

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT MODIFICATION

In the Matter of an
Application for Permit Modification


Mr. Clayton Roesler
Division Environmental Specialist
Florida Gas Transmission Company
P.O. Box 945100
Maitland, Florida 32794-5100

Combustion Turbine No. 3003
Permit Nos. AC29-228821(A)
FID No. 0570438
Station No. 30, Hillsborough County

Enclosed is Permit Modification Number AC29-228821(A) for re-issuance of construction permit AC29-228821. The re-issuance of this permit is for the amendment of Specific Condition No. 1 for Unit No. 3003, located in Hillsborough County, Florida. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.


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

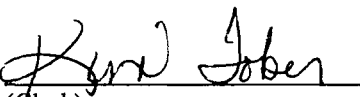
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT MODIFICATION (including the FINAL permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2-12-98 to the person(s) listed:

Mr. Clayton A. Roesler, FGT *
Mr. Bill Thomas, SWD
Mr. Jerry Campbell, HCEPC

Clerk Stamp

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


(Clerk) 2-12-98
(Date)

FINAL DETERMINATION

FLORIDA GAS TRANSMISSION COMPANY

Modification of Permit No. AC29-228821(A)
Compressor Station No. 30 (Unit No. 3003)
Hillsborough County

An Intent to Issue an air construction permit modification for Florida Gas Transmission Company, Compressor Station No. 30, was distributed on December 22, 1997. The modification was to amend the nitrogen oxides emission limit which had been erroneously given as 42 ppm to the correct value of 150 ppm consistent with the original technical evaluation. This facility is located 2 miles east of State Highway 39 on Griffin Road near Plant City, Hillsborough County, Florida. The Notice of Intent was published in The Tampa Tribune on January 7, 1998. Copies of the modification were available for public inspection at the Hillsborough County Environmental Protection Commission (HCEPC) and the Department offices in Tallahassee and Tampa.

No comments were submitted in response to the public notice.

The final action of the Department will be to issue the permit modification as noted during the public notice period.

P 265 659 293.

no green card

US Postal Service

Receipt for Certified Mail

7/98

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Clayton Kessler	
Street & Number 5 GT	
Post Office, State, & ZIP Code Mantland, HI	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date 0570435 2-12-98 Stat. # 30 Hillsboro	

PS Form 3800, April 1995



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:

Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

Authorized Representative:

Mr. Clayton Roesler
Division Environmental Specialist

FID No.	0570438
Permit No.	AC29-228821(A)
SIC No.	4922
Project:	Combustion Turbine 3003
Expires:	March 31, 1998

PROJECT AND LOCATION:

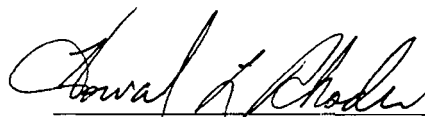
Re-issued air construction permit for a 1202 bhp combustion turbine, Unit No. 3003, at the Florida Gas Transmission Compressor Station No. 30, 2 miles east of State Highway 39 on Griffin Road near Plant City, Hillsborough County, Florida. UTM coordinates are Zone 17; 391.89 km E; 3106.61 km N.

STATEMENT OF BASIS:

This construction permit is reissued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to construct the project 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 of Environmental Protection (Department).

Attached appendices are made a part of this permit:

Appendix GC Construction Permit General Conditions
Appendix SC Emission Unit(s) Specific Conditions


Howard L. Rhodes, Director
Division of Air Resources
Management

APPENDIX SC

Specific Conditions

1. This permit supersedes permit AC29-228821, dated September 23, 1993 and its revision dated August 27, 1996. The provisions of the air construction AC29-228821, dated September 23, 1993 and the revision dated August 27, 1996 (attached) are incorporated into this air construction permit except for the changes that follow in Specific Conditions 2 and 3 below:

2. Original Specific Condition No. 1 as revised on August 27, 1996 is hereby further revised as follows:

NOx emissions shall not exceed ~~42~~150 ppmv at 15% oxygen on a dry basis (based on 100% load conditions). Annual emissions shall not exceed 17.3 TPY.

3. The original General Conditions are replaced by the attached conditions with updated references to applicable statutes.

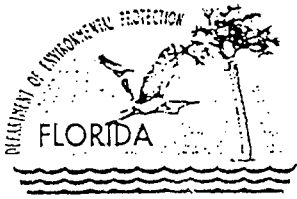
APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.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.
- G.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.
- G.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.
- G.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.
- G.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.
- G.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.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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.

- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.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.
- G.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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology ()
 - (b) Determination of Prevention of Significant Deterioration ();
 - (c) Compliance with New Source Performance Standards (X);
- G.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.
- G.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.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT AMENDMENT

In the Matter of an
Application for Permit by:

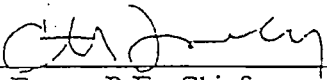
Mr. Allan Weatherford
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

DRAFT Permit Amendment Number:
AC 29-228821
AIRS ID 0570438-002 AC
Hillsborough County (Station No. 30)

Enclosed is the Permit Amendment for the above mentioned compressor station which will modify the permit specific conditions. This facility is located in Hillsborough County, Florida. This permit amendment will be issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.


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



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 21, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Weatherford
Division Environmental Specialist
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

RE: Request for Amendment to Air Construction Permit
AC29-228821 (Station No. 30) Hillsborough County
AIRS ID 0570438-002 AC

The Department is in receipt of your letters dated April 12 and May 10, 1996, requesting to amend the above permit to include the EPA custom fuel monitoring schedule and to modify specific conditions Nos. 1, 2 and 8.

The Department has reviewed this request and hereby amends the above mentioned permit as follows:

SPECIFIC CONDITION No. 1

This condition will be modified to exclude the emission limits standard for all pollutants except for NO_x and SO₂. The emissions expressed in units of mass (TPY) will remain as a condition of the permit. This facility has already demonstrated initial compliance with the permit limits.

FROM:

POLLUTANT	lbs/hr	tons/yr	Emission Factor
NOx *	3.95	17.3	1.49 g/bhp-hr
CO	5.88	25.75	2.22 g/bhp-hr
VOC(s) (non-methane)	0.25	1.10	0.95 g/bhp-hr
PM	0.077	0.34	5 lbs/MMscf
PM10	0.077	0.34	5 lbs/MMscf
S02	0.44	1.94	10 gr S/100scf

*NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

TO:

Standard for Sulfur Dioxide [40 CFR 60.333(a)]

The owner or operator shall not cause to be discharge into the atmosphere from any gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Annual emissions shall not exceed 1.94 TPY.

Standard for Nitrogen Oxides

NOx emissions shall not exceed 42 ppmv at 15% oxygen on a dry basis. (Based on a 100% load conditions). Annual emissions shall not exceed 17.3 TPY.

SPECIFIC CONDITION No. 2

FROM:

Visible Emissions shall not exceed 10% opacity.

TO:

Visible emissions shall not exceed 20% opacity.

SPECIFIC CONDITION No. 8

Mr. Allan Weatherford
Florida Gas Transmission
Station No. 30
Page 3

FROM:

Compliance with the allowable emission limits shall be determined within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial start-up and annually thereafter except as provided in Specific Condition 10, below, by the following reference methods as described in 40 CFR 60, Appendix A (July 1992 version) and adopted by reference in Chapter 17-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 10	Determination of the Carbon Monoxide from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines
Method 18	Measurement of Gaseous Organic Compounds Emissions by Gas Chromatography
Method 25A	Determination of Total Gaseous Organic Concentrations Using a Flame Ionization Analyzer

TO:

Compliance with the allowable emission limits shall be determined by the following EPA reference methods as described in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines

Since this source already demonstrated initial compliance with permitted emission limits, subsequent testing frequency (in operating permits) shall be as determined by the Hillsborough County Environmental Protection Commission (EPC) office.


