

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Florida Gas Transmission Company
1400 Smith Street
Houston, TX 77002

Air Permit No. 1230034-011-AC
Compressor Station No. 15
Taylor County, Florida

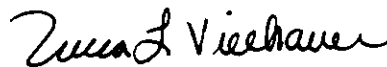
Authorized Representative:

Mr. Richard Craig, V.P. of Southeastern Operations

Enclosed is Final Air Permit No. 1230034-011-AC, which authorizes up-rating of new gas turbine Compressor Engine No. 1507 from 13,000 bhp to 15,000 bhp and revises the particulate matter requirements for Compressor Engine No. 1506. The equipment is installed at existing Compressor Station No. 15, which is located on Pisgah Road approximately 1 mile east of U.S. Highway 19 near Perry in Taylor County, Florida. As noted in the Final Determination (attached), only minor changes were made to correct typographical errors. This permit is issued pursuant to Chapter 403, Florida Statutes.

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 thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1/13/03 to the persons listed:

Mr. Richard Craig, FGTC*
Mr. Jim Thompson, FGTC
Mr. Jim Burrow, FGTC
Mr. Kevin McGlynn, McGlynn Consulting Co.
Mr. V. Duane Pierce, AQMcs
Mr. Chris Kirts, NED

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 / January 13, 2003
(Clerk) (Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Received by, (Please Print Clearly) <i>H. Watt</i> B. Date of Delivery <i>1-17-03</i></p> <p>C. Signature <i>H. Watt</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>X D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p>
<p>1. Article Addressed to:</p> <p>Mr. Richard Craig Vice President of Southeastern Operations Florida Gas Transmission Company 1400 Smith Street Houston, TX 77002</p>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise</p> <p><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>7001 0320 0001 3692 7225</p>	
<p>PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952</p>	

U.S. Postal Service
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Postage	\$	Postmark Here
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Restricted Delivery Fee (Endorsement Required)		
Total Postage & Fees	\$	

Sent To **Richard Craig**

Street, Apt. No. or P.O. No. **1400 Smith St.**

City, State, ZIP+4 **Houston, TX 77002**

PS Form 3800, January 2001 See Reverse for Instructions

FINAL DETERMINATION

PERMITTEE

Florida Gas Transmission Company
1400 Smith Street
Houston, TX 77002

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400

PROJECT

Air Permit No. 1230034-011-AC
Taylor Compressor Station No. 15

This permit authorizes the up-rating of new gas turbine Compressor Engine No. 1507 from 13,000 bhp to 15,000 bhp and revises the particulate matter requirements for Compressor Engine No. 1506. The equipment is installed at existing Compressor Station No. 15, which is located on Pisgah Road approximately 1 mile east of U.S. Highway 19 near Perry in Taylor County, Florida.

NOTICE, PUBLICATION, AND ADMINISTRATIVE PROCEDURES

The Department distributed an "Intent to Issue Permit" package on December 10, 2002. The applicant published the "Public Notice of Intent to Issue" in the Tallahassee Democrat on December 15, 2002. The Department received the proof of publication on December 19, 2002. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received.

CONCLUSION

The final action of the Department is to issue the permit with only minor revisions to correct typographical errors.



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

Florida Gas Transmission Company
1400 Smith Street
Houston, TX 77002

Authorized Representative:

Mr. Richard Craig, V.P. of Southeast Operations

Taylor Compressor Station No. 15
Air Permit No. 1230034-011-AC
Facility ID No. 1230034
SIC No. 4922
Permit Expires: December 31, 2003

PROJECT AND LOCATION

This permit authorizes the up-rating of new gas turbine Compressor Engine No. 1507 from 13,000 bhp to 15,000 bhp and revises the particulate matter requirements for Compressor Engine No. 1506. The equipment is installed at existing Compressor Station No. 15, which is located on Pisgah Road approximately 1 mile east of U.S. Highway 19 near Perry in Taylor County, Florida. The UTM coordinates are Zone 17, 249.02 km East, and 3339.60 km North.

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.) and Title 40, Part 60 of the Code of Federal Regulations. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

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- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

Howard L. Rhodes, Director
Division of Air Resources Management

1/10/03

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The existing facility operates as a compressor station in Taylor County for Florida Gas Transmission Company's natural gas pipeline. It consists of five 2000 bhp reciprocating internal combustion engines, one 4000 bhp reciprocating internal combustion engine, a 15,000 gas turbine compressor engine, a 7200 bhp gas turbine compressor engine, and miscellaneous support equipment. This project affects only the following emissions units.

