

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

Air Permit No. 0170035-008-AC
Citrus Compressor Station No. 26
Up-Rating of Compressor Engine No. 2601

Authorized Representative:

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

Enclosed is Final Air Permit No. 0170035-008-AC, which authorizes the up-rating of gas turbine compressor engine No. 2601 from 6500 bhp to 7300 bhp. The compressor engine operates at existing Compressor Station No. 24, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. As noted in the Final Determination (attached), only minor changes to correct typographical errors were made. 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.



C. H. Fancy, P.E., Chief
Bureau of Air Regulation

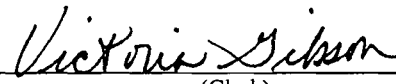
CERTIFICATE OF SERVICE

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 6/20/02 to the persons listed:

Mr. Rick Craig, FGT*
Mr. Jim Thompson, FGT
Mr. Kevin McGlynn, McGlynn Consulting Co.
Mr. V. Duane Pierce, AQMcS
Mr. Gerald Kissel, SWD

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.

 June 20, 2002
(Clerk) (Date)

FINAL DETERMINATION

PERMITTEE

Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

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. 0170035-008-AC
Citrus Compressor Station No. 26

This permit authorizes the up-rating of existing gas turbine No. 2601 from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26 (SIC No. 4922), which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on May 22, 2002. The applicant published the "Public Notice of Intent to Issue" in Citrus County Chronicle on May 30, 2002. The Department received the proof of publication on June 11, 2002. No requests for administrative hearings were filed.

COMMENTS

No comments on the Draft Permit were received from the public, the Department's Southwest District Office, or the applicant.

CONCLUSION

Only minor revisions were made to correct typographical errors. The final action of the Department is to issue the permit with the changes described above.



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
P.O. Box 1188
Houston, TX 77251

Authorized Representative:

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

Citrus Compressor Station No. 26
Air Permit No. 0170035-008-AC
Facility ID No. 0170035
SIC No. 4922
Permit Expires: July 1, 2003

PROJECT AND LOCATION

This permit authorizes the upgrading of existing gas turbine No. 2601 from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26 (SIC No. 4922), which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. The UTM coordinates of the existing station are: Zone 17, 353.21 km East, and 3193.99 km North (Latitude: 28° 51' 58" and Longitude: 82° 30' 18"). {Permitting Note: Construction of this unit was originally authorized by Permit No. AC09-229441, which was issued on September 24, 1993.

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 modify 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. This permit shall supersede the conditions of previous air construction Permit No. AC09-229441.

CONTENTS

- 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

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY AND PROJECT DESCRIPTION

The existing facility operates as a compressor station in Citrus County for Florida Gas Transmission Company's natural gas pipeline. This permit will affect the following existing emissions units.

ID	Emission Unit Description
001	FGTC No. 2601: Solar Taurus 60 T-7300S (ISO) gas turbine compressor engine firing natural gas and rated at 7300 bhp.
003	Miscellaneous Support Equipment: This includes fugitive emissions, lube oil storage tanks, oily water tanks, and a 443 bhp emergency generator.

REGULATORY CLASSIFICATION

Title III: The facility is not classified as 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 not classified as a Title V major source of air pollution.

PSD: The facility is not classified as a PSD major source of air pollution.

NSPS: The gas turbines are subject to the New Source Performance Standards of 40 CFR 60, Subpart GG.

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.

- Permit application received on 05/02/02, complete.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct or modify a PSD-major source shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400 with a copy to the Department's Southwest district Office. All documents related to applications for permits to construct or modify minor sources or for operation permits shall be submitted to the Department's Southwest District Office at 3804 Coconut Palm Drive in Tampa, Florida 33619-8218.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Southwest District Office at 3804 Coconut Palm Drive in Tampa, Florida 33619-8218.
3. Appendices: The following Appendices are attached as part of this permit.
 - Appendix CF describes the format used to cite applicable rules and regulations as well as previous permitting actions.
 - Appendix GC specifies the general conditions applicable to all facilities. The general conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
 - Appendix GG identifies the applicable NSPS requirements for gas turbines in 40 CFR 60, Subpart GG.
 - Appendix SC lists standard conditions applicable to air pollution sources compiled from Chapters 62-4, 62-210, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).
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. Operation Permit: This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules. The permittee shall apply for a minor source air operation permit at least sixty (60) days before the expiration of this construction permit, but no later than ninety (90) days after commencing operation. To apply for an operation permit, the applicant shall submit the appropriate application form, any required compliance test results, and such additional information as the Permitting Authority may by law require. [Rules 62-4.030, 62-4.050, and 62-4.220, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

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

Emissions Unit No. 001 (FGTC No. 2601): Gas Turbine Compressor Engine

Description: 7300 bhp gas-fired gas turbine compressor engine manufactured by Solar (Taurus 60 T-7300S).

Fuel: The gas turbine fires only natural gas (SCC No 2-02-002-01) at a firing rate of approximately 59,615 cubic feet per hour based on the permitted capacity and a higher heating value of 1040 BTU per SCF of gas.

Capacity: The gas turbine produces approximately 7000 bhp (ISO) based on a heat input rate of 62 mmBTU per hour, a compressor inlet air temperature of 59° F, and 60% relative humidity. The unit is intended to operate at or near capacity.

Controls: The gas turbine design incorporates lean premix combustors to minimize NOx emissions. The efficient combustion of natural gas at high temperatures minimizes emissions of CO, PM, SO₂, and VOC.

Stack Parameters: When operating at capacity, exhaust gases exit a 63 feet tall stack that is 6.0 feet in diameter at 920° F with a flow rate of approximately 90,285 acfm.

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 believes 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. Up-Rated Gas Turbine (FGTC No. 2601): The permittee is authorized to up-rate the existing gas turbine, a Solar Taurus 60 T-6500S, from 6500 bhp to 7300 bhp. The up-rated unit will be identified as a Solar Taurus 60 T-7300S. 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 for includes the automated gas turbine control system, an inlet air filtration system, and an exhaust stack that is 63 feet tall and 6.0 feet in diameter. [Applicant Request; Design]

PERFORMANCE RESTRICTIONS

3. Permitted Capacities: The maximum heat input rate to the gas turbine shall not exceed 62 MMBtu per hour while producing approximately 7000 bhp based on a compressor inlet air temperature of 59° F, a relative humidity of 60%, 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. 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. {Permitting Note: At a compressor inlet air temperature of 40° F, the gas turbine output approaches 7300 bhp at 64 MMBtu per hour.} [Rule 62-210.200(PTE), F.A.C.]
4. 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.]
5. Restricted Operation: The hours of operation for the gas turbine are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

EMISSIONS STANDARDS

6. Emissions Standards: Emissions from the 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	6.8	29.78	Synthetic minor source
NOx ^b	25.0 ppmvd @ 15% O ₂	5.6	24.53	Synthetic minor source 40 CFR 60.332
SO ₂ ^c	10.0 grains of sulfur per 100 SCF of gas	1.7	7.45	Synthetic minor source 40 CFR 60.333
Opacity ^d	10% opacity, 6-minute average	Not Applicable		Synthetic minor source
PM ^e	Good combustion practices (Factor: 0.0066 lb/mmBTU)	0.4	1.75	Synthetic minor source
VOC ^e	Good combustion practices (Factor: 2.5 ppmvd @ 15% O ₂)	0.2	0.88	Synthetic minor source

- 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 opacity and CO standards. Equivalent maximum PM emissions are based on AP-42, Table 3.1-2a. Equivalent maximum VOC emissions were based on available vendor data. No testing required.
- f. Equivalent maximum emissions are based on the maximum emission rates, permitted capacity, a compressor inlet air temperature of 59° F, a relative humidity of 60%, 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. The emissions standards of this permit ensure that the facility remains a minor source of air pollution with respect to both PSD and Title V air permit programs.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

EMISSIONS PERFORMANCE TESTING

7. 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
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 analysis 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 Section 4, 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. 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. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

8. 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 at least 90% of the maximum 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 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]
9. Annual Tests: During each federal fiscal year (October 1 - September 30), the gas turbine shall be tested to demonstrate compliance with the visible emissions standard. The permittee shall perform an annual visible inspection of the gas turbine, filters, and associated piping system for rust spots, cracks, leaks, and odors. Safety valves and stacks shall also be visually inspected to ensure proper working order. The results of the visible emissions observation and visual inspections shall be reported with the following additional items: a report on any non-routine maintenance conducted on each unit, a vendor analysis of the fuel sulfur content, and a general description of the activities and operation of this facility since the last test. [Rule 62-297.310(7)(a)4, F.A.C.]
10. Tests Prior to Renewal of Operation Permit: During the 12-month period prior to renewal of the air operation permit, 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 based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)3, 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]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 4, 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 run, the test report shall also 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 inlet compressor temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.334]
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. Within the 10 days of a request by the Department or the Compliance Authority, the permittee shall be able to summarize the following information: average heat input (MMBtu per hour); average 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 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. MISCELLANEOUS SUPPORT EQUIPMENT

This permit recognizes the following additional activities at this facility.

Emissions Unit No. 003: Miscellaneous Support Equipment

003

Miscellaneous support equipment including:

- One gas-fired emergency generator (443 bhp) identified as FGTC No. GEN01;
- Condensate storage tanks;
- Oily water storage tanks; and
- Miscellaneous buildings and pipeline equipment such as pumps, valves, flanges, etc.

{Permitting Notes: The emergency generator is expected to operate much less than 400 hours per year. The activities addressed in this section are included for completeness because they were identified in original air construction Permit No. AC09-229441. However, no changes were made to this equipment.}

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]

{Permitting Note: The above requirements may have already been satisfied for this existing unit.}

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.

EU	Description
001	FGTC No. 2601: 7300 bhp gas-fired gas turbine compressor engine manufactured by Solar (Taurus 60 T-7300S)

NSPS GENERAL PROVISIONS

In addition to the specific conditions of the permit and NSPS Subpart GG, the emissions units are 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

{Note: 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 in bold 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 NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis).

SECTION 4. APPENDIX GG

NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

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.

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.

{Note: The "Y" value when firing natural gas as provided by the manufacturer is approximately "11.43 kilojoules per watt-hour". The equivalent emission standard is 189 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.

{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

SECTION 4. APPENDIX GG
NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

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).

{Note: The excess NOx emissions reporting requirements do not apply. The gas turbine uses dry low-NOx combustion technology 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 little 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 results 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:

$$\text{NOx} = (\text{NOxo}) (\text{Pr}/\text{Po})^{0.5} e^{19(\text{Ho} - 0.00633)} (288^\circ\text{K}/\text{Ta})^{1.53}$$

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: The permittee is required to correct NOx emissions to ISO ambient atmospheric conditions for each required emissions performance test and compare 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.

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

SECTION 4. APPENDIX GG

NSPS SUBPART GG REQUIREMENTS FOR GAS TURBINES

- (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.

- (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.

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

SECTION 4. APPENDIX SC
STANDARD CONDITIONS

{Permitting Note: 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.]

SECTION 4. APPENDIX SC
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

SECTION 4. APPENDIX SC
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.

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 *HRD*
THRU: Clair Fancy
Al Linero *AL 6/14*
FROM: Jeff Koerner *JK*
DATE: June 13, 2002
SUBJECT: Final Air Construction Permit No. 0170035-008-AC
Florida Gas Transmission Company
Citrus County Compressor Station No. 26
Phase V Modifications, Up-rating of Compressor Engine No. 26

The Final Permit for this project is attached for your approval and signature, which authorizes the up-rating of gas turbine compressor engine No. 2601 from 6500 bhp to 7300 bhp. The compressor engine operates at existing Compressor Station No. 26, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. Although the project is minor with respect to PSD, Florida Gas Transmission Company requested that the Tallahassee office process all Phase V modifications for purposes of consistency.

