



# Florida Department of Environmental Protection

Northeast District  
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Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## PERMITTEE:

Florida Gas Transmission Company  
Cross Country Energy  
C/O Panhandle Energy  
5444 Westheimer Road  
Houston, TX 77056-5306

I.D. Number: 0410004  
Permit/Cert Number: 0410004-014-AO  
Modification Date: August 10, 2007  
Expiration Date: January 16, 2012  
County: Gilchrist  
Latitude/Longitude: 29° 39' 51" N; 82° 50' 46" W  
UTM: E-(17) 321.3; N- 3282.8  
Project: Compressor Station 24

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-210, 62-212, 62-272, 62-296, 62-297 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the department and made a part hereof and specifically described as follows:

## PROJECT

**Project 014** is to incorporate Air Construction Permit No. 0410004-011-AC: The replacement of Combustion Turbine No. 2401 (EU001) Solar Model Mars 90-T13000S gas turbine rated at 13,000 bhp (ISO) with a Solar Mars 100- T15000S- 15,000 bhp compressor unit; and establish emission CAPs for NO<sub>x</sub>, CO, VOC, SO<sub>2</sub> and PM. Also, this project includes **Project 013** Administrative Correction to clarify Maximum Heat Input Rate and temperature at LHV & HHV.

## FACILITY DESCRIPTION

Florida Gas Transmission Company (FGTC) operates existing Compressor Station 24 in Gilchrist County for their natural gas pipeline. The station currently consists of a 15,000 bhp gas turbine (Engine 2401), a 7222 bhp gas turbine (Engine 2402), and miscellaneous support activities. The station consists of the following emissions units.

ID No.	Emission Unit Description
001	Engine 2401: Solar Model Mars 100-T15000S gas turbine rated at 15,114 bhp
002	Miscellaneous support activities: <ul style="list-style-type: none"><li>One 443 bhp reciprocating internal combustion engine with emergency generator fired exclusively with natural gas and identified as "GEN03";</li><li>One oily water tank;</li><li>One diesel oil tank;</li><li>One pipeline condensate storage tank;</li><li>Miscellaneous pipeline equipment such as pumps, valves, flanges, connectors, etc.</li></ul>
003	Engine 2402: Cooper-Rolls Model No. 501-KC7-DLE gas turbine rated at 7222 bhp (ISO)

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*{Permitting Note: "GEN03" is an emergency generator that is expected to operate much less than 500 hours per year. The new gas turbine, Engine 2402, EU 003, has the potential to increase fugitive VOC emissions by approximately 0.30 tons per year due to pipeline component and tank leaks.}*

[Air Construction Permit 0410004-006-AC]

The project is part of FGTC's overall Phase VI project intended to increase the natural gas supply capacity and reliability to service domestic, commercial, and industrial customers in Florida. The permit consolidates the regulatory requirements for the emissions units at this facility.

For informational purposes only, the following is a summary of the net emissions at Compressor Station No. 24:

	EU 001	EU 003	EU 002	EU 002	EU 002	EU 002	EU 002	Facility
Pollutant	Compressor Engine 2401	Compressor Engine 2402	Emergency Generator GEN03	Fugitive	Oily Storage Tank	Condensate Tank	Diesel Tank	Potential Emissions CAP *(TPY)
NO <sub>x</sub>	52.1	25.0	2.20					79.3
CO	63.5	30.5	0.60					94.6
VOC	1.8	6.5		0.32	< 0.01	0.01	< 0.01	8.7
SO <sub>2</sub>	15.9	8.2	0.15					24.3
PM	3.4	2.0	0.18					5.6

\*Applicant Requested on July 17, 2006.