ID	Emission Unit Description
002	Compressor Engine No. 1506 – Existing 4000 bhp gas-fired reciprocating internal combustion engine (Cooper Bessemer Model No. 8W-330-C2) operating as a compressor engine.
003	INACTIVE - Formerly identified as Compressor Engine 1507, this Solar Model No. Mars 90 T-13000S gas turbine has been removed.
006	Compressor Engine No. 1507 - New 15,000 bhp gas turbine (Solar Model No. Mars 100 T-13000S) installed as a compressor engine subject to the conditions of this permit.

REGULATORY CLASSIFICATION

Title III: The facility is a major source of hazardous air pollutants (HAP).

Title IV: The facility has no 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 (Chapter 213, F.A.C.).

PSD: The facility is a PSD-major source of air pollution (Rule 62-212.400, F.A.C.).

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

RELEVANT DOCUMENTS

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action and are on file with the Department.

- Request to revise particulate emission rates for Engine 1506 (EU-002) received on 11/21/02;
- Permit application received on 11/06/02;
- Permit No. 1230034-009-AC previously issued on 07/03/02; and
- Permit No. 1230034-007-AC previously issued on 10/26/01.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD preconstruction review shall be submitted to the Department's Bureau of Air Regulation at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All other applications for permits to construct, modify, or operate emissions units shall be submitted to the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590 and phone number 904/807-3300.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northeast District Office at the above address.
3. Appendices: The following Appendices are attached as part of this permit: Appendix CF (Citation Format); Appendix FM (Custom Fuel Monitoring Plan for NSPS Gas Turbines); Appendix GC (General Conditions); Appendix GG (NSPS Subpart GG Requirements for Gas Turbines); and Appendix SC (Standard Conditions).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Part 60 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Source Obligation: This project is subject to Rule 62-212.400(2)(g), F.A.C., which states, "If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of the facility or modification to emit a pollutant (such as a restriction on hours of operation), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commenced on it." This includes, but is not limited to, increases in the heat input rates or pollutant emission rates. [Rule 62-212.400(2)(g), F.A.C.]
8. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may require by law. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 002 - 4000 bhp Reciprocating Compressor Engine No. 1507

This section of the permit addresses the following existing emissions unit.

Emissions Unit No. 005 - Compressor Engine No. 1506

The existing compressor engine is a 4000 bhp reciprocating internal combustion engine fired exclusively with pipeline natural gas.

APPLICABLE REQUIREMENT

1. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other valid air construction and operations permits. [Rule 62-4.070, F.A.C.]
2. Particulate Matter: For Compressor Engine No. 1506 (EU 002), particulate matter emissions are minimized by good combustion design with the firing of natural gas as the exclusive fuel. This requirement supersedes the particulate matter standards (TSP and PM₁₀) in Condition No. 1 of Air Permit No. PSD-FL-160, as amended. *{Permitting Note: This change does not result in any increases in actual emissions of particulate matter. All other standards of Air Permit No. PSD-FL-160 remain unaffected.}*

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 006 - 15,000 bhp Gas Turbine Compressor Engine No. 1507

This section of the permit addresses the following emissions unit.

Emissions Unit No. 006 - Compressor Engine No. 1507

Description: The new gas turbine is a Solar Mars 100 T-15000S that will be used as a compressor engine for the natural gas pipeline.

Fuel: The gas turbine fires only natural gas (SCC No 2-02-002-01). The maximum natural gas firing rate is approximately 118,200 cubic feet per hour based on a heating value of 1040 BTU per SCF of gas.

Capacity: At 123 MMBtu per hour of heat input, the gas turbine produces approximately 15,000 bhp (ISO). The gas turbine typically operates near capacity.

Controls: Lean premix combustion technology reduces NOx emissions. The efficient combustion of natural gas at high temperatures minimizes emissions of CO, PM/PM₁₀, SO₂, and VOC.

Stack Parameters: When operating at capacity, exhaust gases exit a rectangular stack (7.55 feet by 7.55 feet) that is 60 feet tall with a flow rate of approximately 191,800 acfm at 910° F.