Mr. Allan Weatherford
Florida Gas Transmission
Station No. 30
Page 4

CUSTOM FUEL MONITORING SCHEDULE

The custom monitoring schedule, when approved by EPA, will be incorporated by reference. Currently, EPA is in the process of approving the FGT request.

This letter must be attached to the above mentioned permit and shall become a part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

Attachment to be Incorporated

Mr. Allan Weatherford's letters of April 12 and May 10, 1996.

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

FLORIDA GAS TRANSMISSION COMPANY

Hillsborough County
Plant City, Florida
Station No. 30

Natural Gas Compressor Engine
Permit No. AC 29-228821

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

July 22, 1993



Florida Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Florida Gas Transmission Company
P.O. Box 1188
Houston, Texas 77251-1188

Permit Number: AC 29-228821
Expiration Date: June 30, 1995
County: Hillsborough
Latitude/Longitude: 28°04'55"N
82°06'01"W
Project: Natural Gas Turbine
No. 3003) Station No. 30

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210, 212, 272, 275, 296, and 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of one natural gas fired turbine and associated support equipment to be located on Griffin Road, 2 miles east of State Highway 36, Plant City, Hillsborough County, Florida. The UTM coordinates are Zone 17, 392.895 km East and 3106.61 km North.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DEP Form 17-1.202(1) Application to Operate/Construct Air Pollution Sources.
2. Florida Gas Transmission's letter dated April 27, 1993.

GENERAL CONDITIONS:

c. Records of monitoring information shall include:

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

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

Emission Limits

1. The maximum allowable emissions* from this source shall not exceed the emission rates as follows:

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/yr</u>	<u>Emission Factor</u>
Nitrogen Oxides**	3.95	17.3	1.49 g/bhp-hr
Carbon Monoxide	5.88	25.75	2.22 g/bhp-hr
Volatile Organic Compounds (non-methane)	0.25	1.10	0.95 g/bhp-hr
Particulate Matter (TSP)	0.077	0.34	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.077	0.34	5 lbs/MMscf
Sulfur Dioxide	0.44	1.94	10 gr S/100scf

**NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

*Based on 100% load conditions.

2. Visible emissions shall not exceed 10% opacity.

Operating Rates

3. This source is allowed to operate continuously (8760 hours per year).

4. This source is allowed to use natural gas only.

PERMITTEE:

Florida Gas Transmission Company

Permit Number: AC 29-228821

Expiration Date: June 30, 1995

SPECIFIC CONDITIONS:

10. Initial compliance with the total volatile organic compounds will be determined by EPA Method 25A or Method 18. Thereafter, except as provided in Rule 17-297.340(2), compliance with the total VOC emission limits will be assumed, provided the CO allowable emission rate is achieved.

11. During performance tests, to determine compliance with the NO_x standard, measured NO_x emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_x = (NO_x \text{ obs}) \left(\frac{P_{\text{ref}}}{P_{\text{obs}}} \right)^{0.5} e^{19 (H_{\text{obs}} - 0.00633)} \left(\frac{288^\circ\text{K}}{T_{\text{AMB}}} \right)^{1.53}$$

where:

NO_x = Emissions of NO_x at 15 percent oxygen and ISO standard ambient conditions.

NO_x obs = Measured NO_x emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

H_{obs} = Specific humidity of ambient air at test.

e = Transcendental constant (2.718).

T_{AMB} = Temperature of ambient air at test.

12. Stack sampling facilities shall be required and shall comply with the requirements of F.A.C. Rule 17-297.345. Test results will be the average of 3 valid runs. The Air Section of the Environmental Protection Commission in Hillsborough County (EPCHC) and the Southwest District office shall be notified at least 30 days in writing in advance of the compliance test(s). The source shall operate between 90% and 100% of permitted capacity during the compliance test. Compliance test results shall be submitted to the EPCHC and the Southwest District offices no later than 45 days after completion.

13. Sulfur and nitrogen content and the lower heating value of the fuel being fired in the combustion turbines shall be determined as specified in 40 CFR 60.334(b). Any request for a future custom monitoring schedule shall be made in writing and directed to the Environmental Protection Commission of Hillsborough County (EPCHC),

PERMITTEE:
Florida Gas Transmission Company

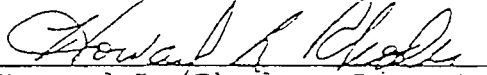
Permit Number: AC 29-228821
Expiration Date: June 30, 1995

SPECIFIC CONDITIONS:

21. Fugitive dust emissions, during the construction period, shall be minimized by covering or watering dust generation areas.
22. Pursuant to F.A.C. Rule 17-210.300(2), Air Operating Permits, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur and nitrogen content, lower heating value of the fuel being fired, fuel usage, turbine inlet and outlet temperature, RPM, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Southwest District office and the EPCHC by March 1 of each calendar year.
23. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).
24. An application for an operation permit must be submitted to the EPCHC and the Southwest District offices at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Issued this 23 day
of September, 1993

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Howard L. Rhodes, Director
Division of Air Resources
Management

I. SYNOPSIS OF APPLICATION

I.1 APPLICANT NAME AND ADDRESS

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

I.2 REVIEWING AND PROCESS SCHEDULE

Date of Receipt of Application: March 26, 1993

Additional Information Received: April 28, 1993

Application Completeness Date: April 28, 1993

II. FACILITY INFORMATION

II.1 FACILITY LOCATION

Florida Gas Transmission Company's (FGTC) facility is located 4 miles northeast of the town of Plant City on State Route 582 in Hillsborough County, Florida. The UTM coordinates are 391.89 E and 3106.61 Km N.

II.2 STANDARD INDUSTRIAL CLASSIFICATION CODE

This facility is classified as follows:

Major Group No.49 - Electric and Sanitary Services

Group No.492- Gas Production and Distribution

Industry No. 4922- Natural Gas Transmission

II.3 FACILITY CATEGORY

The FGTC site in Hillsborough County, will be classified as a minor emitting facility for nitrogen oxides (NOx) and carbon monoxide (CO). The proposed project will increase NOx by 17.30 tons per year and CO by 25.75 tons per year. The total permitted emissions for this facility shall not exceed 46.16 tons NOx per year and 43.03 tons CO per year.

III. PROJECT DESCRIPTION

The FGTC proposed to install one natural gas fired turbine. The turbine engine will be a Solar Saturn T-1200 compressor unit ISO rated at 1,202 bhp at 22,500 revolutions per minute (rpm). The proposed unit will be used to drive a gas compressor that is a part of a new gas transmission line that will transport natural gas from

source wells in Texas and Louisiana for delivery throughout Florida. The proposed engine will incorporate dry low NOx combustion technology. The engine to be installed at compressor station No. 30 is currently operating under a Florida Department of Environmental Regulation permit (AO 53-20944-Engine No. 3201) at Compressor Station No. 32, in Polk County. As part of this project, the Polk County compressor unit and associated auxiliary equipment will be deactivated at Compressor Station No 32, transported to Compressor Station No. 30 and reactivated. A flow diagram of a typical compressor unit is presented in Figure 2-1.

III.1 Background Information

Hillsborough County existing compressor station consists of two (2) Solar Saturn T-1200 turbine engines (note: both units are remanufactured T-1001 turbines, providing T-1200 performance). This compressor station began operations in 1970 when engine 3001 was installed. A second identical unit (3002) was added to the station in 1985. These existing turbines are not modified as part of this Phase III expansion project.

In general, the FGTC Phase III expansion project will be increasing the natural gas transport capacity of the existing Florida gas pipeline system. The scope of the work for Phase III includes expansions by the addition of state-of-the art compressor engines at four existing compressor stations and two new proposed compressor stations. The proposed engines and turbine engines would be used solely for the purpose of transporting natural gas in the pipeline for distribution in Florida. The main gas pipeline and the approximate locations of the existing and proposed compressor stations along the main pipeline are shown in Figure 1-1.

IV. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative (F.A.C.) Chapters 17-209 through 17-297.