The Department distributed an "Intent to Issue Permit" package on May 22, 2002. The applicant published the "Public Notice of Intent to Issue" in Citrus County Chronicle on May 30, 2002. The Department received the proof of publication on June 11, 2002. No requests for administrative hearings were filed.

Day #90 is September 1, 2002. I recommend your approval of the attached Final Permit for this project.

Attachments

HLR/CHF/AAL/jfk

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Rick Craig, V.P.
 of Southeastern Operations
 Florida Gas Transmission Co.
 P.O. Box 1188
 Houston, TX 77251

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

C. Signature *H. W. Staff* 2001

Agent
 Addressee

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

7001 0320 0001 3692 8420

PS Form 3811, July 1999

Domestic Return Receipt

102595

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only - No Insurance Coverage Provided)

7001 0320 0001 3692 8420

Postage \$
 Certified Fee
 Return Receipt Fee (Endorsement Required)
 Restricted Delivery Fee (Endorsement Required)
 Total Postage & Fees \$

Postmark Here

Sent To *Rick Craig*
 Street, Apt. No., or PO Box *PO Box 1188*
 City, State, ZIP+4 *Houston, TX 77251*

PS Form 3800, January 2001 See Reverse for Instructions

Proof of Publication

from the

CITRUS COUNTY CHRONICLE

Crystal River, Citrus County, Florida

PUBLISHED DAILY

STATE OF FLORIDA

COUNTY OF CITRUS

Before the undersigned authority personally appeared

Karen McDaniel

Of the Citrus County Chronicle, a newspaper published daily at Crystal River, in Citrus County, Florida, that the attached copy of advertisement being a public notice in the matter of the

195-0530 THCRN PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION Draft Air Permit No. 0170035-008-AC Florida Gas Transmission Company Citrus County Compressor Station No. 26 Phase V M

Court, was published in said newspaper in the issues of May 30th, 2002.

Affiant further says that the Citrus County Chronicle is a Newspaper published at Crystal River in said Citrus County, Florida, and that the said newspaper has heretofore been continuously published in Citrus County, Florida, each week and has been entered as second class matter at the post office in Inverness in said Citrus County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Karen McDaniel

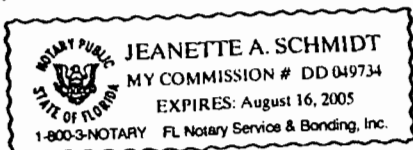
The forgoing instrument was acknowledged before me

This 30th day of May, 2002

By: Karen McDaniel

who is personally known to me and who did take an oath.

Jeanette A. Schmidt
Notary Public



195-0530 THCRN
PUBLIC NOTICE OF INTENT TO ISSUE
AIR CONSTRUCTION PERMIT
STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Draft Air Permit No. 0170035-008-AC
Florida Gas Transmission Company
Citrus County Compressor Station No. 26
Phase V Modification Project

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the Florida Gas Transmission Company to up-rate an existing gas turbine from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. The project is part of Florida Gas Transmission Company's overall Phase V project to increase the natural gas pipeline capacity and availability throughout the state. The applicant's authorized representative is Mr. Rick Craig, Vice President of Southeastern Operations. The applicant's mailing address is Florida Gas Transmission Company, P.O. Box 1188, Houston, TX 77251.

The applicant proposes to up-rate existing gas turbine compressor engine No. 2601 from 6500 bhp to 7300 bhp with a corresponding increase in heat input. The up-rated compressor engine will have the potential to emit the following pollutants: 30 tons of carbon monoxide per year; 25 tons of nitrogen oxides per year; 2 tons of particulate matter per year; 7 tons of sulfur dioxide per year; and 1 tons of volatile organic compounds per year. This represents only slight increases in potential emissions of carbon monoxide and particulate matter and decreases in the potential emissions of nitrogen oxides, sulfur dioxide, and volatile organic compounds. Both the project and facility are considered minor sources of air pollution with respect to Chapters 62-212 (PSD Major Source Preconstruction Review) and 62-213.400 (Title V Major Source Air Operation Permit). The facility is not a major source of hazardous air pollutants.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial inter-

BEST AVAILABLE COPY

representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding. In accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
(111 S. Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400
Telephone: 850/488-0114 Fax: 850/922-6979

Department of Environmental Protection
Southwest District Office
Air Resources Section
3804 Coconut Drive
Tampa, FL 33619-8218
Telephone: 813/744-6100 Fax: 813/744-6084

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project for additional information at the address and phone numbers listed above.

Published one (1) time in the Citrus County Chronicle, May 30, 2002.

RECEIVED

JUN 11 2002

BUREAU OF AIR REGULATION

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:

Mr. Rick Craig
V. P. of Southeastern Operations
Florida Gas Transmission Company
PO Box 1188
Houston, TX 77251

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) B. Date of Delivery

H. W. Att MAY 25 2002

C. Signature

X *H. W. Att* Agent Addressee

D. Is delivery address different from item 1? Yes
If YES, enter delivery address below: No

3. Service Type

- Certified Mail Express Mail
- Registered Return Receipt for Merchandise
- Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

7001 0320 0001 3692 8765

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

**U.S. Postal Service
CERTIFIED MAIL RECEIPT**

(Domestic Mail Only. No Insurance Coverage Provided)

7001 0320 0001 3692 8765

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark
Here

Sent To Rick Craig
Street, Apt. No.,
or PO Box No. PO Box 1188
City, State, ZIP+4 Houston, TX 77251

PS Form 3800, January 2001

See Reverse for Instructions

Memorandum

Florida Department of Environmental Protection

TO: Clair Fancy, Chief - Bureau of Air Regulation
THROUGH: Al Linero, Administrator - New Source Review Section *AAL*
FROM: Jeff Koerner, New Source Review Section *JK*
DATE: May 20, 2002
SUBJECT: Draft Air Construction Permit No. 0170035-008-AC
Florida Gas Transmission Company
Citrus County Compressor Station No. 26
Phase V Modification Project

Attached for your review are the following items:

- Intent to Issue Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- PE Certification

The draft permit authorizes the up-rating of an existing gas turbine (FGTC No. 2601) from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. This project is part of FGTC's overall Phase V project, which is intended to increase natural gas availability and reliability throughout Florida. FGTC requested processing of all of the Phase V projects in Tallahassee for consistency. The station is minor with respect to PSD and Title V and will remain so after completion of this project. The Technical Evaluation and Preliminary Determination provides a detailed description of the project, rule applicability, and emission standards. The P.E. certification briefly summarizes proposed project.

Day #74 is July 14, 2002. I recommend your approval of the attached Draft Permit for this project.

CHF/AAL/jfk

Attachments

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

P.E. CERTIFICATION STATEMENT

PERMITTEE

Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

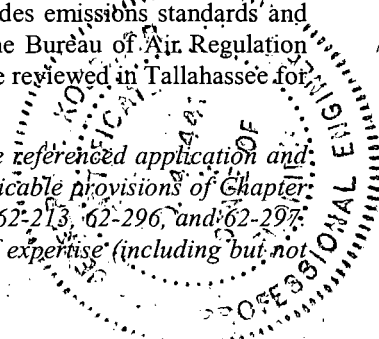
Draft Air Permit No. 0170035-008-AC
Citrus County Compressor Station No. 26
Phase V Modification Project

PROJECT DESCRIPTION

The proposed draft permit authorizes the up-rating compressor engine No. 2601 from 6500 bhp to 7300 bhp with a corresponding increase in fuel consumption. The project will allow the station to operate at a higher capacity than currently possible. This project is part of Florida Gas Transmission Company's overall Phase V project, which is intended to increase natural gas availability and reliability throughout Florida. The up-rated compressor engine will have the potential to emit the following pollutants: 30 tons of carbon monoxide per year; 25 tons of nitrogen oxides per year; 2 tons of particulate matter per year; 7 tons of sulfur dioxide per year; and 1 tons of volatile organic compounds per year. Both the project and facility are considered minor sources of air pollution with respect to Chapters 62-212 (PSD Major Source Preconstruction Review) and 62-213.400 (Title V Major Source Air Operation Permit). The facility is not a major source of hazardous air pollutants.

The gas turbine is subject to the New Source Performance Standards of Subpart GG in 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. This regulation establishes standards for emissions of NOx and SO2 as well as testing and monitoring requirements. Based on the manufacturer's estimated performance and the emissions standards established in the permit, the gas turbine will readily comply with the NSPS requirements. In addition, the draft permit includes emissions standards and monitoring requirements to ensure that the facility remains a minor source of air pollution. The Bureau of Air Regulation processed this application because Florida Gas Transmission requested that all Phase V projects be reviewed in Tallahassee for purposes of consistency.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).



Jeffery F. Koerner

Jeffery F. Koerner, P.E.
Registration Number: 49441

05-20-02

(Date)



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

May 20, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Rick Craig, V.P. of Southeastern Operations
Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

Re: Draft Air Permit No. 0170035-008-AC
Citrus County Compressor Station No. 26
Phase V Modification Project

Dear Mr. Craig:

Enclosed is one copy of the Draft Permit to up-rate an existing gas turbine compressor engine at existing Compressor Station No. 26, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. The Department's "Technical Evaluation and Preliminary Determination", "Intent to Issue Permit", and the "Public Notice of Intent to Issue Permit" are also included.

The "Public Notice of Intent to Issue Permit" must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, Administrator of the New Source Review Section, at the above letterhead address. If you have any other questions, please contact Jeff Koerner at 850/921-9536.

Sincerely,

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/AAI/jfk

Enclosures

In the Matter of an
Application for Air Permit by:

Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

Authorized Representative:

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

Draft Air Permit No. 0170035-008-AC
New Compressor Station No. 26
Phase V Modification Project
Citrus County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (copy of Draft Permit attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below. The applicant, Florida Gas Transmission Company, applied on May 2, 2002 to the Department for a permit to up-rate an existing gas turbine compressor engine at existing Compressor Station No. 26, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required to perform proposed work. The Department intends to issue this air construction permit based on the belief that the applicant has provided reasonable assurances to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114, Fax: 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in Section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) and (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of Public Notice of Intent to Issue Air Permit. Written comments and should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed

within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S. however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Mediation is not available in this proceeding. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.


The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of

the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.


C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit package (including the Public Notice of Intent to Issue Air Construction Permit, Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5/22/02 to the persons listed:

- Mr. Rick Craig, FGTC*
- Mr. Jim Thompson, FGTC
- Mr. Kevin McGlynn, McGlynn Consulting Co.
- Mr. V. Duane Pierce, AQMcS
- Mr. Gerry Kissel, SWD

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.

Victoria Gibson May 22, 2002
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 0170035-008-AC

Florida Gas Transmission Company
Citrus County Compressor Station No. 26
Phase V Modification Project

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the Florida Gas Transmission Company to up-rate an existing gas turbine from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26, which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. The project is part of Florida Gas Transmission Company's overall Phase V project to increase the natural gas pipeline capacity and availability throughout the state. The applicant's authorized representative is Mr. Rick Craig, Vice President of Southeastern Operations. The applicant's mailing address is Florida Gas Transmission Company, P.O. Box 1188, Houston, TX 77251.