**REGULATORY CLASSIFICATION**

This facility is subject to regulation under 40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines and 40 CFR 60, Subpart A- General Provisions:

Emissions Unit  
001

Description  
Engine 2401: 15,114bhp natural gas fired turbine compressor unit

This facility is subject to regulation under 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines:

Emissions Unit

003

Description

Engine 2402: 7,200 bhp (ISO) natural gas fired turbine compressor unit

The following emissions unit is unregulated:

Emissions Unit  
002

Description  
Storage Tanks

The following emissions unit is exempt:

Emissions Unit  
xxx

Description  
Emergency generator exempted per 62-210.200(3)(a)20.b.,F.A.C.

**OPERATING LOCATION**

This facility is located near Trenton at 5030 U.S. Highway 129 in Gilchrist County, Florida.

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**APPENDICES**

The attached appendices are a part of this permit:

Appendix K – NSPS Subpart KKKK Requirements for Gas Combustion Turbines

Appendix C – NSPS Subpart GG Requirements for Gas Turbines

**RELEVANT DOCUMENTS**

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

Air Construction Permit No. 0410004-011-AC  
Administrative Correction Dated April 5, 2007.  
Air Operating Application received June 1, 2007.

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I.D. Number: 0410004  
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**GENERAL CONDITIONS:**

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 the 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 any 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 of 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 not 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 no 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 permitted 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 and 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 any record 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.

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Florida Gas Transmission Company  
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Houston, TX 77056-5306

I.D. Number: 0410004  
Permit/Cert: 0410004-014-AO  
Modification Date: August 10, 2007  
Expiration Date: January 16, 2012

**GENERAL CONDITIONS continued:**

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 non-compliance, 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 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:
  - ( ) Determination of Best Available Control Technology (BACT)
  - ( ) Determination of Prevention of Significant Deterioration (PSD)
  - (X) Compliance with New Source Performance Standards (NSPS)

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I.D. Number: 0410004  
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**GENERAL CONDITIONS:**

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 for 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:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurement;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- 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.

**PERMITTEE:**  
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## **SPECIFIC CONDITIONS:**

### **ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS**

**1. Hours of Operation:** The hours of operation are not limited (24 H/D; 7 D/W; 52 W/Y; **8760 H/Y**) per calendar year.

[Rule 62-210.200(PTE), F.A.C., Definitions - Potential to Emit (PTE)]

**2. Permitted Capacity:** The maximum operating rates are listed below and shall not be exceeded without prior Department approval:

Emissions Unit	Maximum Heat Input Rate
001	115 MMBtu per hour at 45° F based on LHV (939 BTU/scf) <b>NOTE (1)</b>
003	68 MMBtu per hour

**NOTE (1)** Maximum Heat Input Rate is 127.4 MMBtu/hr at 45° F based on the HHV (1040 BTU/scf) of the fuel.

[Air Construction Permit No. 0410004-006-AC; Air Construction Permit No. 0410004-007-AC; Air Construction Permit No. 0410004-010-AC Air Construction Permit No. 0410004-011-AC and Administrative Correction dated April 5, 2007]

### **3. Fuel Usage**

**EU001:** This gas turbine fires pipeline natural gas at a maximum firing rate of approximately 122,500 cubic feet per hour based on a heating value (HHV) for natural gas of 1040 Btu/scf. This gas turbine produces approximately 15,114 bhp based on a turbine inlet air temperature of 45° F, 100% load and is intended to operate at or near capacity.

[Air Construction Permit No. 0410004-011-AC and Administrative Correction dated April 5, 2007]

**EU003:** This gas turbine fires pipeline natural gas at a maximum firing rate of approximately 65,400 cubic feet per hour based on a heating value (HHV) of 1040 Btu per scf of gas. This gas turbine produces approximately 7200 bhp (ISO) based on a turbine inlet air temperature of 59° F, 100% load and is intended to operate at or near capacity.