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS Requirements: The gas turbine shall comply with the New Source Performance Standards (NSPS) of Subpart GG in 40 CFR 60. The applicable NSPS requirements are provided in Appendix GG of this permit. The Department determines that the conditions in this section are at least as stringent, or more stringent than, the NSPS requirements of Subpart GG. [Rule 62-4.070(3), F.A.C.; 40 CFR 60, Subpart GG]

EQUIPMENT

2. Emissions Unit 003: The existing Solar Mars 90 T-13000S gas turbine shall be permanently shutdown and removed from the site. The shutdown unit will be replaced by Emissions Unit 006, which will be identified as Compressor Engine No. 1507. [Applicant Request; Rule 62-212.400(PSD), F.A.C.]
3. New Compressor Engine No. 1507: The permittee is authorized to install a new Solar Mars 100 T-15000S gas turbine that is rated at 15,000 bhp (ISO). The permittee shall tune, operate and maintain the gas turbine's lean premix combustion system to reduce emissions of nitrogen oxides below the permitted limits. Ancillary equipment includes the automated gas turbine control system, an inlet air filtration system, and an exhaust stack. [Applicant Request]

PERFORMANCE RESTRICTIONS

4. Permitted Capacities: The maximum heat input rate to the gas turbine shall not exceed 123 MMBtu per hour while producing approximately 15,000 bhp based on a compressor inlet air temperature of 59° F, 100% load, and a higher heating value (HHV) of 1040 BTU per SCF for natural gas. Heat input rates will vary depending upon gas turbine characteristics, load, and ambient conditions. For the gas turbine, the permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial testing. Performance data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.]
5. Authorized Fuel: The gas turbine shall fire only natural gas with a maximum of 10 grains of sulfur per 100 standard cubic feet of natural gas. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]
6. Restricted Operation: The hours of operation for the gas turbine are not limited (8760 hours per year). Except for startup and shutdown, operation below 50% base load is prohibited. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 006 - 15,000 bhp Gas Turbine Compressor Engine No. 1507

EMISSIONS STANDARDS

7. Emissions Standards: Emissions from the gas turbine shall not exceed the following limits for carbon monoxide (CO), nitrogen oxides (NOx), opacity, particulate matter (PM), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

Pollutant	Standards	Equivalent Maximum Emissions ^f		Rule Basis ^g
		lb/hour	TPY	
CO ^a	50.0 ppmvd @ 15% O ₂	13.5	59.30	Avoid Rule 62-212.400, F.A.C.
NOx ^b	25.0 ppmvd @ 15% O ₂	11.1	48.70	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.332
SO ₂ ^c	10.0 grains of sulfur per 100 SCF of gas	3.4	14.89	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.333
Opacity ^d	10% opacity, 6-minute average	Not Applicable		Rule 62-4.070(3), F.A.C.
PM ^e	Efficient combustion of natural gas	0.8	3.50	Rule 62-4.070(3), F.A.C.
VOC ^e	Efficient combustion of natural gas	0.4	1.70	Rule 62-4.070(3), F.A.C.

- a. The CO standards are based on the average of three test runs as determined by EPA Method 10.
- b. The NOx standards are based on the average of three test runs as determined EPA Method 20.
- c. The fuel sulfur specification is based on the maximum limit specified by Federal Energy Regulatory Commission (FERC) and effectively limits the potential SO₂ emissions. Expected fuel sulfur levels are less than 1 grain per 100 SCF of natural gas from the pipeline.
- d. The opacity standard is based on a 6-minute average, as determined by EPA Method 9.
- e. For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with the opacity and CO standards. Equivalent maximum PM emissions are based on a factor of 0.0066 lb/MMBtu heat input from AP-42 Table 3.1-2a. Equivalent maximum VOC emissions are based on a total hydrocarbon factor of 25.0 ppmvd @ 15% oxygen from the vendor and the conservative assumption that 10% the hydrocarbons are regulated (non-methane) VOC. No testing is required.
- f. Equivalent maximum emissions are based on the maximum expected emissions, permitted capacity, a compressor inlet air temperature of 59° F, and 8760 hours of operation per year. For comparison purposes, the permittee shall provide a reference table with the initial compliance test report of mass emission rates versus the compressor inlet temperatures. Each test report shall include measured mass emission rates for CO, NOx and SO₂. Mass emission rates for SO₂ shall be calculated based on actual fuel sulfur content and fuel flow rate. For tests conducted at 59° F or greater, measured mass emission rates shall be compared to the equivalent maximum emissions above. For tests conducted below 59° F, measured mass emission rates shall be compared to the tabled mass emission rates provided by the manufacturer based on compressor inlet temperatures.
- g. Compliance with the emissions standards of this permit ensure that the project remains a minor source of air pollution with respect to PSD.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 006 - 15,000 bhp Gas Turbine Compressor Engine No. 1507