The applicant proposes to up-rate existing gas turbine compressor engine No. 2601 from 6500 bhp to 7300 bhp with a corresponding increase in heat input. The up-rated compressor engine will have the potential to emit the following pollutants: 30 tons of carbon monoxide per year; 25 tons of nitrogen oxides per year; 2 tons of particulate matter per year; 7 tons of sulfur dioxide per year; and 1 tons of volatile organic compounds per year. This represents only slight increases in potential emissions of carbon monoxide and particulate matter and decreases in the potential emissions of nitrogen oxides, sulfur dioxide, and volatile organic compounds. Both the project and facility are considered minor sources of air pollution with respect to Chapters 62-212 (PSD Major Source Preconstruction Review) and 62-213.400 (Title V Major Source Air Operation Permit). The facility is not a major source of hazardous air pollutants.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments concerning the proposed permit issuance action for a period of fourteen (14) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding;

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
(111 S. Magnolia Drive, Suite 4)
2600 Blair Stone Road, MS #5505
Tallahassee, Florida, 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southwest District Office
Air Resources Section
3804 Coconut Drive
Tampa, FL 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project for additional information at the address and phone numbers listed above.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

PROJECT

Draft Air Construction Permit No. 0170035-008-AC
Existing Station No. 26 – Up-Rated Gas Turbine Compressor Engine
(Emissions Unit Nos. 001 and 003)

COUNTY

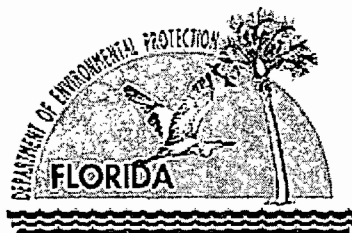
Citrus County

APPLICANT

Florida Gas Transmission Company
ARMS Facility ID No. 0170035
Citrus County Compressor Station No. 26

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
New Source Review Section



May 20, 2002

{Filename: FGT 26V TEPD.doc}

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

1.1 Applicant Name and Address

Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

Authorized Representative:

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

1.2 Processing Schedule

05/02/02: Received permit application No. 0170035-008-AC; complete.

1.3 Facility Description and Location

The applicant proposes to modify existing gas turbine No. 2601 to increase the output from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26 (SIC No. 4922), which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. The UTM coordinates of the existing station are: Zone 17, 353.21 km East, and 3193.99 km North (Latitude: 28° 51' 58" and Longitude: 82° 30' 18"). This is an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

1.4 Regulatory Categories

Title III: The facility is not a major source of hazardous air pollutants (HAP).

Title IV: The facility is not subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is not a Title V major source of air pollution.

PSD: The facility is not a major source of air pollution pursuant to the requirements of the Prevention of Significant Deterioration (PSD) of Air Quality Program, Rule 62-212.400, F.A.C.

NSPS: The gas turbine is subject to the New Source Performance Standards in Subpart GG of 40 CFR 60.

NESHAP: The facility has no emissions units subject to any National Emission Standards for Hazardous Air Pollutants in 40 CFR 63.

1.5 Project Description

The existing facility operates as a compressor station in Citrus County for Florida Gas Transmission Company's natural gas pipeline. It currently consists of the following emissions units.

EU ID	Emissions Unit Description
001	<u>FGTC No. 2601</u> : 6500 bhp gas-fired gas turbine compressor engine
002	<u>FGTC No. 2602</u> : 7200 bhp gas-fired gas turbine compressor engine
003	<u>Miscellaneous Support Activities</u> : This includes fugitive emissions, lube oil storage tanks, oily water tanks, and a 443 bhp emergency generator.

The applicant proposes to upgrade compressor engine No. 2601 from 6500 bhp to 7300 bhp with a corresponding increase in fuel consumption. The project will allow the station to operate at a higher capacity than currently possible. This project is part of Florida Gas Transmission Company's overall Phase V project, which is intended to increase natural gas availability and reliability throughout Florida.

2. APPLICABLE REGULATIONS

2.1 State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice and Comments, Reports, Stack Height Policy, Circumvention, Excess Emissions, Forms and Instructions,
62-212	Preconstruction Review, PSD Requirements, and BACT Determinations
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

2.2 Federal Regulations

This project is also subject to the applicable federal provisions regarding air quality as established by the EPA in the following sections of the Code of Federal Regulations (CFR).

<u>Title 40, CFR</u>	<u>Description</u>
Part 60	Subpart A - General Provisions for NSPS Sources NSPS Subpart GG - Stationary Gas Turbines Applicable Appendices

3. EMISSIONS STANDARDS

3.1 Brief Discussion of Emissions

The following text is an excerpt on stationary gas turbines from Section 3.1 EPA's AP-42 emission factor document:

"The primary pollutants from gas turbine engines are nitrogen oxides (NO_x), carbon monoxide (CO), and to a lesser extent, volatile organic compounds (VOC). Particulate matter (PM) is also a primary pollutant for gas turbines using liquid fuels. Nitrogen oxide formation is strongly dependent on the high temperatures developed in the combustor. Carbon monoxide, VOC, hazardous air pollutants (HAP), and PM are primarily the result of incomplete combustion. Trace to low amounts of HAP and sulfur dioxide (SO₂) are emitted from gas turbines. Ash and metallic additives in the fuel may also contribute to PM in the exhaust. Oxides of sulfur (SO_x) will only appear in a significant quantity if heavy oils are fired in the turbine. Emissions of sulfur compounds, mainly SO₂, are directly related to the sulfur content of the fuel.

Available emissions data indicate that the turbine's operating load has a considerable effect on the resulting emission levels. Gas turbines are typically operated at high loads (greater than or equal to 80 percent of rated capacity) to achieve maximum thermal efficiency and peak combustor zone flame temperatures. With reduced loads (lower than 80 percent), or during periods of frequent load changes, the combustor zone flame temperatures are expected to be lower than the high load temperatures, yielding lower thermal efficiencies and more incomplete combustion ... "

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

3.2 NSPS Subpart GG Standards

The gas turbine is subject to the New Source Performance Standards of Subpart GG in 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. This regulation establishes standards for emissions of NOx and SO2 as well as testing and monitoring requirements. The Solar Model Taurus 60 T-7300S gas turbine has a heat rate of 11.43 kilojoules per watt-hour. Therefore, the corresponding NSPS standards are:

- NOx emissions ≤ 189ppmvd @ 15% oxygen, and
- SO2 emissions are limited to the firing of only fuels containing ≤ 0.8 percent sulfur by weight.

Based on the manufacturer’s estimated performance and guarantees, the gas turbine will readily comply with the NSPS requirements. The applicant has requested lower emissions standards for several pollutants that reflect the more efficient operation and that will ensure that the facility remains minor with respect to both the PSD and Title V air permitting programs.

3.3 Draft Emissions Standards

Based on the applicant’s request, the Department will establish the following emissions standards.

EU-001: Gas Turbine Compressor Engine No. 2601

Pollutant	Standards	Equivalent Maximum Emissions ^f		Rule Basis ^g
		lb/hour	TPY	
CO ^a	50.0 ppmvd @ 15% O ₂	6.8	29.78	Synthetic minor source
NOx ^b	25.0 ppmvd @ 15% O ₂	5.6	24.53	Synthetic minor source 40 CFR 60.332
SO ₂ ^c	10.0 grains of sulfur per 100 SCF of gas	1.7	7.45	Synthetic minor source 40 CFR 60.333
Opacity ^d	10% opacity, 6-minute average	Not Applicable		Synthetic minor source
PM ^e	Good combustion practices (Factor: 0.0066 lb/mmBTU)	0.4	1.75	Synthetic minor source
VOC ^e	Good combustion practices (Factor: 10 ppmvd @ 15% O ₂)	0.2	0.88	Synthetic minor source

- a. The CO standards are based on the average of 3 test runs as determined by EPA Method 10.
- b. The NOx standards are based on the average of 3 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 opacity and CO standards. Equivalent maximum PM emissions are based on AP-42, Table 3.1-2a. Equivalent VOC emissions assumed 10% of the vendor emission factor for total unburned hydrocarbons. No testing required.
- f. Equivalent maximum emissions are based on maximum emission rates, permitted capacity, a compressor inlet air temperature of 59° F, a relative humidity of 60%, 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

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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. The emissions standards of this permit ensure that the facility remains a minor source of air pollution with respect to both PSD and Title V air permit programs. Based on the application, this will bring the total annual potential emissions for the facility to: 78 TPY of CO; 62 TPY of NO_x; 14 TPY of PM; 10 TPY of SO₂; and 3 TPY of VOC. This remains well below the PSD and Title V applicability thresholds.

Note: Original construction Permit No. AC09-229441 identified the annual potential emissions for this unit as: 28.29 TPY of CO; 39.05 TPY of NO_x; 1.51 TPY of PM; 8.62 TPY of SO₂; and 1.62 TPY of VOC. Therefore, the project will result in only slight potential emissions increases of CO and PM. Potential emissions of NO_x, SO₂, and VOC will decrease.

3.4 Compliance Methods

- a. *Initial Tests:* The gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NO_x, and visible emissions. The initial tests shall be conducted within 60 days after achieving at least 90% of the maximum permitted capacity, but not later than 180 days after initial operation of the gas turbine. The initial NO_x 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 NO_x performance tests shall consist of three, 20-minute test runs. The peak load NO_x performance test shall consist of three, 1-hour test runs. The CO performance tests shall be conducted concurrently with the NO_x performance tests at peak load. SO₂ emissions shall be calculated 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]
- b. *Annual Tests:* During each federal fiscal year (October 1 - September 30), the gas turbine shall be tested to demonstrate compliance with the visible emissions standard. In addition to the test results, each report shall include the following: a report on any non-routine maintenance conducted on each unit, a vendor analysis of the fuel sulfur content, and a general description of the activities and operation of this facility since the last test. [Rule 62-297.310(7)(a)4, F.A.C.]
- c. *Tests Prior to Renewal of Operation Permit:* During the 12-month period prior to renewal of the air operation permit, the gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NO_x, and visible emissions. CO and NO_x emissions shall be tested concurrently at permitted capacity. SO₂ emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)3, F.A.C.]
- d. *Custom Fuel Monitoring:* The applicant has requested a custom fuel-monitoring schedule for fuel sulfur that meets the general requirements of EPA's most recent guidance regarding compliance with the NSPS Subpart GG provisions. The frequency of monitoring shall begin at twice per week and may eventually be reduced to twice per year based on satisfactory results.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the specific conditions of the draft permit. Jeff Koerner is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE:

Florida Gas Transmission Company
P.O. Box 1188
Houston, TX 77251

Authorized Representative:

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

Citrus Compressor Station No. 26 Air Permit No. 0170035-001-AC Facility ID No. 0170035 SIC No. 4922 Permit Expires: July 1, 2003

PROJECT AND LOCATION

This permit authorizes the upgrading of existing gas turbine No. 2601 from 6500 bhp to 7300 bhp. The gas turbine serves as a compressor engine at existing Station No. 26 (SIC No. 4922), which is located northwest of the town of Lecanto approximately 0.4 miles north of Highway 44 on North Maylen Road in Citrus County, Florida. The UTM coordinates of the existing station are: Zone 17, 353.21 km East, and 3193.99 km North (Latitude: 28° 51' 58" and Longitude: 82° 30' 18"). {Permitting Note: Construction of this unit was originally authorized by Permit No. AC09-229441, which was issued on September 24, 1993.

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 modify 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. This permit shall supersede the conditions of previous air construction Permit No. AC09-229441.

CONTENTS

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

(DRAFT)

Howard L. Rhodes, Director
Division of Air Resources Management

(Date)

SECTION 1. GENERAL INFORMATION (DRAFT)

FACILITY AND PROJECT DESCRIPTION

The existing facility operates as a compressor station in Citrus County for Florida Gas Transmission Company's natural gas pipeline. This permit will affect the following existing emissions units.

ID	Emission Unit Description
001	FGTC No. 2601: Solar Taurus 60 T-7300S (ISO) gas turbine compressor engine firing natural gas and rated at 7300 bhp.
003	Miscellaneous Support Equipment: This includes fugitive emissions, lube oil storage tanks, oily water tanks, and a 443 bhp emergency generator.

REGULATORY CLASSIFICATION

Title III: The facility is not classified as 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 not classified as a Title V major source of air pollution.

PSD: The facility is not classified as a PSD major source of air pollution.