This plant is located in an area (Hillsborough County) designated nonattainment for ozone and attainment for all of the other criteria pollutant in accordance with Rule 17-275.500 and 17-275.400, respectively.

The proposed project is exempt from review under F.A.C. Rule 17-212.400 Prevention of Significant Deterioration (PSD) because this new source is considered a minor emitting facility for purpose of the PSD regulations under (250 TPY).

The proposed facility shall comply with applicable provisions of F.A.C. Chapter 17-297, Stationary Sources-Emissions Monitoring; F.A.C. 17-296, Stationary Sources-Emissions Standards; F.A.C. Rule

17-296.310 General Particulate Emission Limiting Standards; F.A.C. Rule 17-296.320, General Pollutant Limiting Standards. The proposed project will be reviewed in accordance with F.A.C. Rule 17-212.300, Sources not Subject to PSD review or Nonattainment Requirements.

V. SOURCE IMPACT ANALYSIS

V.1 EMISSION LIMITATIONS

The proposed engine will incorporate dry low-NOx combustion technology. Dry combustion techniques are designed to alter the conditions in the combustion chamber to influence the temperature, residence time, and mixing of air and fuel so as to reduce the amount of NOx formed. The state-of-the-art concept in designing a low-NOx turbine involves raising the air-to-fuel ratio in the combustion primary zone and thoroughly premixing primary combustion air and fuel. This reduces NOx formation by lowering the average flame temperature in the combustor primary zone and avoiding localized hot spots. Dry low-NOx combustion is a technically feasible control method for natural gas pipeline turbines.

The operation of this source will produce emissions of nitrogen oxide (NOx), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM), and sulfur dioxide (SO2) from the burning of natural gas. Potential new VOC emissions from the station include fugitive emissions from new valves and flanges that will be in gas service. Table I summarizes the proposed source emissions and Table II comprises the proposed and total emissions from this station.

Table I
Summary of Emissions
Source ID No. 3003

Pollutant	Max. Potential Emissions From Proposed Turbine (lbs/hr)	(TPY)	Significant Emission Rate (TPY)
Nitrogen Oxides	3.95	17.30	40
Carbon Monoxide	5.88	25.75	100
Volatile Organic Compounds (non-methane)	0.25	1.10	40
Particulate Matter (TSP)			
Particulate Matter (PM ₁₀)	0.06	0.28	25
Sulfur Dioxide	0.37	1.62	40
Fugitive (VOC Emissions)	0.154	0.68	

V.2 AIR QUALITY ANALYSIS

From a technical review of the application, the Department has determined that the construction and operation of this source will not have a detrimental impact on Florida's ambient air quality.

BEST AVAILABLE COPY

TABLE II

Annual (TPY) Emission Levels
FGTC's Compressor Station No. 30

SOURCE ID	DESCRIPTION	NO _x	CO	VOC (NM/NE, HC)	SO ₂	PM
EXISTING FACILITY						
	COMPRESSOR ENGINES:					
3001	1202 bhp Turbine Engine	14.43	8.64	0.22	1.58	0.28
3002	1202 bhp Turbine Engine	14.43	8.64	0.22	1.58	0.28
	OTHER SOURCES:	—	—	0.17	—	—
EXISTING TOTAL		28.86	17.28	0.61	3.16	0.56
PROJECT RELATED						
	COMPRESSOR ENGINE:					
	1202 bhp Turbine Engine	17.30	25.75	1.10	1.62	0.28
	TANKS:					
Tank 1	Used Lube Oil Tank	—	—	0.00**	—	—
Tank 2	Used Lube Oil Tank	—	—	0.00**	—	—
	FUGITIVE	—	—	0.13	—	—
PROJECT TOTAL		17.30	25.75	1.23	1.62	0.28
STATION TOTAL		46.16	43.03	1.84	4.78	0.84

* - estimated fugitive emissions from equipment leaks only.

** - actual emissions are insignificant at 0.00002 TPY for Tank 1 and 0.00002 TPY for Tank 2.

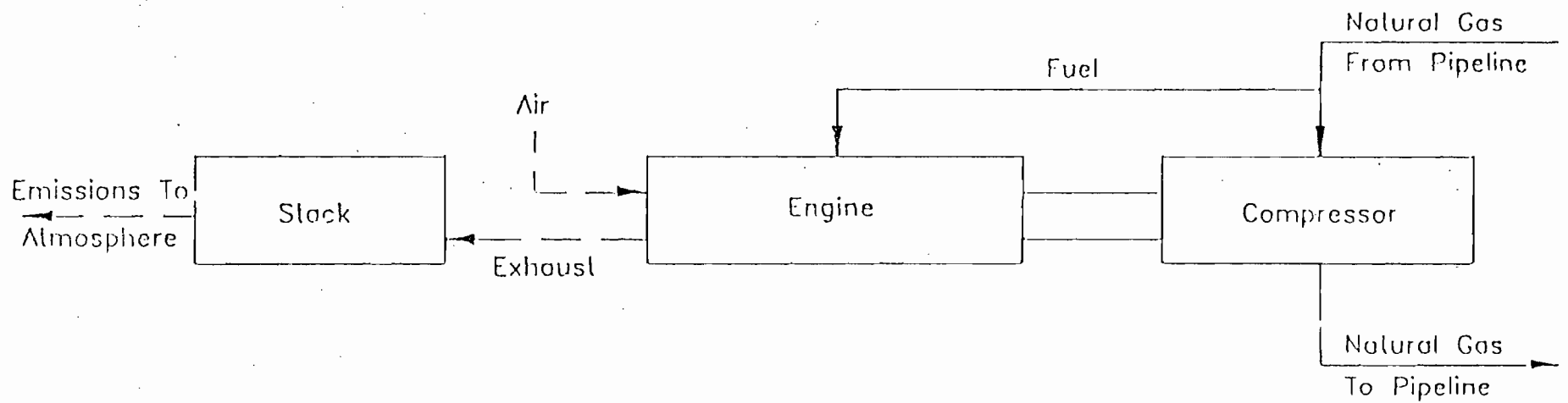
*** - STATION TOTAL = EXISTING + PROJECT

VI. CONCLUSION

Based on the information provided by Florida Gas Transmission Company, the Department has reasonable assurance that the proposed project, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-209 through 17-297 of the Florida Administrative Code.

P. [Signature]
#41755

CE679259
(DALLAS/11PCL21)



ENSRTM

ENSR CONSULTING & ENGINEERING



FIGURE 2-1
PROCESS FLOW DIAGRAM
OF AN
ENGINE-COMPRESSOR UNIT

DRAWN	DC/SII	DATE	11-6-92	PROJECT	111111 P.
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Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes

THRU: Clair Fancy 
Al Linero  2/3

FROM: Teresa Heron

DATE: February 3, 1998

SUBJECT: Florida Gas Transmission (FGT)
AC29-228821A - Station No. 30 Hillsborough County

Attached is the package for re-issuance of the construction permit for FGT Station No. 30. The re-issuance of this permit is for the amendment of Specific Condition No. 1. This condition lists a NO_x standard of 42 ppmv at 15% oxygen on a dry basis for turbine 3003. This standard was inadvertently set for this turbine in the original construction permit issued in 1993. This Station did not undergo PSD or BACT review. The condition probably strayed over from the permits which did undergo PSD/BACT review. Hourly and annual emission limits for NO_x from this unit are correct and remain unchanged.

I recommend your approval and signature.

AAL/th

Attachments



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

January 12, 1998

Certified Mail

Florida Dept. of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Sir or Madam:

RE: Intent to Issue Permit No.: AC 29-228821(A)
Compressor Station No. 30, Hillsborough County, FL

Enclosed please find a print of the legal notice and proof of publication in the above referenced matter.