[Air Construction Permit No. 0410004-010-AC]

### **EMISSION LIMITATIONS AND PERFORMANCE STANDARDS**

**4. Emission Limits:** The permitted maximum allowable emission rate for each pollutant is as follows:

Pollutant	Standards Engines 2401 and 2402	Equivalent Maximum Emissions <sup>6</sup>				Rule Basis <sup>7</sup>
		Engine 2401		Engine 2402		
		lb/hr	TPY	lb/hour	TPY	
CO <sup>1</sup>	50.0 ppmvd @ 15% O <sub>2</sub>	14.5	63.5	7.0	30.5	Rule 62-4.070(3), F.A.C.

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**SPECIFIC CONDITION No. 4 continued:**

Pollutant	Standards Engines 2401 and 2402	Equivalent Maximum Emissions <sup>6</sup>				Rule Basis <sup>7</sup>
		Engine 2401		Engine 2402		
		lb/hr	TPY	lb/hour	TPY	
NO <sub>x</sub> <sup>2</sup>	25.0 ppmvd @ 15% O <sub>2</sub>	11.9	52.1	5.7	25.0	Rule 62-4.070(3), F.A.C. 40 CFR 60.332
SO <sub>2</sub> <sup>3</sup>  EU001	≤110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output, or ≤ 26 ng SO <sub>2</sub> /J (0.060 lb SO <sub>2</sub> /MMBtu) heat input.	3.6	15.9			Rule 62-4.070(3), F.A.C. 40 CFR 60.4330(a)(1) and (2)
SO <sub>2</sub> <sup>3</sup> EU003	10 grains of sulfur/100 scf			1.9	8.2	Rule 62-4.070(3), F.A.C. 40 CFR 60.333
Opacity <sup>5</sup>	10% opacity, 6-minute average	Not Applicable				Rule 62-4.070(3), F.A.C.
PM <sup>4</sup>	Lean premix combustion design	0.7	3.3	0.45	2.0	Rule 62-4.070(3), F.A.C.
VOC <sup>4</sup>	Lean premix combustion design	0.4	1.8	1.5	6.5	Rule 62-4.070(3), F.A.C.

<sup>1</sup> The CO standards are based on the average of three test runs as determined by EPA Method 10.

<sup>2</sup> The NO<sub>x</sub> standards are based on the average of three test runs as determined by EPA Method 20.

<sup>3</sup> EU001: 0 CFR 60.4415 and EU003: Maximum SO<sub>2</sub> standards are based on the maximum level specified by Federal Energy Regulatory Commission (FERC), which is 10 grains of sulfur per 100 standard cubic feet of natural gas. Actual fuel sulfur levels are expected to be less than 1 grain per 100 SCF of natural gas.

<sup>4</sup> For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions were based on data in Table 3.1-2a in AP-42. Regulated VOC emissions were conservatively assumed to be 10% of the manufacturer's estimated emissions for total hydrocarbons. No testing required.

<sup>5</sup> The opacity standard is based on a 6-minute block average, as determined by EPA Method 9.  
{Permitting Note: This standard is established as reasonable assurance of good combustion practices to minimize emissions.}

<sup>6</sup> Equivalent maximum emissions for each gas turbine are based on: permitted capacity, a turbine inlet air temperature of 45° F, full operation (8760 hours per year), and the permit standards (CO, NO<sub>x</sub>, and SO<sub>2</sub>) or the maximum expected emissions (PM and VOC). For comparison purposes, the permittee shall provide a reference table with the initial compliance test report of mass emission rates versus the turbine inlet temperatures. Each test report shall include measured mass emission rates for CO, NO<sub>x</sub> and SO<sub>2</sub>. Mass emission rates for SO<sub>2</sub> shall be calculated based on actual fuel sulfur content and fuel flow rate. For tests conducted at 45° F or greater, measured mass emission rates shall be compared to the equivalent maximum emissions above. For tests conducted below 45° F, measured mass emission rates shall be compared to the tabled mass emission rates provided by the manufacturer based on turbine inlet temperatures.