NSPS: The gas turbines are subject to the New Source Performance Standards of 40 CFR 60, Subpart GG.

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.

- Permit application received on 05/02/02, complete.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

1. Permitting Authority: All documents related to applications for permits to construct or modify a PSD-major source shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400 with a copy to the Department's Southwest district Office. All documents related to applications for permits to construct or modify minor sources or for operation permits shall be submitted to the Department's Southwest District Office at 3804 Coconut Palm Drive in Tampa, Florida 33619-8218.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Southwest District Office at 3804 Coconut Palm Drive in Tampa, Florida 33619-8218.
3. Appendices: The following Appendices are attached as part of this permit.
 - Appendix CF describes the format used to cite applicable rules and regulations as well as previous permitting actions.
 - Appendix GC specifies the general conditions applicable to all facilities. The general conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
 - Appendix GG identifies the applicable NSPS requirements for gas turbines in 40 CFR 60, Subpart GG.
 - Appendix SC lists standard conditions applicable to air pollution sources compiled from Chapters 62-4, 62-210, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).
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. Operation Permit: This permit authorizes modification of the permitted emissions units and initial operation to determine compliance with Department rules. The permittee shall apply for a minor source air operation permit at least sixty (60) days before the expiration of this construction permit, but no later than ninety (90) days after commencing operation. To apply for an operation permit, the applicant shall submit the appropriate application form, any required compliance test results, and such additional information as the Permitting Authority may by law require. [Rules 62-4.030, 62-4.050, and 62-4.220, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

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

Emissions Unit No. 001 (FGTC No. 2601): Gas Turbine Compressor Engine

Description: 7300 bhp gas-fired gas turbine compressor engine manufactured by Solar (Taurus 60 T-7300S).

Fuel: The gas turbine fires only natural gas (SCC No 2-02-002-01) at a firing rate of approximately 59,615 cubic feet per hour based on the permitted capacity and a higher heating value of 1040 BTU per SCF of gas.

Capacity: The gas turbine produces approximately 7000 bhp (ISO) based on a heat input rate of 62 mmBTU per hour, a compressor inlet air temperature of 59° F, and 60% relative humidity. The unit is intended to operate at or near capacity.

Controls: The gas turbine design incorporates lean premix combustors to minimize NOx emissions. The efficient combustion of natural gas at high temperatures minimizes emissions of CO, PM, SO₂, and VOC.

Stack Parameters: When operating at capacity, exhaust gases exit a 63 feet tall stack that is 6.0 feet in diameter at 920° F with a flow rate of approximately 90,285 acfm.

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 believes 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. Up-Rated Gas Turbine (FGTC No. 2601): The permittee is authorized to up-rate the existing gas turbine, a Solar Taurus 60 T-6500S, from 6500 bhp to 7300 bhp. The up-rated unit will be identified as a Solar Taurus 60 T-7300S. 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 for includes the automated gas turbine control system, an inlet air filtration system, and an exhaust stack that is 63 feet tall and 6.0 feet in diameter. [Applicant Request; Design]

PERFORMANCE RESTRICTIONS

3. Permitted Capacities: The maximum heat input rate to the gas turbine shall not exceed 62 MMBtu per hour while producing approximately 7000 bhp based on a compressor inlet air temperature of 59° F, a relative humidity of 60%, 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. 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. {Permitting Note: At a compressor inlet air temperature of 40° F, the gas turbine output approaches 7300 bhp at 64 MMBtu per hour.} [Rule 62-210.200(PTE), F.A.C.]
4. 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.]
5. Restricted Operation: The hours of operation for the gas turbine are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

EMISSIONS STANDARDS

6. Emissions Standards: Emissions from the 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	6.8	29.78	Synthetic minor source
NOx ^b	25.0 ppmvd @ 15% O ₂	5.6	24.53	Synthetic minor source 40 CFR 60.332
SO ₂ ^c	10.0 grains of sulfur per 100 SCF of gas	1.7	7.45	Synthetic minor source 40 CFR 60.333
Opacity ^d	10% opacity, 6-minute average	Not Applicable		Synthetic minor source
PM ^e	Good combustion practices (Factor: 0.0066 lb/mmBTU)	0.4	1.75	Synthetic minor source
VOC ^e	Good combustion practices (Factor: 2.5 ppmvd @ 15% O ₂)	0.2	0.88	Synthetic minor source

- 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 opacity and CO standards. Equivalent maximum PM emissions are based on AP-42, Table 3.1-2a. Equivalent maximum VOC emissions were based on available vendor data. No testing required.
- f. Equivalent maximum emissions are based on the maximum emission rates, permitted capacity, a compressor inlet air temperature of 59° F, a relative humidity of 60%, 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. The emissions standards of this permit ensure that the facility remains a minor source of air pollution with respect to both PSD and Title V air permit programs.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

EMISSIONS PERFORMANCE TESTING

7. 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
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 analysis 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 Section 4, 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. 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. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

8. Initial Tests: The gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NO_x, and visible emissions. The initial tests shall be conducted within 60 days after achieving at least 90% of the maximum permitted capacity, but not later than 180 days after initial operation of the gas turbine. The initial NO_x 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 NO_x performance tests shall consist of three, 20-minute test runs. The peak load NO_x performance test shall consist of three, 1-hour test runs. The CO performance tests shall be conducted concurrently with the NO_x performance tests at peak load. SO₂ emissions shall be calculated 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]
9. Annual Tests: During each federal fiscal year (October 1 - September 30), the gas turbine shall be tested to demonstrate compliance with the visible emissions standard. The permittee shall perform an annual visible inspection of the gas turbine, filters, and associated piping system for rust spots, cracks, leaks, and odors. Safety valves and stacks shall also be visually inspected to ensure proper working order. The results of the visible emissions observation and visual inspections shall be reported with the following additional items: a report on any non-routine maintenance conducted on each unit, a vendor analysis of the fuel sulfur content, and a general description of the activities and operation of this facility since the last test. [Rule 62-297.310(7)(a)4, F.A.C.]
10. Tests Prior to Renewal of Operation Permit: During the 12-month period prior to renewal of the air operation permit, the gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NO_x, and visible emissions. CO and NO_x emissions shall be tested concurrently at permitted capacity. SO₂ emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)3, 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]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. FGT UNIT NO. 2601, GAS TURBINE COMPRESSOR ENGINE

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 4, Appendix SC of this permit. In addition, NO_x 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 run, the test report shall also 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 inlet compressor temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.334]
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. Within the 10 days of a request by the Department or the Compliance Authority, the permittee shall be able to summarize the following information: average heat input (MMBtu per hour); average 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 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. MISCELLANEOUS SUPPORT EQUIPMENT

This permit recognizes the following additional activities at this facility.

Emissions Unit No. 003: Miscellaneous Support Equipment	
003	Miscellaneous support equipment including: <ul style="list-style-type: none">• One gas-fired emergency generator (443 bhp) identified as FGTC No. GEN01;• Condensate storage tanks;• Oily water storage tanks; and• Miscellaneous buildings and pipeline equipment such as pumps, valves, flanges, etc.

{Permitting Notes: The emergency generator is expected to operate much less than 400 hours per year. The activities addressed in this section are included for completeness because they were identified in original air construction Permit No. AC09-229441. However, no changes were made to this equipment.}



Florida Gas Transmission Company

April 22, 2002

Capital Projects Field Office, 111 Kelsey Lane, Ste. A., Tampa, FL 33619
813.655.7441 / 800.381.1477

Mr. Clair H. Fancy, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Bldg.
2600 Blairstone
Tallahassee, FL 32399-2400

Reference: Facility No. 0170035
Compressor Station No. 26, Citrus County

Dear Mr. Fancy:

Subject: Application for Air Construction Permit

Florida Gas Transmission Company (FGT) is proposing to uprate an existing compressor turbine at the above referenced facility from 6,500 hp to 7,300 hp ISO conditions. This existing facility is a minor source under Title V and New Source Review regulations and the proposed modification is not significant; therefore, only a state construction permit is required.

Enclosed is an Application for an Air Construction Permit for the proposed modification. A check for \$2,000.00 is attached for the application fee.

If you have any questions or need additional information, please call me at (800) 381-1477.

Sincerely,

Jim Thompson
Environmental Project Manager
For Florida Gas Transmission Company Phase V Project

ATTACHMENTS

CC: James Alexander, Phase V w/o attachments
Rick Craig, w/o attachments
Frank Diemont
Jake Krautsch, Tallahassee
V. Duane Pierce, AQMs

RECEIVED

MAY 02 2002

BUREAU OF AIR REGULATION

Florida Gas Transmission Company

Phase V Expansion Project

Compressor Station No. 26

Lecanto, Florida

**APPLICATION
For
AIR CONSTRUCTION
PERMIT**

RECEIVED

MAY 02 2002

BUREAU OF AIR REGULATION

March 2002

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1.0 INTRODUCTION

Florida Gas Transmission Company (FGT), a Delaware Corporation and ENRON/EL PASO affiliate of Houston, Texas, is proposing to modify its existing natural gas pipeline facility near Lecanto in Citrus County, Florida (Compressor Station No. 26). This proposed modification is part of FGT's Phase V Expansion Project, aimed at increasing the supply capacity of FGT's network servicing domestic, commercial, and industrial customers in Florida. The scope of work for the Phase V Expansion Project includes expansion through the addition of state-of-the-art compressor engines at eight existing compressor stations and the development of three new compressor stations and pipeline within the State of Florida. The basic project components include:

- Mainline loops, additions, and replacements;
- Lateral loops and additions;
- Meter station additions, modifications, and expansions;
- Regulator additions, modifications, and expansions; and
- Compressor station additions and modifications.

Compressor Station No. 26 is located in Citrus County, Florida, northwest of the town of Lecanto on North Maylen Road 0.4 miles north of Highway 44. Figure 1-1 shows the location of the existing compressor station.

The proposed modification involves the uprating of an existing compressor turbine from 6,500 bhp to 7,300 ISO hp. This equates to 6,954 site brake Hp at 59°F ambient temperature and elevation of 98 feet. The compressor turbine is used solely for transporting natural gas by pipeline for distribution to markets in Florida. The existing engine is a Solar Taurus 60S T-6500S equipped with dry low NO_x (oxides of nitrogen) combustion. Under current federal and state air quality regulations, the facility is a minor stationary source. Based on the projected annual emission rates, there will be no PSD significant increase in any emissions.

Engineering designs for the proposed expansion project include selection of an engine incorporating dry low NO_x combustion technology. Dry low NO_x technology for control of NO_x emissions would represent Best Available Control Technology (BACT) for the proposed turbine engine under PSD requirements.

This application contains two additional sections. Descriptions of the existing operation at FGT's Compressor Station No. 26 and the proposed uprated turbine are presented in Section 2.0. The air quality review requirements and applicability of state and federal regulations are discussed in Section 3.0.

FDEP permit application forms are provided in Attachment A. Attachment B contains vendor information and Attachment C contains emission calculations.