Sincerely,

Clayton A. Roesler
Division Environmental Specialist

cc: Ray Glass

CR/wlb

f:\user\croesler\enviro\facility\cs30\airprmt\0112fdep.doc

RECEIVED

JAN 15 1998

**BUREAU OF
AIR REGULATION**

THE TAMPA TRIBUNE
Published Daily
Tampa, Hillsborough County, Florida

State of Florida)
County of Hillsborough) ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of _____

PUBLIC NOTICE OF INTENT

was published in said newspaper in the issues of _____

JANUARY 7, 1998

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

J. Rosenthal

Sworn to and subscribed before me, this _____ day
of _____ JANUARY, A.D. 19⁹⁸

Personally Known: _____ or Product Identification _____
Type of Identification Produced _____

(SEAL)

Susie Lee Slaton



PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DEP Permit No. AC 29-228821(A) Combustion Turbine 3003 Florida Gas Transmission Company- Compressor Station 30 Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to re-issue an air construction permit to Florida Gas Transmission Company to construct a 1202 brake horsepower combustion turbine at Compressor Station 30. The station is located 2 miles east of State Highway 39 on Griffin Road near Plant City, Hillsborough County. A Best Available Control Technology (BACT) determination was not required pursuant to Rules 62-212.400 and 410, F.A.C., Prevention of Significant Deterioration (PSD). The applicant's name and address are: Florida Gas Transmission Company, Post Office Box 945100, Maitland, Florida 32794.

The original Notice for the project was published on August 6, 1993 in The Tampa Tribune and a permit was issued on September 23, 1993. It contained an erroneous requirement of 42 parts per million (ppm) nitrogen oxides concentration in the exhaust gas when the applicable standard is 150 ppm. In the interim, the unit was constructed and the construction permit expired. Therefore this public notice and a re-issued construction permit are required. Allowable nitrogen oxides emission rates of 3.95 pounds per hour and 17.3 tons per year in the original permit remain unchanged as a result of this action.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit 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 and requests for public meetings concerning the proposed DRAFT Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The Department will issue FINAL Permit with the conditions of the DRAFT Permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action.

J/A. GAS Transmission
CS # 30 - Hillsborough

1/15/98

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with 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, 3900 Commonwealth Boulevard, Mall Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9370, fax: 850/487-4938. Petitions must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the County in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

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 of intent. 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:
Hillsborough County
Environmental
Protection Commission

1900 Ninth Avenue
Tampa, Florida 33605
Telephone 813/272-5960
Fax: 813/272-5157
Department of Environmental
Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850-488-1344
Fax: 850/922-6979
Department of Environmental
Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, Draft Permit, previous technical evaluation and permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section of 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-1344, for additional information.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 22, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Clayton Roesler
Division Environmental Specialist
Florida Gas Transmission
P.O. Box 945100
Maitland, Florida 32794

Re: DEP No. AC 29-228821A **0570438-002-AC**
Station No. 30 Hillsborough County

Dear Mr. Roesler:

Enclosed is one copy of the Draft Re-issued Air Construction Permit for Turbine 3003 at Station No. 30 at the Florida Gas Transmission (FGT) facility located 2 miles east of State Highway 39 on Griffin Road in Hillsborough County, Florida. The Department's Intent to Issue Air Construction Permit and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" are also included.

The enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time 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, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Teresa Heron or Mr. Linero at 850/488-1344.

Sincerely,

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

CHF/aal

Enclosures

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP Permit No. AC 29-228821(A)

Combustion Turbine 3003

Florida Gas Transmission Company - Compressor Station 30

Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to re-issue an air construction permit to Florida Gas Transmission Company to construct a 1202 brake horsepower combustion turbine at Compressor Station 30. . The station is located 2 miles east of State Highway 39 on Griffin Road near Plant City, Hillsborough County. A Best Available Control Technology (BACT) determination was not required pursuant to Rules 62-212.400 and 410, F.A.C., Prevention of Significant Deterioration (PSD). The applicant's name and address are: Florida Gas Transmission Company, Post Office Box 945100 Maitland, Florida 32794.

The original Notice for the project was published on August 6, 1993 in The Tampa Tribune and a permit was issued on September 23, 1993. It contained an erroneous requirement of 42 parts per million (ppm) nitrogen oxides concentration in the exhaust gas when the applicable standard is 150 ppm. In the interim, the unit was constructed and the construction permit expired. Therefore this public notice and a re-issued construction permit are required. Allowable nitrogen oxides emission rates of 3.95 pounds per hour and 17.3 tons per year in the original permit remain unchanged as a result of this action.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit 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 and requests for public meetings concerning the proposed DRAFT Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

The Department will issue FINAL Permit with the conditions of the DRAFT Permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with 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, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9370, fax: 850/487-4938. Petitions must be filed

Is your RETURN ADDRESS completed on the reverse side?

SENDER: ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Clayton Roesler, ES Fla. Gas Transmission P.O. Box 945100 Maitland, FL	4a. Article Number P 265 659 272	
5. Received By: (Print Name)		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
6. Signature: (Addressee or Agent) PS Form		7. Date of Delivery DEC 22 1997
8. Addressee's Address (Only if requested and fee is paid)		Thank you for using Return Receipt Service.

P 265 659 272

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sender Clayton Roesler	
Street & Number FG T	
Post Office, State, & ZIP Code Maitland FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date 12-22-97 Sl. # 30	

PS Form 3800, April 1995

within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. A petitioner must 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

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 of intent. 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:

Hillsborough County Environmental Protection Commission 1900 Ninth Avenue Tampa, Florida 33605 Telephone 813/272-5960 Fax: 813/272-5157	Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Telephone: 850/488-1344 Fax: 850/922-6979	Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/744-6084
--	--	--

The complete project file includes the application, Draft Permit, previous technical evaluation and permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-1344, for additional information.

In the Matter of an
Application for Permit by:

Florida Gas Transmission Company
P.O. Box 945100
Maitland, Florida 32794-5100

DEP File No. AC29-228821A
Compressor Station No. 30
Hillsborough County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to re-issue an air construction permit (copy of DRAFT Permit attached) for the proposed project, detailed in the request specified above and the original Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Florida Gas Transmission Company, submitted a letter on December 9, 1997 to the Department for a corrective amendment of the original construction permit for a combustion turbine (Unit 3003) at its Compressor Station No. 30 located 2 miles east of State Highway 39 on Griffin Road, Plant City, Hillsborough County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a corrected and re-issued air construction permit is required.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of this emission unit will not adversely impact air quality, and the emission unit 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 62-103.150, 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 within 14 (fourteen) days in the legal advertisement section of a newspaper of general circulation in the area affected. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. 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: 850/488-1344; Fax 850/ 922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150 (6), F.A.C.

The Department will issue the FINAL Permit, in accordance with the conditions of the enclosed DRAFT Permit 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 and requests for public meetings concerning the proposed DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT." Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT 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. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with 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, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

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 of intent. 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.

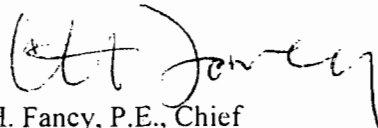
In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. 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 (including the PUBLIC NOTICE and the DRAFT permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on: 12-22-97 to the person(s) listed:

- Mr. Clayton Roesler *, FGT
- Mr. Bill Thomas, SWD
- Mr. J. Campbell, EPCHC

Clerk Stamp

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

Kuni Joben 12-22-97
(Clerk) (Date)

DRAFT

PERMITTEE:

Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

FID No.	0570438
Permit No.	AC29-228821(A)
SIC No.	4922
Project:	Combustion Turbine 3003
Expires:	March 31, 1998

Authorized Representative:

Mr. Clayton Roesler
Division Environmental Specialist

PROJECT AND LOCATION:

Re-issued air construction permit for a 1202 bhp combustion turbine, Unit No. 3003, at the Florida Gas Transmission Compressor Station No. 30, 2 miles east of State Highway 39 on Griffin Road near Plant City, Hillsborough County. UTM coordinates are Zone 17; 391.89 km E; 3106.61 km N.