EMISSIONS PERFORMANCE TESTING

8. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content {Permitting Note: These methods shall be used as necessary to support other required methods.}
9	Determination of Opacity
10	Determination of Carbon Monoxide Emissions {Permitting Note: This method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide and Nitrogen Oxides Emission Rates {Permitting Note: This method shall be used as necessary to support other required methods.}
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines

Tests shall also be conducted in accordance with the requirements specified Appendix SC of this permit. The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

9. Initial Tests: The gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NOx, and visible emissions. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the gas turbine. The initial NOx performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load. Each of the three low-load NOx performance tests shall consist of three, 20-minute test runs. The peak load NOx performance test shall consist of three, 1-hour test runs. The CO performance tests shall be conducted concurrently with the NOx performance tests at peak load. SO₂ emissions shall be calculated and reported based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)1, F.A.C.; 40 CFR 60.8 and 60.335]
10. Annual Tests: During each federal fiscal year (October 1 - September 30), the gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NOx, and visible emissions. CO and NOx emissions shall be tested concurrently at permitted capacity. SO₂ emissions shall be calculated and reported based on fuel flow and vendor analysis of fuel sulfur content. In addition to the test results, each report shall include a general description of the maintenance activities and operation of this facility since the last test. [Rule 62-297.310(7)(a)4, F.A.C.]
11. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and, 60.8]

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix SC of this permit. In addition, NOx emissions shall be corrected to ISO ambient atmospheric conditions and compared to the NSPS Subpart GG standard identified in Appendix GG of this permit for each required test. For each test run, the report shall also indicate the natural gas firing rate (cubic feet per hour), heat input rate (MMBtu per hour), the power output (bhp), percent peak load, and the inlet compressor temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.334]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. EU 006 - 15,000 bhp Gas Turbine Compressor Engine No. 1507

13. Custom Fuel Monitoring Schedule: In lieu of the NSPS fuel monitoring requirements of 40 CFR 60.334 of Subpart GG, the Department approves the custom fuel-monitoring schedule specified in Appendix FM of this permit. [Rule 62-4.070(3), F.A.C.; 40 CFR 60.334]
14. Operational Data: Using the automated gas turbine control system, the permittee shall monitor and record heat input (MMBtu), power output (bhp), and hours of operation for the gas turbine. Within the 10 days of a request by the Department or the Compliance Authority, the permittee shall be able to summarize the following information: heat input (MMBtu per hour); power output (bhp); and hours of gas turbine operation. This information shall also be used for submittal of the required Annual Operating Report. [Rule 62-4.070(3), F.A.C.]

SECTION 4. APPENDICES

Contents

- Appendix CF. Citation Format
- Appendix FM. Custom Fuel Monitoring Plan for NSPS Gas Turbines
- Appendix GC. General Conditions
- Appendix GG. NSPS Subpart GG Requirements for Gas Turbines
- Appendix SC. Standard Conditions

SECTION 4. APPENDIX CF

Citation Format

The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

Example: Permit No. AC50-123456 or Air Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number
“001” identifies the specific permit project
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

SECTION 4. APPENDIX FM

Custom Fuel Monitoring Plan for NSPS Gas Turbines

Custom Fuel Monitoring Schedule: The Department approves the following custom fuel-monitoring schedule in lieu of the NSPS fuel monitoring requirements in 40 CFR 60.334 of Subpart GG for the gas turbines affected by this project.