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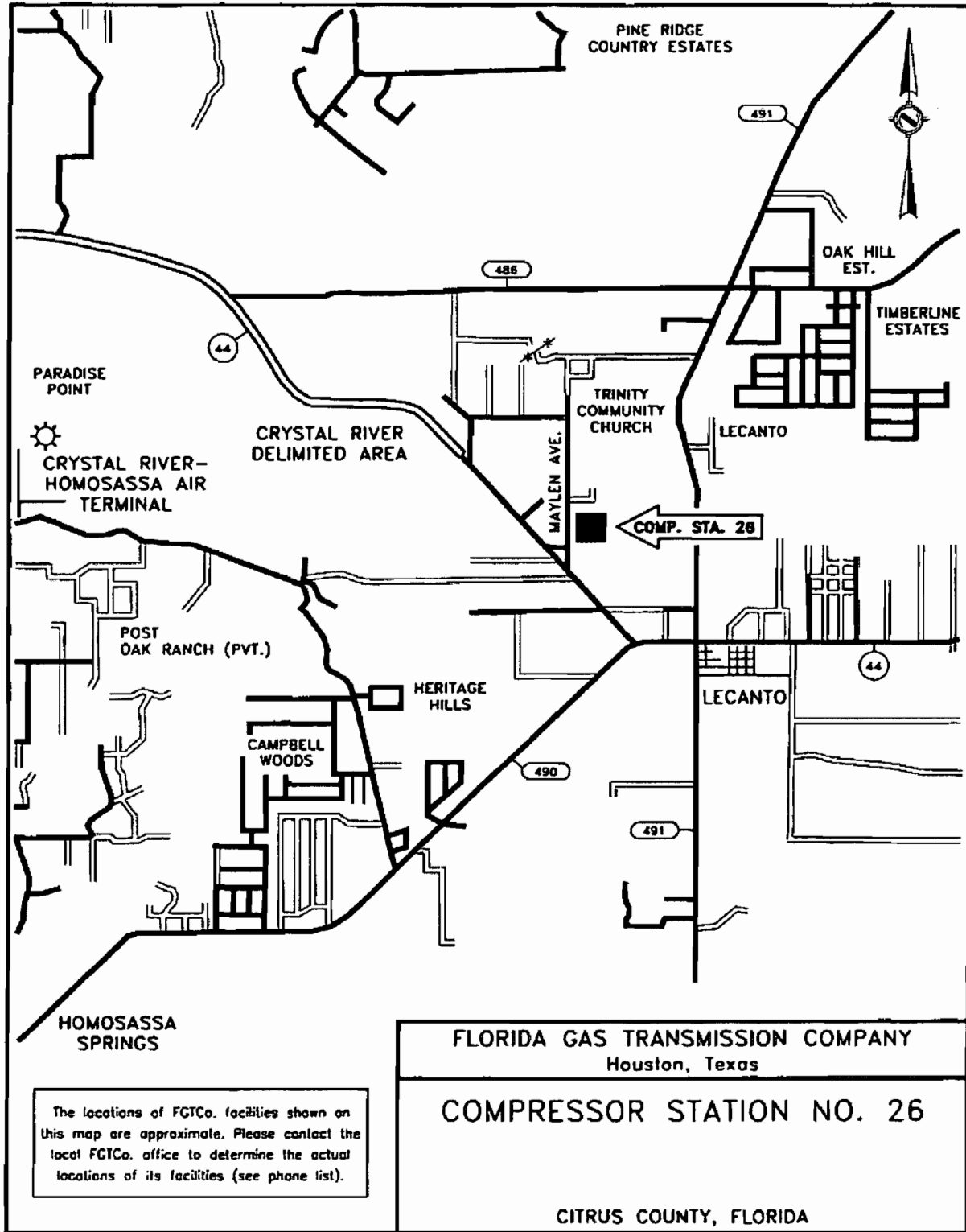


Figure 1-1

2.0 PROJECT DESCRIPTION

The following sections provide a description of the operations at this location.

2.1 Existing Operations

FGT's existing Compressor Station No. 26 consists of two gas-fired turbine compressors. One is rated at 6,500 bhp ISO and the other at 7,200 bhp ISO. The existing engine rated at 6,500 bhp is being modified as part of this expansion project.

The existing facility also has supporting equipment including pipeline condensate lube oil and oily water storage tanks and an emergency generator.

2.2 Proposed Compressor Station Modification

FGT proposes to increase the horsepower capacity of Compressor Station No. 26, as part of the Phase V Expansion Project. This will involve uprating an existing gas-fired turbine (Compressor Engine 2601). The proposed uprated engine will be used to increase the volumetric delivery capacity by driving a gas compressor that is a part of a gas transmission line that transports natural gas from source wells in Texas and Louisiana for delivery throughout Florida. Without the proposed modifications, it would not be possible to increase the volumetric delivery capacity necessary to meet both short and long-term demands for natural gas in Florida.

2.2.1 Uprated Compressor Turbine

FGT proposes to upgrade one existing natural gas-fired turbine engine compressor unit at Compressor Station No. 26. The existing engine is a Solar Taurus 60 T-6500S turbine compressor unit rated at 6,500 bhp (ISO) that will be uprated to a Taurus 60 T-7300S at 7,300 ISO hp (6,954 hp at site elevation, 59° F ambient temperature and inlet and exhaust pressure losses included). Fuel will be exclusively natural gas from FGT's natural gas pipeline. Specifications and stack parameters for the proposed modified engine are presented in Table 2-1.

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Table 2-1 Proposed Uprated Turbine (2601) Specifications and Stack Parameters

Parameter	Design
Compressor Engine	2601
Type	Gas Turbine
Manufacturer	Solar
Model	Taurus 60 T-7300S
Unit Size (59°F with site elevation and inlet and exhaust losses of 4.0 inches H2O)	6,954 bhp
Specific Heat Input ^a	8,528 Btu/hp-hr
Maximum Fuel Consumption ^b	0.062725 MMscf/hr
Speed	13,029 rpm
Stack Parameters	
Stack Height	63 ft
Stack Diameter	6.0 ft
Exhaust Gas Flow ^c	90,285 acfm
Exhaust Temperature ^c	956 °F
Exhaust Gas Velocity ^c	53.2 ft/sec

NOTE:

- acfm = actual cubic feet per minute.
- bhp = brake horsepower.
- Btu/hp-hr = British thermal units per brake horsepower per hour.
- °F = degrees Fahrenheit.
- ft = feet.
- ft/sec = feet per second.
- MMscf/hr = million standard cubic feet per hour.
- rpm = revolutions per minute.

^a Vendor provided value for 95° F and 59% RH (based on unknown Lower Heating Value)

^b Based on vendor specific heat rate of 8,528 Btu/hp-hr at an inlet temperature of 95° F plus 10%, horsepower at 6,954 hp and a higher heating value for natural gas of 1040 Btu per standard cubic foot (Btu/scf).

^c Based on inlet temperature of 95° F

Hourly and annual emissions of regulated pollutants from the proposed engine under normal operating conditions are presented in Table 2-2. Emissions of NOX, CO and VOCs are based on the engine manufacturer's supplied data (See Attachment B). Short-term emissions rates (lb/hr) are based on an inlet temperature of 40° F, 60% relative humidity and site elevation. Long-term emission rates (tpy) are based on ISO conditions at site elevation.

Typically, turbine vendors do not provide information on particulate matter or SO₂ emissions; therefore, particulate matter emissions are based upon USEPA publication AP-42 Table 3.1-2a (USEPA, 2000) and emissions of SO₂ are based on FGT's Federal Energy Regulatory

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Commission (FERC) certificate limit of 10 grains sulfur per 100 cubic feet of natural gas. Hazardous air pollutant (HAP) emissions are based upon the Gas Research Institute's (GRI) HapCalc 3.0 software that uses USEPA emission factors, emission factors found in research literature and emission factors based on GRI research data.

Table 2-2 Proposed Up-rated Turbine (2601) Compressor Engine Emissions

Pollutant	Emission Factor ^a	Reference	lb/hr ^b	TPY
Nitrogen Oxides	5.60 lb/hr	Manufacturer Data	5.81	24.53
Carbon Monoxide	6.82 lb/hr	Manufacturer Data	7.07	29.86
Volatile Organic Compounds ^c	0.2025 lb/hr	Manufacturer Data	0.20	0.86
Particulate Matter	0.0066 lb/MMBtu	AP-42, Table 3.1-2a	0.43	1.89
Sulfur Dioxide ^d	10 grains/100 scf	FERC Limit	1.79	7.85
HAPs	Various see Attachment C	AP-42, Table 3.1-3	0.067	0.29

- a. Emission factors are for ISO conditions with site elevation
- b. Short-term emissions rates for NOx, CO and VOCs are based on an inlet temperature of 40° F, 60% relative humidity and site elevation
- c. VOC emissions assumed to be 10% of vendor provided UHC emission rates
- d. Emissions based on vendor specific heat rate of 8,528 Btu/hp-hr at an inlet temperature of 95° F plus 10%, horsepower at 6,954 hp and a HHV for natural gas of 1040 Btu per standard cubic foot (Btu/scf).

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2.2.2 Emissions Summary

The total new emissions resulting from the project are listed on Table 2-3. As can be seen from the table, the emission increases are not significant under PSD. The calculations used to estimate these emissions are presented in Attachment C.

Table 2-3 Potential Annual Emissions (tpy) Summary

SOURCE ID	DESCRIPTION	NO _x	CO	VOC ^a	SO ₂	PM
EXISTING EMISSIONS						
2601 – current	6,500 bhp ISO Turbine Engine	39.1	28.3	1.6	7.2	1.3
2602	7,200 bhp ISO Turbine Engine	35.6	47.0	1.3	2.1	11.7
GEN01	443 bhp Recip. Engine	2.2	0.6	0.0	0.2	0.2
	OTHER SOURCES: ^b	0.0	0.0	0.5	0.0	0.0
CURRENT TOTALS:		76.9	75.9	3.4	9.5	13.2
NEW EMISSION RATES						
2601 - modified	7,300 bhp ISO Turbine Engine	24.5	29.9	0.9	7.9	1.9
CHANGE IN EMISSIONS						
2601 - modified	7,300 bhp ISO Turbine Engine	-14.6	1.6	-0.7	0.7	0.6
PROPOSED NEW TOTALS:		62.3	77.5	2.7	10.2	13.8
<p>(a) VOC = NM/NE HC (b) Other Sources Includes: Ancillary equipment, storage tanks and equipment leaks</p>						

3.0 REGULATORY ANALYSIS

This section presents a review of federal and Florida State air quality regulations, which govern the operations and proposed modifications to be conducted at Compressor Station No. 26.

3.1 Federal Regulations Review

The federal regulatory programs administered by the USEPA have been developed under the authority of the Clean Air Act. The following subsections review the essential elements of the federal regulatory program and the impact they have on the proposed operations at Compressor Station No. 26.

3.1.1 Classification of Ambient Air Quality

The 1970 Amendments to the CAA gave the USEPA specific authority to establish the minimum level of air quality that all states would be required to achieve. These minimum values or standards were developed in order to protect the public health (primary) and welfare (secondary).

Areas of the country that have air quality equal to or better than these standards (i.e., ambient concentrations less than a standard) are designated as "Attainment Areas", while those where monitoring indicates air quality is worse than the standards are known as "Non-attainment Areas." The designation of an area has particular importance for a proposed project as it determines the type of permit review to which the application will be subject.

Major new sources or major modifications to existing major sources located in attainment areas are required to obtain a PSD permit before initiation of construction. Similar sources located in areas designated as non-attainment or that adversely impact such areas undergo more stringent Non-attainment New Source Review (NNSR). In either case, it is necessary, as a first step, to determine the air quality classification of a project site.

All areas of all states are classified as either attainment, non-attainment or unclassifiable for each criteria pollutant. The current classification of Citrus County is listed on Table 3-1 for each criteria pollutant. Citrus County is designated as unclassifiable or attainment for all criteria pollutants. These designations were obtained from 40 CFR 81.310, as updated in the June 5, 1998 Federal Register (FR31036) and 62-204.340 F.A.C.

Table 3-1 Classification Of Citrus County For Each Criteria Pollutant

Carbon Monoxide	Attainment
Oxides of Nitrogen	Attainment
Sulfur Dioxide	Attainment
Particulate Matter (PM ₁₀)	Unclassifiable
Lead	Unclassifiable
Ozone	Attainment
Source 40 CFR 81.310 1998; 62-204.340 F.A.C.	

The designation of Unclassifiable indicates that there is insufficient monitoring data to prove that the area has attained the federal standards; however, the limited data available indicate that the standard has been achieved. Areas with this classification are treated as attainment areas for permitting purposes.