STATEMENT OF BASIS:

This construction permit is reissued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to construct the project 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 of Environmental Protection (Department).

Attached appendices are made a part of this permit:

Appendix GC Construction Permit General Conditions
Appendix SC Emission Unit(s) Specific Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

APPENDIX SC
Specific Conditions

DRAFT

-
1. This permit supersedes permit AC29-228821, dated September 23, 1993 and its revision dated August 27, 1996. The provisions of the air construction AC29-228821, dated September 23, 1993 and the revision dated August 27, 1996 (attached) are incorporated into this air construction permit except for the changes that follow in Specific Conditions 2 and 3 below:
 2. Original Specific Condition No. 1 as revised on August 27, 1996 is hereby further revised as follows:

NOx emissions shall not exceed ~~42~~150 ppmv at 15% oxygen on a dry basis (based on 100% load conditions). Annual emissions shall not exceed 17.3 TPY.
 3. The original General Conditions are replaced by the attached conditions with updated references to applicable statutes.



Florida Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Florida Gas Transmission Company
P.O. Box 1188
Houston, Texas 77251-1188

Permit Number: AC 29-228821
Expiration Date: June 30, 1995
County: Hillsborough
Latitude/Longitude: 28°04'55"N
82°06'01"W
Project: Natural Gas Turbine
No. 3003) Station No. 30

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210, 212, 272, 275, 296, and 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of one natural gas fired turbine and associated support equipment to be located on Griffin Road, 2 miles east of State Highway 36, Plant City, Hillsborough County, Florida. The UTM coordinates are Zone 17, 392.895 km East and 3106.61 km North.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DEP Form 17-1.202(1) Application to Operate/Construct Air Pollution Sources.
2. Florida Gas Transmission's letter dated April 27, 1993.

GENERAL CONDITIONS:

c. Records of monitoring information shall include:

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

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

Emission Limits

1. The maximum allowable emissions* from this source shall not exceed the emission rates as follows:

Pollutant	lbs/hr	tons/yr	Emission Factor
Nitrogen Oxides**	3.95	17.3	1.49 g/bhp-hr
Carbon Monoxide	5.88	25.75	2.22 g/bhp-hr
Volatile Organic Compounds (non-methane)	0.25	1.10	0.95 g/bhp-hr
Particulate Matter (TSP)	0.077	0.34	5 lbs/MMscf
Particulate Matter (PM ₁₀)	0.077	0.34	5 lbs/MMscf
Sulfur Dioxide	0.44	1.94	10 gr S/100scf

**NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

*Based on 100% load conditions.

2. Visible emissions shall not exceed 10% opacity.

Operating Rates

3. This source is allowed to operate continuously (8760 hours per year).

4. This source is allowed to use natural gas only.

PERMITTEE:
Florida Gas Transmission Company

Permit Number: AC 29-228821
Expiration Date: June 30, 1995

SPECIFIC CONDITIONS:

10. Initial compliance with the total volatile organic compounds will be determined by EPA Method 25A or Method 18. Thereafter, except as provided in Rule 17-297.340(2), compliance with the total VOC emission limits will be assumed, provided the CO allowable emission rate is achieved.

11. During performance tests, to determine compliance with the NO_x standard, measured NO_x emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$\text{NO}_x = (\text{NO}_x \text{ obs}) \left(\frac{\text{P}_{\text{ref}}}{\text{P}_{\text{obs}}} \right)^{0.5} e^{19 (\text{H}_{\text{obs}} - 0.00633)} \left(\frac{288^\circ\text{K}}{\text{T}_{\text{AMB}}} \right)^{1.53}$$

where:

NO_x = Emissions of NO_x at 15 percent oxygen and ISO standard ambient conditions.

NO_x obs = Measured NO_x emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

H_{obs} = Specific humidity of ambient air at test.

e = Transcendental constant (2.718).

T_{AMB} = Temperature of ambient air at test.

12. Stack sampling facilities shall be required and shall comply with the requirements of F.A.C. Rule 17-297.345. Test results will be the average of 3 valid runs. The Air Section of the Environmental Protection Commission in Hillsborough County (EPCHC) and the Southwest District office shall be notified at least 30 days in writing in advance of the compliance test(s). The source shall operate between 90% and 100% of permitted capacity during the compliance test. Compliance test results shall be submitted to the EPCHC and the Southwest District offices no later than 45 days after completion.

13. Sulfur and nitrogen content and the lower heating value of the fuel being fired in the combustion turbines shall be determined as specified in 40 CFR 60.334(b). Any request for a future custom monitoring schedule shall be made in writing and directed to the Environmental Protection Commission of Hillsborough County (EPCHC),

PERMITTEE:
Florida Gas Transmission Company

Permit Number: AC 29-228821
Expiration Date: June 30, 1995

SPECIFIC CONDITIONS:

21. Fugitive dust emissions, during the construction period, shall be minimized by covering or watering dust generation areas.


22. Pursuant to F.A.C. Rule 17-210.300(2), Air Operating Permits, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur and nitrogen content, lower heating value of the fuel being fired, fuel usage, turbine inlet and outlet temperature, RPM, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Southwest District office and the EPCHC by March 1 of each calendar year.

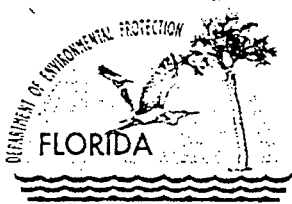
23. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

24. An application for an operation permit must be submitted to the EPCHC and the Southwest District offices at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

Issued this 23 day
of September, 1993

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Howard L. Rhodes, Director
Division of Air Resources
Management



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT AMENDMENT

In the Matter of an
Application for Permit by:

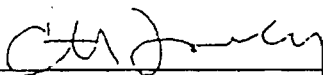
Mr. Allan Weatherford
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

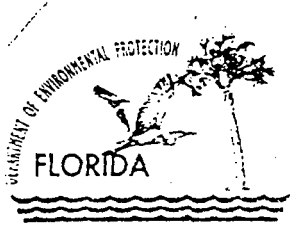
DRAFT Permit Amendment Number:
AC 29-228821
AIRS ID 0570438-002 AC
Hillsborough County (Station No. 30)

Enclosed is the Permit Amendment for the above mentioned compressor station which will modify the permit specific conditions. This facility is located in Hillsborough County, Florida. This permit amendment will be issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.


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



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 21, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Weatherford
Division Environmental Specialist
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

RE: Request for Amendment to Air Construction Permit
AC29-228821 (Station No. 30) Hillsborough County
AIRS ID 0570438-002 AC

The Department is in receipt of your letters dated April 12 and May 10, 1996, requesting to amend the above permit to include the EPA custom fuel monitoring schedule and to modify specific conditions Nos. 1, 2 and 8.

The Department has reviewed this request and hereby amends the above mentioned permit as follows:

SPECIFIC CONDITION No. 1

This condition will be modified to exclude the emission limits standard for all pollutants except for NO_x and SO₂. The emissions expressed in units of mass (TPY) will remain as a condition of the permit. This facility has already demonstrated initial compliance with the permit limits.

FROM:

POLLUTANT	lbs/hr	tons/yr	Emission Factor
NOx *	3.95	17.3	1.49 g/bhp-hr
CO	5.88	25.75	2.22 g/bhp-hr
VOC(s) (non-methane)	0.25	1.10	0.95 g/bhp-hr
PM	0.077	0.34	5 lbs/MMscf
PM10	0.077	0.34	5 lbs/MMscf
S02	0.44	1.94	10 gr S/100scf

*NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

TO:

Standard for Sulfur Dioxide [40 CFR 60.333(a)]

The owner or operator shall not cause to be discharge into the atmosphere from any gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Annual emissions shall not exceed 1.94 TPY.

Standard for Nitrogen Oxides

NOx emissions shall not exceed 42 ppmv at 15% oxygen on a dry basis. (Based on a 100% load conditions). Annual emissions shall not exceed 17.3 TPY.