<sup>7</sup> The emissions standards of this permit ensure that operation of the gas turbine will not trigger the major source requirements of Title V (Chapter 62-213, F.A.C.) or PSD (Chapter 62-212, F.A.C.).

[Air Construction Permit No. 0410004-011-AC and Administrative Correction dated April 5, 2007]



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Expiration Date: January 16, 2012

5. **40 CFR 60, Subpart KKKK.** Emissions Unit 001 is subject to the requirements of 40 CFR 60, Subpart KKKK (APPENDIX-K).

**40 CFR 60, Subpart GG.** Emissions Unit 003 shall comply with the New Source Performance Standards (NSPS) of Subpart GG in 40 CFR 60. The applicable NSPS requirements are provided in Appendix C of this permit.

[40 CFR 60, Subpart KKKK- Standards of Performance for Stationary Combustion Turbines and 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines]

6. **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 the Department 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 the permit or the regulations.  
[Rule 62-4.130, F.A.C]
7. **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]
8. **Excess Emissions Prohibited:** Excess emission 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]
9. **Excess Emissions Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department 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]
10. **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]

**COMPLIANCE MONITORING AND TESTING REQUIREMENTS**

11. **Compliance Testing:** Test the emissions for the following pollutant(s): CO, NO<sub>x</sub>, SO<sub>2</sub> and visible emissions, within 60 days after achieving the maximum production rate, but no later than 180 days after initial startup, notify the Department 15 days prior to testing [FAC Rules 297.310(7)(a)1 and 297.310(7)(a)9], and submit the test report documentation to the Department with the operation permit application within 45 days after completion of the testing [FAC Rule 297-310(8)(b)].

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Florida Gas Transmission Company  
 5444 Westheimer Road  
 Houston, TX 77056-5306

I.D. Number: 0410004  
 Permit/Cert: 0410004-014-AO  
 Modification Date: August 10, 2007  
 Expiration Date: January 16, 2012

- 12. Compliance Test Notification:** The permittee 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.]

- 13. Compliance Test Methods:** Required tests shall be performed in accordance with the following reference methods.

<u>Method</u>	<u>Description of Method and Comments</u>
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
9	Visual Determination of the Opacity of emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analyses to calculate mass emissions in lieu of Methods 1-4.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines,

Tests shall also be conducted in accordance with the requirements specified in 62-297.310, F.A.C. The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C.

[Rule 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

- 14. Required Number of Test Runs:** For mass emission limitations, a compliance test shall consist of three complete and separate determination of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determination 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 determination 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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I.D. Number: 0410004  
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- 15. Operation During Compliance Test:** Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity as defined in Specific Condition 2. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

[Rule 62-297.310(2)(b), F.A.C.]

- 16. 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.]

- 17. Compliance 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 for 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.]

**18. Determination of Process Variables:**

- a) *Required Equipment.* The owner or operator of an emissions unit for which compliance testes 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 tot be determine within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

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I.D. Number: 0410004  
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19. **Sampling Facility:** 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.
20. **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 may 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.]