3.1.2 PSD Applicability

The 1977 CAA Amendments added Part C: Prevention of Significant Deterioration to the Act. This part required proposed new major stationary sources or existing sources planning a major modification in an area that has attained the National AAQS, to conduct a preconstruction review that includes a detailed analysis of the impacts from the source's emissions. Federal air quality permitting regulations for attainment areas are codified in the Code of Federal Regulations (CFR), Title 40- Protection of the Environment, Part 52.21 - Prevention of Significant Deterioration (40 CFR 52.21).

For the PSD regulations to apply to a given project, the proposed location must be in a PSD area, i.e., an area that has been classified as attainment or as unclassifiable for a particular pollutant. Citrus County is designated as attainment area for all criteria pollutants. A project's potential to emit is then reviewed to determine whether it constitutes a major stationary source or major modification to an existing major stationary source.

A major stationary source is defined as either one of the 28 sources identified in 40 CFR 52.21 that has a potential to emit 100 tons or more per year of any regulated pollutant, or any other stationary source that has the potential to emit 250 tons or more per year of a regulated pollutant. "Potential to emit" is determined on an annual basis after the application of air pollution control equipment, or any other federally enforceable restriction.

According to the "Draft New Source Review Workshop (NSR) Manual (USEPA, October 1990),"

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for a modification to be classified as major and therefore, subject to PSD review:

- (1) The modification must occur at an existing major stationary source, and
- (2) The net emissions increase of any pollutant emitted by the source, as a result of modification, is "significant", or
- (3) The modification results in emissions increases, which if considered alone would constitute a major stationary source.

"Significant" emission rates are defined as amounts equal to or greater than the emission rates given in Table 3-2.

By these definitions, and based on the emissions presented in Section 2.0, the action proposed for Compressor Station No. 26 is modification of a minor stationary source, since Compressor Station No. 26 is not one of the 28 named source categories and emits <250 TPY of each regulated pollutant. Therefore, the compressor station is not subject to PSD pre-construction review.

Table 3-2 Applicability of PSD Significant Emission Rates

Pollutant	Emission Rate Tons/Year
Carbon Monoxide	100
Nitrogen Oxides	40
Sulfur Dioxide	40
Particulate Matter (PM/PM ₁₀)	25/15
Ozone (VOC)	40
Lead	0.6
Fluorides	3
Reduced Sulfur including Hydrogen Sulfide	10
Total Reduced Sulfur including Hydrogen Sulfide	10
Sulfuric Acid Mist	7
Lead	0.6
Mercury	0.1
VOC = Volatile Organic Compounds Sources: 40 CFR 52.21(b)(23); Table 212.400-2 62-212 F.A.C.	

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3.1.3 Non-Attainment New Source Review (NSR) Applicability

Based on the current non-attainment provisions, all new major stationary sources, or major modifications to such sources, located in a non-attainment area must undergo Non-attainment New Source Review, if they have the potential to emit above an NSR significant threshold. For major new sources or major modifications in an attainment or unclassifiable area, the non-attainment provisions apply if the source or modification is located within the area of influence of a non-attainment area. The area of influence is defined as an area, which is outside the boundary of a non-attainment area, but within the locus of all points that are 50 kilometers outside the non-attainment area.

Compressor Station No. 26 is located in an area that is designated as either attainment or not classifiable for all criteria pollutants and is not located in an area of influence outside a non-attainment area. Therefore, this compressor station is not subject to federal non-attainment New Source Review.

3.1.4 Applicability of New Source Performance Standards (NSPS)

The regulation of new sources through the development of standards applicable to a specific category of sources was a significant step taken by the 1970 CAA Amendments. The Administrator was directed to publish a proposed regulation establishing a Standard of Performance for any category of new sources that cause or contribute significantly to air pollution and which may reasonably be anticipated to endanger public health. All Standards apply to all sources within a given category, regardless of geographic location or ambient air quality at the location.

Performance standards are published in 40 CFR 60. The uprated turbine to be installed at Compressor Station No. 26 is subject to Subpart GG, Standards of Performance for Stationary Gas Turbines, because it will have a maximum heat input at peak load of >10.7 gigajoules/hour (10 MMBtu/hr) based on the lower heating value of the natural gas fuel. This regulation establishes emission limits for NO_x and SO₂ and requires performance testing and daily monitoring of fuel nitrogen and sulfur. The applicable emission standards are provided in Table 3-3.

The NO_x emission limit for Subpart GG is calculated as follows:

$$STD = 0.0150 (14.4/Y) + F$$

$$STD = \text{Allowable NO}_x \text{ emissions}$$

$$Y = \text{Heat rate at peak load not to exceed 14.4 KJwatt-hour}$$

$$F = \text{NO}_x \text{ emission allowance}$$

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The fuel bound nitrogen in natural gas is less than 0.015% by weight. Therefore, the value of F as defined in 40 CFR 60.332(a)(3) is equal to zero. Using a maximum heat rate at 40° F:

$$\begin{aligned} Y &= \text{Btu/bhp-hr} \times 1.055 \text{ Kj/Btu} \times \text{hp-hr/745.7 watt-hour} \\ &= 8,081 \text{ Btu/bhp-hr} \times 1.055 \text{ Kj/Btu} \times \text{hp-hr/745.7 watt-hour} \\ &= 11.43 \\ \text{STD} &= 0.0150 (14.4/11.34) + 0 \\ &= 0.0189\% \\ &= 189 \text{ ppm}_v \end{aligned}$$

Table 3-3 summarizes the NSPS applicability for the proposed gas engines.

The turbine at this facility will meet the NSPS for NO_x of 189 ppmv (i.e., manufacturer's estimation of 25 ppmv), and for SO₂ of 150 ppmv.

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Table 3-3 Applicability of New Source Performance Standards

NSPS Subpart	NSPS Regulations	Equipment	Fuel	Pollutant	Heat Input Applicability	Equipment Design Maximum*	NSPS Emission Limits	Equipment Emissions
GG	60.332(a)(2)	Engine No. 2601 Gas Turbine	Gas	NO ₂	>10 MM Btu/hr	56.2 MMBtu/hr	189 ppm _v	25 ppm _v
GG	60.333(a)	Engine No. 2601 Gas Turbine	Gas	SO ₂	>10 MM Btu/hr	56.2 MMBtu/hr	150 ppm _v	~10 ppm _v

* Design maximum based on vendor data of 6,954 hp and heat input of 8,081 Btu/hp-hr (LHV) at 59°F ambient conditions and site elevation and inlet and exhaust pressure losses.

3.2 Florida State Air Quality Regulations

Compressor Station No. 26 is currently operating under Permit No. 0390029-001-AV and is subject to the provisions of that permit. Rule 62, F.A.C., contains the air quality rules and regulations for the State of Florida. The primary federal regulations that affect Compressor Station No. 26 have been incorporated into or are referenced by these rules. The significant state regulations that are applicable to the new emission units are briefly listed below.

3.2.1 Rule 62-210.300 Permits Required

FGT is required to obtain a construction permit prior to construction of new emission units. This requirement is being met by the submittal of this application.

3.2.2 Rule 62-204.240 Ambient Air Quality Standards

FGT must not violate any of the ambient air quality standards listed under this rule.

3.2.3 Rule 62-296.320(2) Objectionable Odors

This rule prohibits the discharge of pollutants that will cause or contribute to an objectionable odor.

3.2.4 Rule 62-296.320(4)(b)1 General Particulate Emission Limiting Standards.

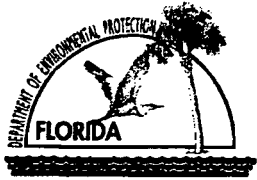
FGT is prohibited from allowing the new compressor engine to discharge into the atmosphere the emissions of air pollutants, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity).

3.2.5 Rule 62-210.300(3)(a) Exempt Emissions Units and/or Activities.

The emissions from the emergency generator, storage tanks and the fugitive leak emissions are insignificant sources and are exempt from the permitting requirements of Chapter 62-210 Stationary Sources - General Requirements, 62-213 Operation Permits For Major Sources Of Air Pollution and 62-4 Permits.

Attachment A

DEP Forms



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - NON-TITLE V SOURCE

See Instructions for Form No. 62-210.900(3)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Florida Gas Transmission Company	
2. Site Name: Compressor Station No. 26	
3. Facility Identification Number: [X] Unknown	
4. Facility Location: Street Address or Other Locator: Intersection of U.S. Highway 129 and SW 50 th Street City: Trenton County: Citrus Zip Code: 32693	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: Jim Thompson, Environmental Project Manager for Florida Gas Transmission Co. – Phase V Expansion Project	
2. Application Contact Mailing Address: Organization/Firm: Florida Gas Transmission Company Street Address: 111 Kelsey Lane, Ste. A City: Tampa State: FL Zip Code: 33619	
3. Application Contact Telephone Numbers: Telephone: (800) 381-1477 Fax: (813) 655-3951	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	5/2/02
2. Permit Number:	0170035-008-AC

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Initial non-Title V air operation permit for one or more existing, but previously unpermitted, emissions units.
- Initial non-Title V air operation permit for one or more newly constructed or modified emissions units.

Current construction permit number: _____

- Non-Title V air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number: _____

Operation permit number to be revised: _____

- Initial non-Title V air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s):

- Non-Title V air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit number to be revised: _____

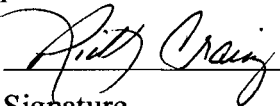
Reason for revision: _____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Air construction permit to construct or modify one or more emissions units.
- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative or Responsible Official: Rick Craig, Vice President, Southeast Operations
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Florida Gas Transmission Company Street Address: P.O. Box 1188 City: Houston State: TX Zip Code: 77251
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (713) 646-6128 - Fax: () -
4. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative* of the facility addressed in this application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i> Signature <u></u> Date <u>4-10-02</u>

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Kevin McGlynn Registration Number: 50908
2. Professional Engineer Mailing Address: Organization/Firm: McGlynn Consulting Company Street Address: 1967 Commonwealth Lane City: Tallahassee State: FL Zip Code: 32303
3. Professional Engineer Telephone Numbers: Telephone: (850)350-5035 Fax: (850) 350-5002

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

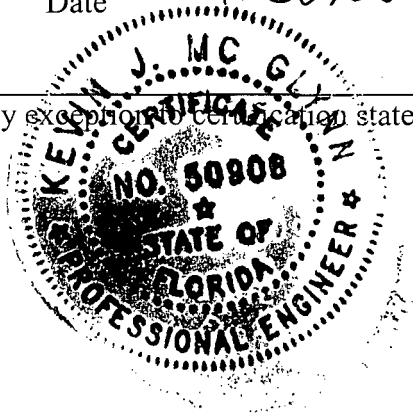
If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Ken Milgum, P.E.
Signature

April 26, 2002
Date

#50908

(seal)



* Attach any exceptions to certification statement.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Modification of a gas fired Solar Taurus 60 T-6500S compressor turbine at 6,500 hp at ISO conditions to a Taurus 60 T-7300S 7300 ISO Hp or 6,954 hp at 59°F ambient conditions with site elevation, intake and exhaust pressure losses included.

2. Projected or Actual Date of Commencement of Construction: 11/01/02

3. Projected Date of Completion of Construction: 02/01/03

Application Comment

This facility is part of FGT's Phase V expansion project, aimed at increasing the supply capacity of FGT's network servicing domestic, commercial, and industrial customers in Florida.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 353.212 North (km): 3193.987			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 28/51/58 Longitude (DD/MM/SS): 82/30/18			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4922
7. Facility Comment (limit to 500 characters): Compressor Station No. 26 is a natural gas pipeline compressor station with two compressor engines. It is classified as a minor source under New Source Review and Title V definitions.			