SPECIFIC CONDITION No. 2

FROM:

Visible Emissions shall not exceed 10% opacity.

TO:

Visible emissions shall not exceed 20% opacity.

SPECIFIC CONDITION No. 8

FROM:

Compliance with the allowable emission limits shall be determined within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial start-up and annually thereafter except as provided in Specific Condition 10, below, by the following reference methods as described in 40 CFR 60, Appendix A (July 1992 version) and adopted by reference in Chapter 17-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 10	Determination of the Carbon Monoxide from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines
Method 18	Measurement of Gaseous Organic Compounds Emissions by Gas Chromatography
Method 25A	Determination of Total Gaseous Organic Concentrations Using a Flame Ionization Analyzer

TO:

Compliance with the allowable emission limits shall be determined by the following EPA reference methods as described in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines

Since this source already demonstrated initial compliance with permitted emission limits, subsequent testing frequency (in operating permits) shall be as determined by the Hillsborough County Environmental Protection Commission (EPC) office.

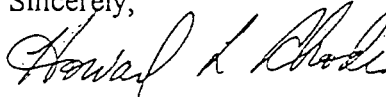
Mr. Allan Weatherford
Florida Gas Transmission
Station No. 30
Page 4

CUSTOM FUEL MONITORING SCHEDULE

The custom monitoring schedule, when approved by EPA, will be incorporated by reference. Currently, EPA is in the process of approving the FGT request.

This letter must be attached to the above mentioned permit and shall become a part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

Attachment to be Incorporated

Mr. Allan Weatherford's letters of April 12 and May 10, 1996.

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

FLORIDA GAS TRANSMISSION COMPANY

Hillsborough County
Plant City, Florida
Station No. 30

Natural Gas Compressor Engine
Permit No. AC 29-228821

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

July 22, 1993

I. SYNOPSIS OF APPLICATION

I.1 APPLICANT NAME AND ADDRESS

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

I.2 REVIEWING AND PROCESS SCHEDULE

Date of Receipt of Application: March 26, 1993

Additional Information Received: April 28, 1993

Application Completeness Date: April 28, 1993

II. FACILITY INFORMATION

II.1 FACILITY LOCATION

Florida Gas Transmission Company's (FGTC) facility is located 4 miles northeast of the town of Plant City on State Route 582 in Hillsborough County, Florida. The UTM coordinates are 391.89 E and 3106.61 Km N.

II.2 STANDARD INDUSTRIAL CLASSIFICATION CODE

This facility is classified as follows:

Major Group No.49 - Electric and Sanitary Services

Group No.492- Gas Production and Distribution

Industry No. 4922- Natural Gas Transmission

II.3 FACILITY CATEGORY

The FGTC site in Hillsborough County, will be classified as a minor emitting facility for nitrogen oxides (NOx) and carbon monoxide (CO). The proposed project will increase NOx by 17.30 tons per year and CO by 25.75 tons per year. The total permitted emissions for this facility shall not exceed 46.16 tons NOx per year and 43.03 tons CO per year.

III. PROJECT DESCRIPTION

The FGTC proposed to install one natural gas fired turbine. The turbine engine will be a Solar Saturn T-1200 compressor unit ISO rated at 1,202 bhp at 22,500 revolutions per minute (rpm). The proposed unit will be used to drive a gas compressor that is a part of a new gas transmission line that will transport natural gas from

source wells in Texas and Louisiana for delivery throughout Florida. The proposed engine will incorporate dry low NOx combustion technology. The engine to be installed at compressor station No. 30 is currently operating under a Florida Department of Environmental Regulation permit (AO 53-20944-Engine No. 3201) at Compressor Station No. 32, in Polk County. As part of this project, the Polk County compressor unit and associated auxiliary equipment will be deactivated at Compressor Station No 32, transported to Compressor Station No. 30 and reactivated. A flow diagram of a typical compressor unit is presented in Figure 2-1.

III.1 Background Information

Hillsborough County existing compressor station consists of two (2) Solar Saturn T-1200 turbine engines (note: both units are remanufactured T-1001 turbines, providing T-1200 performance). This compressor station began operations in 1970 when engine 3001 was installed. A second identical unit (3002) was added to the station in 1985. These existing turbines are not modified as part of this Phase III expansion project.

In general, the FGTC Phase III expansion project will be increasing the natural gas transport capacity of the existing Florida gas pipeline system. The scope of the work for Phase III includes expansions by the addition of state-of-the art compressor engines at four existing compressor stations and two new proposed compressor stations. The proposed engines and turbine engines would be used solely for the purpose of transporting natural gas in the pipeline for distribution in Florida. The main gas pipeline and the approximate locations of the existing and proposed compressor stations along the main pipeline are shown in Figure 1-1.

IV. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Florida Administrative (F.A.C.) Chapters 17-209 through 17-297.

This plant is located in an area (Hillsborough County) designated nonattainment for ozone and attainment for all of the other criteria pollutant in accordance with Rule 17-275.500 and 17-275.400, respectively.

The proposed project is exempt from review under F.A.C. Rule 17-212.400 Prevention of Significant Deterioration (PSD) because this new source is considered a minor emitting facility for purpose of the PSD regulations under (250 TPY).

The proposed facility shall comply with applicable provisions of F.A.C. Chapter 17-297, Stationary Sources-Emissions Monitoring; F.A.C. 17-296, Stationary Sources-Emissions Standards; F.A.C. Rule

17-296.310 General Particulate Emission Limiting Standards; F.A.C. Rule 17-296.320, General Pollutant Limiting Standards. The proposed project will be reviewed in accordance with F.A.C. Rule 17-212.300, Sources not Subject to PSD review or Nonattainment Requirements.

V. SOURCE IMPACT ANALYSIS

V.1 EMISSION LIMITATIONS

The proposed engine will incorporate dry low-NOx combustion technology. Dry combustion techniques are designed to alter the conditions in the combustion chamber to influence the temperature, residence time, and mixing of air and fuel so as to reduce the amount of NOx formed. The state-of-the-art concept in designing a low-NOx turbine involves raising the air-to-fuel ratio in the combustion primary zone and thoroughly premixing primary combustion air and fuel. This reduces NOx formation by lowering the average flame temperature in the combustor primary zone and avoiding localized hot spots. Dry low-NOx combustion is a technically feasible control method for natural gas pipeline turbines.

The operation of this source will produce emissions of nitrogen oxide (NOx), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM), and sulfur dioxide (SO2) from the burning of natural gas. Potential new VOC emissions from the station include fugitive emissions from new valves and flanges that will be in gas service. Table I summarizes the proposed source emissions and Table II comprises the proposed and total emissions from this station.

Table I
Summary of Emissions
Source ID No. 3003

Pollutant	Max. Potential Emissions From Proposed Turbine (lbs/hr)	(TPY)	Significant Emission Rate (TPY)
Nitrogen Oxides	3.95	17.30	40
Carbon Monoxide	5.88	25.75	100
Volatile Organic Compounds (non-methane)	0.25	1.10	40
Particulate Matter (TSP)			
Particulate Matter (PM ₁₀)	0.06	0.28	25
Sulfur Dioxide	0.37	1.62	40
Fugitive (VOC Emissions)	0.154	0.68	

V.2 AIR QUALITY ANALYSIS

From a technical review of the application, the Department has determined that the construction and operation of this source will not have a detrimental impact on Florida's ambient air quality.