1. Because natural gas is the exclusive fuel for the gas turbine and contains negligible amounts of nitrogen, no monitoring of the fuel nitrogen content is required.
2. Fuel sulfur monitoring shall be performed in accordance with the following requirements:
 - a. The natural gas shall be sampled and analyzed for the sulfur content as determined by ASTM methods D4084-82, D3246-81 or more recent versions.
 - b. After first fire in the gas turbine, fuel sulfur monitoring shall be conducted at least twice each month. If this monitoring indicates little variability and compliance with the fuel sulfur limit of this permit for a period of six months, monitoring shall be reduced to once each calendar quarter. If this monitoring indicates little variability and compliance with the fuel sulfur limit of this permit for six calendar quarters, monitoring shall be reduced to twice each year (once each during the first and third calendar quarters).
 - c. The permittee shall provide written notification to the Compliance Authority prior to reducing the frequency of monitoring in accordance with the above custom schedule. The notification shall include the results of the previous fuel sulfur analyses, the current frequency of monitoring, and the future frequency of monitoring.
3. This custom fuel-monitoring plan shall be reevaluated if there is a change in the fuel supply, a substantial change in the fuel quality, or any required monitoring indicates failure to comply with the fuel sulfur limit of this permit. For such cases, fuel sulfur monitoring shall resume on a weekly basis while the Department reevaluates the monitoring schedule.

[Rule 62-4.070(3); 40 CFR 60.334]

SECTION 4. APPENDIX GC

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION 4. APPENDIX GC

General Conditions

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (NA);
 - b. Determination of Prevention of Significant Deterioration (NA); and
 - c. Compliance with New Source Performance Standards (X).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX GG

NSPS Subpart GG Requirements for Gas Turbines

The following emissions unit is subject to the applicable requirements of Subpart A (General Provisions) and Subpart GG (Stationary Gas Turbines) established as New Source Performance Standards in 40 CFR 60 and adopted by reference in Rule 62-204.800(7)(b), F.A.C.

ID	Emission Unit Description
006	Compressor Engine No. 1507 consists of a 15,000 bhp gas turbine compressor engine.

NSPS GENERAL PROVISIONS

In addition to the specific conditions of the permit and NSPS Subpart GG, the emissions unit is subject to the applicable General Provisions of the New Source Performance Standards including 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements). The General Provisions are not included in this permit, but can be obtained from the Department upon request.

40 CFR 60, SUBPART GG - STANDARDS OF PERFORMANCE FOR STATIONARY GAS TURBINES

Each gas turbine shall comply with all applicable requirements of 40 CFR 60, Subpart GG adopted by reference in Rule 62-204.800(7)(b), F.A.C. Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.

Section 60.330 Applicability and Designation of Affected Facility.

- (a) The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour), based on the lower heating value of the fuel fired.

Section 60.331 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

- (g) ISO standard day conditions means 288 degrees Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.
- (i) Peak load means 100 percent of the manufacturer's design capacity of the gas turbine at ISO standard day conditions.
- (j) Base load means the load level at which a gas turbine is normally operated.

Section 60.332 Standard for Nitrogen Oxides.

- (a) On and after the date of the performance test required by Section 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraphs (c) of this section shall comply with:
 - (2) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

SECTION 4. APPENDIX GG

NSPS Subpart GG Requirements for Gas Turbines

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	$0.04(N)$
$0.1 < N \leq 0.25$	$0.004 + 0.0067(N - 0.1)$
$N > 0.25$	0.005

where: N=the nitrogen content of the fuel (percent by weight).

Department Requirement: When firing natural gas, the "F" value shall be assumed to be 0.

{Permitting Note: The "Y" value when firing natural gas as provided by the manufacturer is approximately "11.4". The equivalent emission standard is 190 ppmvd at 15% oxygen. The emissions standards in Section 3 of this permit are much more stringent than this requirement.}

(c) Stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired, shall comply with the provisions of paragraph (a)(2) of this section.

Section 60.333 Standard for Sulfur Dioxide.

On and after the date on which the performance test required to be conducted by Section 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

Section 60.334 Monitoring of Operations.

(b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

Department Requirement: The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived because natural gas is the exclusive fuel and contains negligible amounts of nitrogen. For purposes of complying with the sulfur content monitoring requirements of this rule, the permittee shall comply with the custom fuel monitoring schedule specified in the Section 3 of the permit.

{Permitting Note: This is consistent with guidance from EPA Region 4 on custom fuel monitoring.}

(c) For the purpose of reports required under Section 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with Section 60.332 by the performance test required in Section 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in Section 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Section 60.335(a).