Facility Contact

1. Name and Title of Facility Contact: Terry Jaminet , Team Environmental Leader			
2. Facility Contact Mailing Address: Organization/Firm: Florida Gas Transmission Company Street Address: 245 N. Maylen Road City: Lecanto State: FL Zip Code: 34461			
3. Facility Contact Telephone Numbers: Telephone: (352)527-1898 Fax: (352)527-2034			

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
5. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
6. <input type="checkbox"/> One or More Emission Units Subject to NESHAP Recordkeeping or Reporting?	
7. Facility Regulatory Classifications Comment (limit to 200 characters): Facility is a minor source for PSD and Title V purposes. Modified turbine is subject to NSPS Subpart GG.	

Rule Applicability Analysis

FDEP Title V Core List 62-296.320(4)(b)1 General Visible Emissions Standards 40 CFR 60, Subpart GG Standards of Performance for Stationary Gas-fired Turbines

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
NO _x	B				
CO	B				
VOC	B				
SO ₂	B				
PM	B				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID:_____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input type="checkbox"/> Attached, Document ID:_____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input type="checkbox"/> Attached, Document ID:_____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID::_____ <input checked="" type="checkbox"/> Not Applicable
6. Supplemental Requirements Comment: <p>Area map is provided as Figure 1-1 in the narrative. The plot plan and other supplemental information were submitted in December 1999 with the permit application for engine 2602.</p>

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>		
<p>2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p>7,300 ISO hp natural gas fired turbine compressor unit</p>		
<p>3. Emissions Unit Identification Number: ID:</p>		<p><input checked="" type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>
<p>4. Emissions Unit Status Code: C</p>	<p>5. Initial Startup Date: 02/01/03</p>	<p>6. Emissions Unit Major Group SIC Code: 49</p>
<p>7. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The turbine engine is an existing Solar Taurus 60 T-6500S engine compressor unit currently rated at 6,500 bhp (ISO). This turbine will be uprated to 7,300 (ISO). Fuel is exclusively natural gas from the FGT's gas pipeline. The engine incorporates dry, low NO_x combustion technology.</p>		

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):	
The proposed engine will incorporate dry, low NOX combustion technology.	
2. Control Device or Method Code(s):	NA

Emissions Unit Details

1. Package Unit:	
Manufacturer:	Solar
Model Number:	Taurus 60 T-7300S
2. Generator Nameplate Rating:	MW
3. Incinerator Information:	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	65.234 mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24	hours/day	7 days/week
	52	weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):			
Heat input is based on vendor specific heat rate of 8,528 Btu/hp-hr at an inlet temperature of 95° F plus 10% and a horsepower of 6,954 hp.			

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? 2601		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA			
5. Discharge Type Code: V	6. Stack Height: 63 feet	7. Exit Diameter: 6.0 feet	
8. Exit Temperature: 956 °F	9. Actual Volumetric Flow Rate: 90,285 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 353.212 North (km): 3193.897			
14. Emission Point Comment (limit to 200 characters): Exit temperature and volumetric flow based on inlet temperature of 95° F.			

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas fired turbine engine driving a natural gas compressor, operating full time.		
2. Source Classification Code (SCC): 2-02-002-01		3. SCC Units: million cubic feet burned
4. Maximum Hourly Rate: 0.062725	5. Maximum Annual Rate: 549.47	6. Estimated Annual Activity Factor: NA
7. Maximum % Sulfur: 0.03	8. Maximum % Ash: NA	9. Million Btu per SCC Unit: 1040
10. Segment Comment (limit to 200 characters): Based on vendor specific heat rate of 8,528 Btu/hp-hr at an inlet temperature of 95° F plus 10%, horsepower at 6,954 hp and a HHV for natural gas of 1040 Btu per standard cubic foot (Btu/scf). Percent sulfur is base on maximum Federal Energy Regulatory Commission (FERC) limit of 10 gr S/100 scf and gas density of 0.0455 lb/scf.		

Segment Description and Rate: Segment NA of

1. Segment Description (Process/Fuel Type) (limit to 500 characters): 		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): 		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: NOX		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: 099	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 5.81 lb/hour 24.53 tons/year		7. Synthetically Limited? []	
8. Emission Factor: 5.60 lb/hr Reference: Vendor's data		9. Emissions Method Code: 5	
10. Calculation of Emissions (limit to 600 characters): (5.60 lb/hr)(8760 hr/1 yr)(1 ton/2000 lb) = 24.53 tpy Maximum short-term emission rate 5.81 lb/hr at inlet temperature of 40° F			
11. Pollutant Potential Emissions Comment (limit to 200 characters): Vendor's data based on ISO conditions with site elevation and inlet and exhaust losses of 4.0 in H ₂ O.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: RULE	2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: 25	4. Equivalent Allowable Emissions: 5.81 lb/hour 24.53 tons/year
5. Method of Compliance (limit to 60 characters): Initial performance test.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 40 CFR 60.332(a)(2) NOX emissions to 189 ppmv.	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: CO		2. Pollutant Regulatory Code: NS	
3. Primary Control Device Code: NA	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 7.07 lb/hour 29.87 tons/year		7. Synthetically Limited? []	
8. Emission Factor: 6.82 lb/hr Reference: Vendor's data		9. Emissions Method Code: 5	
10. Calculation of Emissions (limit to 600 characters): (6.82 lb/hr)(8760 hr/1 yr)(1 ton/2000 lb) = 29.87 tpy Maximum short-term emission rate 7.07 lb/hr at inlet temperature of 40° F			
11. Pollutant Potential Emissions Comment (limit to 200 characters): Vendor's data based on ISO conditions and site elevation			

Allowable Emissions Allowable Emissions NA of

1. Basis for Allowable Emissions Code: NA	2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: VOC		2. Pollutant Regulatory Code: NS	
3. Primary Control Device Code: NA	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 0.2025 lb/hour 0.86 tons/year		7. Synthetically Limited? []	
8. Emission Factor: 0.1953 lb/hr Reference: Vendor's data		9. Emissions Method Code: 5	
10. Calculation of Emissions (limit to 600 characters): Vendor factor for unburned hydrocarbons (UHC) = 1.953 lb/hr Assume 10% is VOC. (0.1953 lb/hr)(8760 hr/1 yr)(1 ton/2000 lb = 0.86 tpy Maximum short-term emission rate 0.2025 lb/hr at inlet temperature of 40° F			
11. Pollutant Potential Emissions Comment (limit to 200 characters): Vendor's data based on ISO conditions with site elevation.			

Allowable Emissions Allowable Emissions NA of

1. Basis for Allowable Emissions Code: NA	2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**Potential Emissions**

1. Pollutant Emitted: SO2		2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: NA	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 1.79 lb/hour 7.85 tons/year		7. Synthetically Limited? []	
8. Emission Factor: 10 gr/100scf Reference: Vendor's fuel use data		9. Emissions Method Code: 2	
10. Calculation of Emissions (limit to 600 characters): $(10 \text{ gr S}/100 \text{ scf})(0.062725 \text{ MMscf/hr})(1 \text{ lb}/7000 \text{ gr}) = 0.896 \text{ lb S/hr}$ $(0.896 \text{ lb S/hr})(2 \text{ lb SO}_2/\text{lb S}) = 1.792 \text{ lb SO}_2/\text{hr}$ $(1.792 \text{ lb SO}_2/\text{hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) = 7.85 \text{ ton/yr}$			
11. Pollutant Potential Emissions Comment (limit to 200 characters): Based on vendor specific heat rate of 8,528 Btu/hp-hr at an inlet temperature of 95° F plus 10%, horsepower at 6,954 hp and a HHV for natural gas of 1040 Btu per standard cubic foot (Btu/scf). .			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: NA	2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units: 10 grains/100 scf	4. Equivalent Allowable Emissions: 1.79 lb/hour 7.85 tons/year
5. Method of Compliance (limit to 60 characters): Initial performance test.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 40 CFR 60.333(a) limits SO2 emissions to 150 ppmv.	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: NS	
3. Primary Control Device Code: NA	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 0.43 lb/hour 1.89 tons/year		7. Synthetically Limited? []	
8. Emission Factor: 0.0066 lb/MM Btu Reference: Table 3.1-2a, AP-42 4/00, Supplement F		9. Emissions Method Code: 4	
10. Calculation of Emissions (limit to 600 characters): $(0.0066 \text{ lb/MMBtu})(65.234 \text{ MMBtu/hr}) = 0.43 \text{ lb/hr}$ $(0.43 \text{ lb/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) = 1.89 \text{ ton/yr}$			
11. Pollutant Potential Emissions Comment (limit to 200 characters): Based on vendor specific heat rate of 8,528 Btu/hp-hr at an inlet temperature of 95° F plus 10%, horsepower at 6,954 hp and a HHV for natural gas of 1040 Btu per standard cubic foot (Btu/scf).			

Allowable Emissions Allowable Emissions NA of

1. Basis for Allowable Emissions Code: NA	2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: HAPS		2. Pollutant Regulatory Code: NS	
3. Primary Control Device Code: NA	4. Secondary Control Device Code: NA	5. Total Percent Efficiency of Control:	
6. Potential Emissions: 0.067 lb/hour 0.29 tons/year		7. Synthetically Limited? []	
6. Emission Factor: 0.0103 lb/MMBtu Reference: Table 3.1-3, AP-42 4/00, Supplement F		7. Emissions Method Code: 5	
10. Calculation of Emissions (limit to 600 characters): $(0.0103 \text{ lb/MM Btu})(65.234 \text{ MM Btu/hr}) = 0.067 \text{ lb/hr}$ $(0.067 \text{ lb/hr})(8760 \text{ hr/yr})(1 \text{ ton}/2000 \text{ lb}) = 0.29 \text{ ton/yr}$			
11. Pollutant Potential Emissions Comment (limit to 200 characters): Detailed calculations provided in Attachment C. Included in VOC emissions.			

Allowable Emissions Allowable Emissions NA of

1. Basis for Allowable Emissions Code: NA	2. Future Effective Date of Allowable Emissions: NA
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

Emissions Unit Information Section 1 of 1

**E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)**

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule [] Other []
3. Requested Allowable Opacity: Normal Conditions: 20% Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: 40 CFR 60 Appendix A Method 9	
5. Visible Emissions Comment (limit to 200 characters): Subject to 62-296-320(4)(b)1 General Visible Emissions Standards.	

**F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)**

Continuous Monitoring System: Continuous Monitor NA of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[] Rule [] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: Attachment B <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment: Supplemental information was provided in the construction permit application for the original facility.

Attachment B
Vendor Information

Solar Turbines

A Caterpillar Company

PREDICTED EMISSION PERFORMANCE

Customer Enron		Engine Model TAURUS 60-T7300S	
Job ID NO1-277		CS/MD 59F MATCH	
Inquiry Number NO1-277		Fuel Type SD NATURAL GAS	Water Injection NO
Run by Wilson, John	Date Run 6-SEP-01	Engine Emissions Data REV. 0.0	Engines Tested 0

Critical Warnings in Use of Data for Permitting

1. Short term permitting values such as PPMV or lbs/hr should be based on worst case actual operating conditions specific to the application and the site. Worst case for one pollutant is not necessarily the same for another. The values on this form are only predicted emissions at one specific operating condition; not necessarily the worst case.
2. Long term reference emission units (e.g. tons/yr) should reference the average conditions at the site (e.g. ISO). That number should not be derived from the worst case value referenced above, or conversely this average must not be used to calculate worst case.
3. Nominal values are based on actual test results, or predicted in the case of no actual engine tests. Expected maximum values should be referenced for permitting.
4. If a SoLoNOx model is planned to be installed in the future, use no less than 50 PPMV CO.