TABLE II

Annual (TPY) Emission Levels
 FGTC's Compressor Station No. 30

SOURCE ID	DESCRIPTION	NO _x	CO	VOC (NM/NE, HC)	SO ₂	PM
EXISTING FACILITY						
	COMPRESSOR ENGINES:					
3001	1202 bhp Turbine Engine	14.43	8.64	0.22	1.58	0.28
3002	1202 bhp Turbine Engine	14.43	8.64	0.22	1.58	0.28
	OTHER SOURCES:	—	—	0.17	—	—
EXISTING TOTAL		28.86	17.28	0.61	3.16	0.56
PROJECT RELATED						
	COMPRESSOR ENGINE:					
	1202 bhp Turbine Engine	17.30	25.75	1.10	1.62	0.28
	TANKS:					
Tank 1	Used Lube Oil Tank	—	—	0.00**	—	—
Tank 2	Used Lube Oil Tank	—	—	0.00**	—	—
	FUGITIVE	—	—	0.13	—	—
PROJECT TOTAL		17.30	25.75	1.23	1.62	0.28
STATION TOTAL ***		46.16	43.03	1.84	4.78	0.84

* - estimated fugitive emissions from equipment leaks only.

** - actual emissions are insignificant at 0.00002 TPY for Tank 1 and 0.00002 TPY for Tank 2.

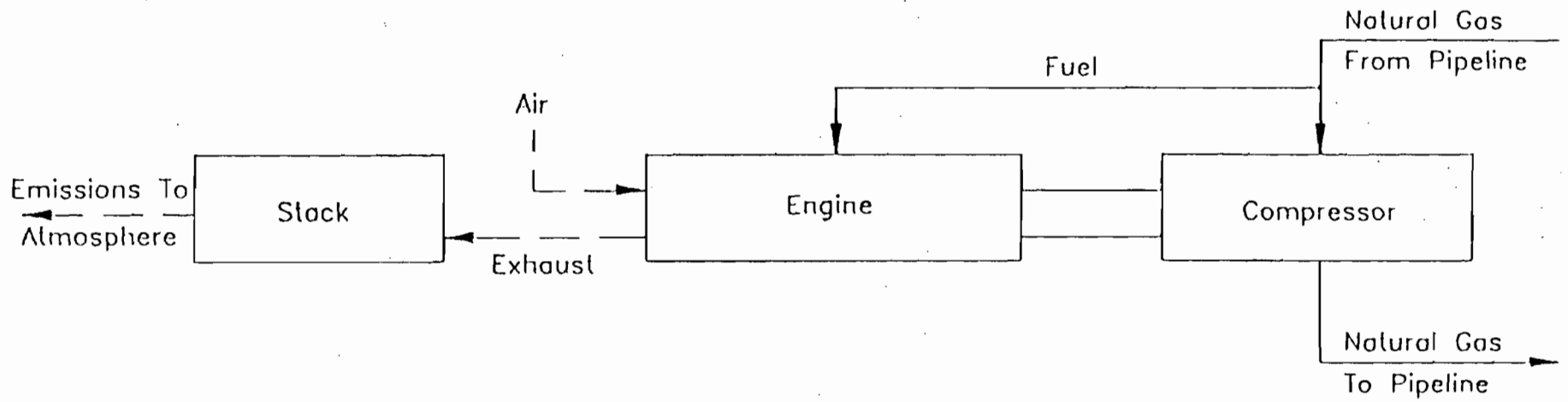
*** - STATION TOTAL = EXISTING + PROJECT

VI. CONCLUSION

Based on the information provided by Florida Gas Transmission Company, the Department has reasonable assurance that the proposed project, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-209 through 17-297 of the Florida Administrative Code.

Printed name
#41755

CE679259
(DALLAS/HIPCL21)




ENSR TM ENSR CONSULTING & ENGINEERING			
FIGURE 2-1 PROCESS FLOW DIAGRAM OF AN ENGINE-COMPRESSOR UNIT			
DRAWN:	DC/SH	DATE:	11-6-92
		PROJECT	NUMBR:

Memorandum

Florida Department of Environmental Protection

TO: Clair Fancy

THRU: Al Linero  12/19

FROM: Teresa Heron

DATE: December 19, 1997

SUBJECT: Florida Gas Transmission (FGT)
AC29-228821A - Station No. 30 Hillsborough County

Attached is the Public Notice package for re-issuance of the construction permit for FGT Station No. 30 . The re-issuance of this permit is for the amendment of Specific Condition No.1. This condition lists a NO_x standard of 42 ppmv at 15% oxygen on a dry basis for turbine 3003. This standard was inadvertently set for this turbine in the original construction permit issued in 1993. This Station did not go PSD or BACT review. The condition probably strayed over from the permits which did undergo PSD/BACT review. Hourly and annual emission limits for NO_x from this unit are correct and remain unchanged.

I recommend your approval and signature.

AAL/aal

Attachments



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

December 4, 1997

CERTIFIED MAIL

Ms. Teresa Heron, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Bldg.
2600 Blairstone
Tallahassee FL 32399-2400

RECEIVED

DEC 09 1997

**BUREAU OF
AIR REGULATION**

Re: Air Permit 0570438-003-AO
Florida Gas Transmission Company Compressor Station No. 30

Dear Mr. Kirby:

Subject: Correction of Permit Requirement

Florida Gas Transmission Company (FGT) has discovered an error in the above referenced permit. Specific Condition No. 6 A of the permit indicates that NO_x emissions of Turbine 3003 are limited to 42 ppmv and 17.3 tons per year (tpy). The 42 ppmv is incorrect and inconsistent with the 17.3 tpy which is correct. This error appears to have been in existence since the original construction permit, Permit No. AC29-228821 was issued on September 23, 1993. The 42 ppmv appears as a footnote to the NO_x emission limitations in Specific Condition No. 1 of Permit No. AC29-228821.

It is not possible for Turbine 3003 to achieve 42 ppmv. At the time of the original construction permitting of this emission unit, four other turbines at three other compressor stations were also permitted. These other turbines were larger and equipped with state of the art low NO_x combustion technology. The NO_x emission rate for these other units were all 42 ppmv which was also considered BACT for the one unit that was subject to PSD. There was no requirement for BACT on Turbine 3003 and the low NO_x combustion technology was not available for such units.

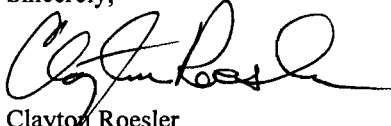
Table 3-5 of the original construction permit application submitted in March 1993 indicated a NSPS NO_x limitation of 150 ppmv based upon 40 CFR 60 Subpart GG requirements. This table also indicated that Turbine 3003 had a NO_x emission rate of 75 ppmv.

FGT respectfully requests that this error be corrected and that the NO_x limitations for emission unit 3003 be set at 150 ppmv as required by 40 CFR 60 Subpart GG.

A request to change the current operating permit is also being sent to Hillsborough County Environmental Protection Commission in Tampa.

If additional information is needed or if you have any questions, please call Mr. Clay Roesler at (407) 875-5865. Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Clayton Roesler". The signature is fluid and cursive, with the first name being more prominent.

Clayton Roesler
Division Environmental Specialist

cc: Compressor Station 30
V. Duane Pierce, Ph.D.

FILE: 30FDEP revise 42 ppmv.doc



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 15, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Clayton Roesler
Division Environmental Specialist
Florida Gas Transmission Company
P.O. Box 945100
Maitland, Florida 32794-5100

Re: Florida Gas Transmission Gas Turbines Permits
EPA Approval of Custom Fuel Monitoring Schedule
Station 30: 0570438-002-AC
Station 26: 0170035-001-AC
Station 15: 1230034-002-AC

Dear Mr. Roesler:

This letter is a reminder for you to send the Bureau of Air Regulation, the EPA Custom Fuel Monitoring Schedule approval for the above referenced gas turbines at the above mentioned FGT stations. If this request for approval has not been granted by EPA, please let us know.

As Teresa Heron has mentioned to you in previous telephone conversations, we need that information in order to update our ARMS database.