SECTION 4. APPENDIX GG

NSPS Subpart GG Requirements for Gas Turbines

{Permitting Note: The excess NOx emissions reporting requirements do not apply. The gas turbine uses "dry" lean premix combustors and not wet injection to control NOx emissions. Also, NOx emissions due to fuel-bound nitrogen are considered negligible because natural gas is the exclusive fuel and contains negligible nitrogen.}

- (2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

Department Requirement: In accordance with the custom fuel-monitoring schedule, any period between two consecutive fuel sulfur analyses shall be reported as excess emissions if the result of the second analysis indicates failure to comply with the fuel sulfur limit of the permit.

Section 60.335 Test Methods and Procedures.

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
(b) In conducting the performance tests required in Section 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in Section 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
(c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in Sections 60.332 and 60.333(a) as follows:

- (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

NOx = (NOxo) (Pr/Po) 0.5 e 19(Ho - 0.00633) (288°K/Ta) 1.53

where:

- NOx = emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent.
NOxo = observed NOx concentration, ppm by volume.
Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.
Po = observed combustor inlet absolute pressure at test, mm Hg.
Ho = observed humidity of ambient air, g H2O/g air.
e = transcendental constant, 2.718.
Ta = ambient temperature, °K.

Department Requirement: NOx emissions shall be corrected to ISO ambient atmospheric conditions for each required emissions performance test and compared to the NOx standard specified in 40 CFR 60.332.

- (2) The monitoring device of Section 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Section 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

Department Requirement: The initial NOx performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load.

{Permitting Note: The dry low-NOx controls are only effective above a minimum load, which will be identified during initial testing.}

- (3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

Department Requirement: The span value shall be no greater than 75 ppm of nitrogen oxides due to the low NOx emission levels of the gas turbine.

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NSPS Subpart GG Requirements for Gas Turbines

- (d) The owner or operator shall determine compliance with the sulfur content standard in Section 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference--see Section 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

Department Requirement: The natural gas shall be sampled and analyzed for the sulfur content as determined by ASTM methods D4084-82, D3246-81 or more recent versions.

- (e) To meet the requirements of Section 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

{Permitting Note: The fuel analysis requirements of the permit meet or exceed the requirements of this rule and will ensure compliance.}

SECTION 4. APPENDIX SC

Standard Conditions

{Permitting Note: Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at this facility.}

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

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Standard Conditions

11. **Operating Rate During Testing:** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
12. **Calculation of Emission Rate:** For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
13. **Test Procedures:** Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. **Required Sampling Time.** Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. **Minimum Sample Volume.** Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. **Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.
[Rule 62-297.310(4), F.A.C.]
14. **Determination of Process Variables**
 - a. **Required Equipment.** The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - b. **Accuracy of Equipment.** Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]
15. **Sampling Facilities:** The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
16. **Test Notification:** The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
17. **Special Compliance Tests:** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
18. **Test Reports:** The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide

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Standard Conditions

sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-210.310(8), F.A.C.]

RECORDS AND REPORTS

19. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

Florida Department of
Environmental Protection

Memorandum

TO: Howard Rhodes, Division of Air Resources Management
THRU: Trina Vielhauer, Bureau of Air Regulation *TV*
Al Linero, New Source Review Section *AL*
FROM: Jeff Koerner, New Source Review Section *JK*
DATE: January 9, 2003
SUBJECT: Final Air Construction Permit No. 1230034-011-AC
Florida Gas Transmission Company
Compressor Station No. 15, Taylor County
Phase VI Modifications

The Final Permit for this project is attached for your approval and signature, which authorizes the up-rating of new gas turbine Compressor Engine No. 1507 from 13,000 bhp to 15,000 bhp. In addition, the particulate matter standards for Compressor Engine No. 1506 were revised to "good combustion design with the firing of natural gas as the exclusive fuel". A previous permit had established particulate matter standards based on outdated AP-42 emission factors. The equipment is installed at existing Compressor Station No. 15, which is located on Pisgah Road approximately 1 mile east of U.S. Highway 19 near Perry in Taylor County, Florida. Although the project is minor with respect to PSD, Florida Gas Transmission Company requested that the Tallahassee office process the application for consistency between the Phase VI projects.

The Department distributed an "Intent to Issue Permit" package on December 10, 2002. The applicant published the "Public Notice of Intent to Issue" in the Tallahassee Democrat on December 15, 2002. The Department received the proof of publication on December 19, 2002. No requests for administrative hearings were filed.

Day #90 is February 25, 2003. I recommend your approval of the attached Final Permit for this project.

Attachments

TV/AAL/jfk