	NOx EMISSIONS		CO EMISSIONS		UHC EMISSIONS	
	Nominal	Maximum	Nominal	Maximum	Nominal	Maximum
1	5927 Hp 100.0% Load Elev. 98 ft Rel. Humidity 60.0% Temperature 95.0 Deg. F					
PPMvd at 15% O2	*	25.00	*	50.00	*	25.000
lbm/hr	*	4.96	*	6.04	*	1.730
ton/yr	*	21.73	*	26.46	*	7.578
2	6954 Hp 100.0% Load Elev. 98 ft Rel. Humidity 60.0% Temperature 99.0 Deg. F					
PPMvd at 15% O2	*	25.00	*	60.00	*	25.000
lbm/hr	*	6.60	*	6.82	*	1.953
ton/yr	*	24.53	*	29.86	*	8.552
3	7268 Hp 100.0% Load Elev. 98 ft Rel. Humidity 60.0% Temperature 40.0 Deg. F					
PPMvd at 15% O2	*	25.00	*	50.00	*	25.000
lbm/hr	*	5.81	*	7.07	*	2.025
ton/yr	*	25.44	*	30.98	*	8.871

Other Important Notes

1. Solar does not provide maximum values for water-to-fuel ratio, SOx, particulates, or conditions outside those above without separate written approval.
2. Solar can optionally provide factory testing in San Diego to ensure the actual unit(s) meet the above values within the tolerances quoted. Pricing and schedule impact will be provided upon request.
3. Fuel must meet Solar standard fuel specification ES 9-98. Predicted emissions are based on the attached fuel composition, or, San Diego natural gas or equivalent.
4. If the above information is being used regarding existing equipment, it should be verified by actual site testing.

Solar Turbines

A Caterpillar Company

PREDICTED ENGINE PERFORMANCE

Customer Enron	
Job ID NO1-277	
Run By Wilson, John	Date Run 6-SEP-01
Engine Performance Code REV. 2.87	Engine Performance Data REV. 0.1

Model TAURUS 60-T7300S
Package Type CS/MD
Match 59F MATCH
Fuel System GAS
Fl. of Type SD NATURAL GAS

DATA FOR NOMINAL PERFORMANCE

Elevation	Foot	98		
Inlet Loss	in. H2O	4.0		
Exhaust Loss	in. H2O	4.0		
Accessory on GP Shaft	Hp	14.0		
			1	2
				3
Engine Inlet Temperature	Deg. F	95.0	59.0	40.0
Relative Humidity	%	60.0	60.0	60.0
Driven Equipment Speed	RPM	12637	13029	13059
Specified Load	Hp	FULL	FULL	FULL
Net Output Power	Hp	6927	6954	7268
Fuel Flow	MMBtu/hr	50.54	56.20	58.10
Heat Rate	Btu/Hp-hr	8528	8081	7994
Engine Exhaust Flow	lbm/hr	151150	166884	172369
Exhaust Temperature	Deg. F	956	920	903

Attachment C
Emissions Calculations

Compressor Station No. 26

Engine No. 2601

NOx Emissions: (Based on Vendor Data)

$$\text{lb/hr NO}_x = 5.60$$

$$\begin{aligned} \text{tpy NO}_x/\text{yr} &= (\text{lb NO}_x/\text{hr})(\text{hrs}/1 \text{ yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (5.60 \text{ lb NO}_x/\text{hr})(8760 \text{ hrs}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 24.53 \end{aligned}$$

CO Emissions: (Based on Vendor Data)

$$\text{lb/hr CO} = 6.82$$

$$\begin{aligned} \text{tpy CO}/\text{yr} &= (\text{lb CO}/\text{hr})(\text{hrs}/1 \text{ yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (6.82 \text{ lb CO}/\text{hr})(8760 \text{ hrs}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 29.87 \end{aligned}$$

VOC Emissions: (Based on Vendor Data)

$$\text{lb/hr VOC} = 0.20$$

$$\begin{aligned} \text{tpy VOC}/\text{yr} &= (\text{lb VOC}/\text{hr})(\text{hrs}/1 \text{ yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (0.20 \text{ lb VOC}/\text{hr})(8760 \text{ hrs}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 0.86 \end{aligned}$$

SO2 Emissions: (Based on FERC Limits)

$$\begin{aligned} \text{lb S}/\text{hr} &= (\text{gr S}/100 \text{ scf})(\text{MMscf}/\text{hr})(1 \text{ lb}/7000 \text{ gr}) \\ &= (10 \text{ gr S}/100 \text{ scf})(0.062725 \text{ MMscf}/\text{hr})(1 \text{ lb}/7000 \text{ gr}) \\ &= 0.896 \end{aligned}$$

$$\begin{aligned} \text{lb SO}_2/\text{hr} &= (\text{lb S}/\text{hr})(2 \text{ lb SO}_2/\text{lb S}) \\ &= (0.896 \text{ lb S}/\text{hr})(2 \text{ lb SO}_2/\text{lb S}) \\ &= 1.792 \end{aligned}$$

$$\begin{aligned} \text{tons SO}_2/\text{yr} &= (\text{lb SO}_2/\text{hr})(\text{hr}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (1.792 \text{ lb SO}_2/\text{hr})(8760 \text{ hr}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 7.85 \end{aligned}$$

PM 10/2.5 Emissions: (Based on AP-42 Table 3.1-2a, 4/00)

$$\begin{aligned} \text{lb PM}/\text{hr} &= (\text{lb PM}/\text{MMBtu})(\text{MMBtu}/\text{hr}) \\ &= (0.0066 \text{ lb}/\text{MMBtu})(65.234 \text{ MMBtu}/\text{hr}) \\ &= 0.43 \end{aligned}$$

$$\begin{aligned} \text{tons PM}/\text{yr} &= (\text{lb PM}/\text{hr})(\text{hr}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (0.43 \text{ lb PM}/\text{hr})(8760 \text{ hr}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 1.89 \end{aligned}$$

HAP Emissions: (Based on AP-42 Table 3.1-3, 4/00)

$$\begin{aligned} \text{lb HAPs}/\text{hr} &= (\text{lb HAPs}/\text{MMBtu})(\text{MMBtu}/\text{hr}) \\ &= (0.00103 \text{ lb}/\text{MMBtu})(65.234 \text{ MMBtu}/\text{hr}) \\ &= 0.067 \end{aligned}$$

$$\begin{aligned} \text{tons HAPs}/\text{yr} &= (\text{lb HAPs}/\text{hr})(\text{hr}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= (0.067 \text{ lb HAPs}/\text{hr})(8760 \text{ hr}/\text{yr})(1 \text{ ton}/2000 \text{ lb}) \\ &= 0.29 \end{aligned}$$

2601 HAP Emission Factors

HAP	Factor lb/MMBtu
1,3-Butadiene	4.30E-07
Acetaldehyde	4.00E-05
Acrolein	6.40E-06
Benzene	1.20E-05
Ethylbenzene	3.20E-05
Formaldehyde	7.10E-04
Naphthalene	1.30E-06
PAH	2.20E-06
Propylene Oxide	2.90E-05
Toluene	1.30E-04
Xylenes	6.40E-05
Total Hazardous Cmpds	1.03E-03

AP-42, 5th Edition, Supplement F, 04/00, Table3.1-3

Patty,

Received one original and
3 copies. Gave one copy
to Jeff. Also, received
a \$2000⁰⁰ check with application.
on 5/2. Jeff said he would

input this application
into the system. Barbara
processed the check as
per the attached memo.

Vicki

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Wendy Meyer 3. _____
2. MS 99 4. _____
5. _____

PLEASE PREPARE REPLY FOR:

- SECRETARY'S SIGNATURE
- DIV/DIST DIR SIGNATURE
- MY SIGNATURE
- YOUR SIGNATURE
- DUE DATE _____

ACTION/DISPOSITION

- DISCUSS WITH ME
- COMMENTS/ADVISE
- REVIEW AND RETURN
- SET UP MEETING
- FOR YOUR INFORMATION
- HANDLE APPROPRIATELY
- INITIAL AND FORWARD
- SHARE WITH STAFF
- FOR YOUR FILES

COMMENTS:

Please process attached check and forward to Finance & Accounting.

Note to SSA:

*Please cash list to Object Code 2273 for Air Construction funds
attn - Patty Adams.*

FROM:

Barbara Sunday

DATE:

5/3/02

PHONE:

924-9524

Florida Gas Transmission Company
 An Enbridge Energy Affiliate
 P.O. Box 1188 Houston, TX 77251-1188

35-60
1130 **No. 93565**

DATE 4-19 2002

PAY TO THE ORDER OF: Florida Department of Environmental Protection \$ 2000.00

PAYEE ADDRESS: Two thousand and no/100
Twin Towers Office Bldg, Tallahassee FL 32390

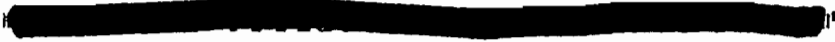
IN FULL PAYMENT FOR: CS 26 application fee - Air Construction INVOICE No.: _____ INVOICE DATE: _____

Account Coding:	Co.	Account	Center	W.O. No.	P.U.	C.C.	Amount	
0536	52508000	W4,900015	C	005062	26	01.14.04.01	2000 00	
							TOTAL	2000 00

NOT VALID AFTER 180 DAYS
 NOT VALID FOR AMOUNTS
 OVER \$5,000.00
 PAYABLE THRU
 Chase Bank of Texas, N.A.,
 HOUSTON, TEXAS

Florida Gas Transmission Company
 UNIVERSAL DRAFT

[Signature]
 AUTHORIZED SIGNATURE



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>W. A. ...</i> B. Date of Delivery <i>2/11/01</i></p> <p>C. Signature <i>H. W. ...</i> <input type="checkbox"/> Agent <input checked="" type="checkbox"/> Addressee</p> <p>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>Rick Craig, V.P. of Southeastern Operations Florida Gas Transmission Co. P.O. Box 1188 Houston, TX 77251</p>	<p>3. Service Type</p> <p><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
7001 0320 0001 3692 8420	
PS Form 3811, July 1999 Domestic Return Receipt 102595	

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)	
OFFICIAL USE	
<p>Postage \$</p> <p>Certified Fee</p> <p>Return Receipt Fee (Endorsement Required)</p> <p>Restricted Delivery Fee (Endorsement Required)</p> <p>Total Postage & Fees \$</p>	<p>Postmark Here</p>
<p>Sent To <u>Rick Craig</u></p> <p>Street, Apt. No.; or PO Box No. <u>PO Box 1188</u></p> <p>City, State, ZIP+4 <u>Houston, TX 77251</u></p>	
<p>7001 0320 0001 3692 8420</p> <p>PS Form 3800, January 2001 See Reverse for Instructions</p>	

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. 	A. Received by (Please Print Clearly)	B. Date of Delivery
1. Article Addressed to: Mr. Rick Craig V. P. of Southeastern Operations Florida Gas Transmission Company PO Box 1188 Houston, TX 77251	C. Signature X <i>[Signature]</i>	MAY 25 2002 <input type="checkbox"/> Agent <input type="checkbox"/> Addressee
	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No	
	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.	
	4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes	
7001 0320 0001 3692 8765		
PS Form 3811, July 1999	Domestic Return Receipt	102595-00-M-0952

U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)											
OFFICIAL USE											
<table border="1"> <tr> <td>Postage</td> <td>\$</td> </tr> <tr> <td>Certified Fee</td> <td></td> </tr> <tr> <td>Return Receipt Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Restricted Delivery Fee (Endorsement Required)</td> <td></td> </tr> <tr> <td>Total Postage & Fees</td> <td>\$</td> </tr> </table>	Postage	\$	Certified Fee		Return Receipt Fee (Endorsement Required)		Restricted Delivery Fee (Endorsement Required)		Total Postage & Fees	\$	Postmark Here
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Certified Fee											
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Total Postage & Fees	\$										
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