S fuel oil	N/A	Record Keeping	PSD Avoidance

a. The fuel sulfur specifications combined with the efficient combustion design and operation of the combustion turbine represent BACT for PM/PM_{10} emissions. Compliance with the visible emissions standard shall serve as an indicator of good combustion.

b. The fuel sulfur specifications and limited hours of operation effectively limit the potential emissions of SO_2 and sulfuric acid mist (SAM) from the gas turbine.

~~c. The mass emission rate standards are based on a turbine inlet condition of 59°F and 100 percent full load operation. Mass emission rate may be adjusted from actual test conditions in accordance with the performance curves and/or equations on file with the Department.~~

{Permitting Note: In combination with the annual restriction on hours of operation, the above emissions standards effectively limit annual potential emissions from the combustion turbine to: 174.5 tons/year of NO_X, 34.5 tons/year of PM/PM_{10}, and 37.1 tons/year of SO_2.}

[Rules 62-4.070(3), 62-210.200 (BACT), 62-212.400(PSD and PSD Avoidance), F.A.C; 40 CFR 60, Subpart KKKK; and, Applicants Request]

Affected Emissions Unit: EU-005

Subsection IIIA, Specific Condition 16: This condition is revised as follows:

Testing Requirements: Initial tests shall be conducted between 90% and 100% of permitted capacity; otherwise, this permit shall be modified to reflect the true maximum capacity as constructed. Subsequent annual tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. Tests shall be conducted for each pollutant while firing each fuel in the CT. For each run during tests for visible emissions, emissions of NO_X recorded by the CEMS shall also be reported. Data collected from the reference method during the required CEMS quality assurance RATA tests may substitute for annual and renewal compliance tests for NO_X, provided the owner or operator indicates this intent in the submitted test protocol, and obtains approval prior to testing. If the RATA is conducted at less than permitted capacity, and the data is used for annual compliance, the requirements of 62-297.310(2) (Operating Rate During Testing) still apply. The mass emission rate

standards are based on a turbine inlet condition of 59°F and 100 percent full load operation. Mass emission rate may be adjusted from actual test conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-297.310(2), and (7)(a), F.A.C.; 40 CFR 60.8; and, Applicants Request]

Affected Emissions Unit: EU-005

Subsection IIIA, Specific Condition 18: This condition is revised as follows:

Subsequent Compliance Testing: Annual compliance tests for NO_X, and visible emissions shall be conducted during each federal fiscal year (October 1st, to September 30th). If normal operation on fuel oil is less than 400 hours per calendar year, then subsequent compliance testing (annual or renewal) on fuel oil is not required for that year. If normal operation on fuel oil exceeds 400 hours per year, the Department shall require compliance testing for NO_X and visible emissions while firing fuel oil. If data collected from the reference method during the required CEMS quality assurance RATA test are substituted for annual or renewal compliance tests for NO_X, then no separate annual or renewal compliance testing for the fuel fired while conducting the CEMS quality assurance RATA test shall be required.
[Rules 62-4.070, 62-210.200(BACT), and 62-297.310(7)(a)4, F.A.C.; and, Applicants Request]