**REPORTING AND RECORDKEEPING REQUIREMENTS**

21. **Turbine Component Replacement Language:** For the replacement of gas turbine components to facilitate prompt repair and return the unit to its original specifications, the permittee shall comply with the following notification and testing requirements.
- a) Components shall only be replaced with functionally equivalent “like-kind” equipment. Replacement components may consist of improved or newer equipment, but such components shall not change operation or increase the capacity (heat input and power output rates) of the gas turbine. Replacement components that affect emissions shall be designed to achieve the emissions standards specified in all valid air permits and shall achieve these standards or better. After a component replacement, the gas turbine compressor engine remains subject to the standards of all valid air permits. [Rule 62-210.200(PTE), F.A.C.]
  - b) The permittee shall notify the Compliance Authority within seven days after beginning any replacement of the gas generator component of the compressor engine. Within seven days of first fire on a replacement gas generator, the permittee shall submit the following information to the Compliance Authority: date of first fire and certification from the vendor that the replacement gas generator is a functionally equivalent “like-kind” component. The vendor certification shall also identify the make, model number, maximum heat input rate (MMBtu/hour), power output (bhp) at ISO conditions, and that the permitted emission rates are achievable with the replacement component. This notification may be made by letter, fax or email. A copy of the information shall be kept on site at the compressor station. Within 60 days of restarting the unit after a gas generator replacement, the permittee shall conduct stack tests to demonstrate compliance with the applicable emission standards. The permittee shall notify the Compliance Authority in writing at least 15 days prior to conducting these tests. The permittee shall comply with all permit requirements for test notification, test methods, test procedures, and reporting. [Rules 62-4.130, 62-4.160(2),(6), and(15) and 62-297.310(7)(b), F.A.C.]
  - c) After investigation and for good cause, the Department may require special compliance tests pursuant to Rule 62-297.310(7)(b), F.A.C.
22. **Gas Turbine Replacement:** The gas turbine may be periodically removed and replaced with an equivalent <sup>1</sup> model. The permittee shall:
- a) As soon as possible, notify the Department of any turbine failures and of any scheduled replacements.
  - b) Prior to initial operation of a replaced turbine, provide the Department with documentation indicating the manufacturer, model number, serial number, brake-horsepower rating, heat input (MMBtu/hour), pollutant emission rates and certification by a professional Engineer registered in the State of Florida that the replacement is an equivalent <sup>1</sup> unit.

**PERMITTEE:**

Florida Gas Transmission Company  
5444 Westheimer Road  
Houston, TX 77056-5306

I.D. Number: 0410004  
Permit/Cert: 0410004-014-AO  
Modification Date: August 10, 2007  
Expiration Date: January 16, 2012

**22. continued:**

- c) Within one working day, notify the Department when the replacement is complete, when the replacement unit commenced operation, and the scheduled date of the emissions compliance tests.
- d) Conduct emissions compliance tests within 60 days of commencing operation of the replacement unit.
- e) Within 45 days of conducting the tests, submit test results indicating compliance with the emissions standards.
- f) Comply with the notification requirements of 40 CFR 60.7.

<sup>1</sup> {Permitting Note: Appendix B lists the equivalent gas turbine models. If the replacement gas turbine is not listed in Appendix B, the permittee shall apply for and receive a construction permit for the replacement gas turbine prior to installation}

23. **Recordkeeping:** 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. If requested by the Department, the permittee shall be able to provide a summary of this information within at least ten days of such request. The information shall also be used for submittal of the required Annual Operating Report.

[Rule 62-4.070(3), F.A.C.]

24. **Compliance Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Rule 62-297.310(8), F.A.C. For each run, the test report shall indicate the natural gas firing rate (cubic feet per hour), heat input rate (MMBtu per hour), the power output (bhp), percent base load, and the compressor inlet temperature. The required test report shall be filed with the Department as soon as practical by no later than 45 days after the last sampling run of each test is completed.

[Rule 62-297.310(8), F.A.C.]

25. **Annual Operating Report:** The owner or operator shall submit an Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) to the Department annually pursuant to Rule 62-210.370(3), F.A.C.

[Rule 62-210.300(3)(c)1.h, F.A.C.]

26. **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.

[Rule 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

**ADMINISTRATIVE**

27. The I.D. No. and Project name for this source shall be used on all correspondence.
28. Any revision(s) to a permit (and application) must be submitted to the Department, in writing, and approved by the Department prior to implementation.

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29. A completed Application for Air Permit Renewal- Non-Title V Source, DEP Form No. 62-210.900(4), F.A.C.] shall be submitted to the Department at least 60 days prior to the expiration date of this operating permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, processing fee, and compliance test reports as required by this permit. [Rules 62-4.055 and 62-4.220, F.A.C.]

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



Christopher L. Kirts, P.E.  
District Air Program Administrator