If you have any questions regarding this matter, please call Teresa Heron at (904) 488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/th/t

P 265 659 471

no green card 7/98

US Postal Service

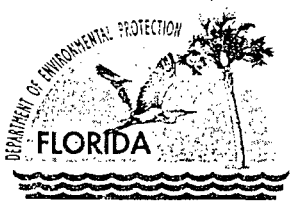
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Clayton Kessler	
Street & Number F 5 T	
Post Office, State, & ZIP Code Mantland, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	10-15-97
Stat. 30 " 26 " 15	

PS Form 3800, April 1995



8/27/96

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

NOTICE OF PERMIT AMENDMENT

In the Matter of an
Application for Permit by:

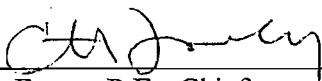
Mr. Allan Weatherford
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

DRAFT Permit Amendment Number:
AC 29-228821
AIRS ID 0570438-002 AC
Hillsborough County (Station No. 30)

Enclosed is the Permit Amendment for the above mentioned compressor station which will modify the permit specific conditions. This facility is located in Hillsborough County, Florida. This permit amendment will be issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.


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

BEST AVAILABLE COPY

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Allan Weatherford
 Florida Gas Transmission
 P.O. Box 945100
 Maitland, FL
 32794-5100

4a. Article Number
 P 339 251 146

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 MAITLAND FL
 AUG 30 1996

5. Signature (Addressee)
 [Signature]

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 **DOMESTIC RETURN RECEIPT**

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

P 339 251 146

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sender Allan Weatherford	
Street & Number FIA GAS TRANS	
Post Office, State, & ZIP Code Maitland, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	8-27-96
AC 29-228821 0570438-002-AC	

PS Form 3800, April 1995



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

RECEIVED

May 9, 1996

OVERNIGHT MAY 10 1996

BUREAU OF
AIR REGULATION

A. A. Linero, P.E.
Administrator
New Source Review Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

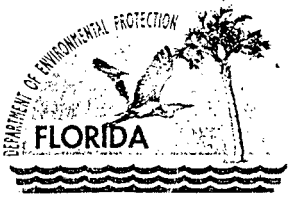
Dear Sir or Madam:

Enclosed please find our check in the amount of \$250.00 for processing fees for our amendment request for permits AC09-229441, AC62-229319, and AC29-228821.

If you have any questions or need additional information, please call me at (407)-875-5816.

Sincerely,

Allan Weatherford
Division Environmental Specialist



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

May 5, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Clayton Roesler
Division Environmental Specialist
Florida Gas Transmission Company
P.O. Box 945100
Maitland, Florida 32794-5100

Re: Florida Gas Transmission Permit Modifications
1230034-004-AC, (PSD-FL-202), Station 15, Taylor County
0990333-003-AC, Station 21, Palm Beach County
0170035-003-AC, Station 26, Citrus County
0570438-004-AC, Station 30, Hillsborough County

Dear Mr. Roesler:

This letter is to confirm your April 9, 1997 telephone conversation with Ms. Teresa Heron, concerning your letter dated April 2, 1997. Your letter essentially requested treatment of turbine replacements as routine replacements not requiring construction permits or modifications. Based on your observations, the turbines have been lasting only approximately 5000 hours or so making their replacement routine rather than life extension projects or modifications subject to construction permitting.

It was our understanding that only the new (Phase III) turbines were unreliable to the extent that routine (possibly annual) replacement is foreseen. However it is not clear that the replacement is just for the gas turbines permitted during Phase III that are defective. Your request implies all existing gas turbines in the Florida Gas Transmission system. Be advised that a replacement of an old unit (pre- NSPS) for a new unit will have to be accomplished by the permitting process. New units will be subject to 40 CFR 60, Subpart GG.

Based on our review of your request the following information is needed:

Provide reasonable assurance (e.g. a letter from the manufacturer of the turbine) that will indicate the limited life of the turbines and the need of routine repair, maintenance, or replacement for the affected turbines. Identify those FGT units that would be affected.

Submit a table identifying for both the existing and the replacement unit: the manufacturer, model number, serial number, capacity (bhp) and the allowable emissions levels.

Pursuant to Rule 62-4.050 F.A.C., please submit the above requested information under a professional engineer seal. This is required to provide reasonable assurance that the units to be replaced are rated at the same capacity (brake horsepower) or less than the existing units and that the emissions levels will not exceed those of the already permitted turbine for that site or otherwise contravene a Department rule or permit condition.

Please direct a copy of your response to each of the individuals listed below. If you have any questions regarding this matter, please call Teresa Heron at (904) 488-1344.

Sincerely,



A. A. Linero, P.E. Administrator
New Source Review Section

AAL/th/t

cc: Jerry Campbell, EPCHC
Jerry Kissel, SWD
Jeff Koerner, PBCPHU
Bob Leetch, NED

P 265 659 204

no green card 7/98

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to Walter Roester	
Street & Number Fla. GAS TRANS.	
Post Office, State & ZIP Code Maitland, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date stat. 15 21 26 30	5-6-97

PS Form 3800, April 1995



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

April 12, 1996

CERTIFIED

RECEIVED

APR 16 1996

BUREAU OF
AIR REGULATION

Mr. Clair Fancy
Florida Department of Environmental Protection
Northwest District Branch Office
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

Re: Florida Gas Transmission Company - Station 30
Air Permit No. AC29-228821

Florida Gas Transmission Company (FGT) requests that certain modifications be made to the above referenced construction permit and also requests approval for a custom monitoring schedule for sampling and analyzing nitrogen and sulfur in the natural gas.

The permitted unit is a minor source at a minor facility. Changes are requested to eliminate requirements that exceed those specified by rule without significantly impacting reasonable compliance oversight.

Specifically, FGT requests the following changes to the referenced permit:

Change Specific Condition 1 so that all emissions limiting standards are omitted except for NO_x and SO₂ standards. The standards should be consistent with the standards that are applicable to the source in NSPS (40CFR61) and should be expressed in the units defined in the standard rather than in pounds per hour (lbs/hr) or tons per year (TPY).

Change Specific Condition 2 to read: "Visible emissions shall not exceed 20% opacity."

Revise Specific Condition 8 so that the test requirements are limited to:

-Annual Testing: for visible emissions by Method 9

-Initial and Prior to Renewal Testing: for No_x by Methods 1,2,3A, and 20

NOTE: The initial tests, as currently specified in the permit, were completed and showed compliance with all permit limits. FGT is requesting the change to affect only the "annual" and "prior to renewal" testing requirements.

Additionally, pursuant to Specific Condition 13, FGT requests approval of a custom monitoring schedule for sampling and analyzing nitrogen and sulfur in its fuel gas (a copy of this request has also been sent to Hillsborough County EPC for their consideration). The permitted gas turbine burns only highly regulated pipeline quality natural gas that contains negligible amounts of nitrogen and sulfur. The initial compliance tests (attached) show the nitrogen and sulfur concentrations in the gas to be much less than the respective permit limits. The nitrogen and sulfur content of the fuel gas, supplied through FGT's pipeline, has historically been and will remain relatively constant at levels far below those of regulatory interest.

If you have any questions or would like to arrange a meeting to discuss these changes, please call me at (407) 875-5816.

Sincerely,



Allan Weatherford
Division Environmental Specialist

c Charlie Thompson
 Roy Smith
 Curt Gavin
 Ray Glass
 Eric Peterson, Hillsborough County EPC

Table 2
Summary of Results Unit No. 3003

Company: Florida Gas Transmission Co.
 Plant: Compressor Station No. 30
 Location: 4 miles NE of Plant City
 Hillsborough Co., FL on SR 582
 Source: Solar Saturn T-1001S-312F
 Technicians: CDC, LJB, DD

Test Number	30C-1	30C-2	30C-3	Averages	FDEP Permit Limits
Date	7/25/95	7/25/95	7/25/95		
Start Time	8:30	10:10	11:35		
Stop Time	9:44	11:10	12:35		
Turbine/Compressor Operation					
Power Turbine Speed (% NPT)	80.9	79.9	80.5	80.4	
Gas Producer Speed (% NGP)	96.8	95.9	96.0	96.2	
Horsepower (site bhp, via FGT cmprsr thrupt calc.)	1057	1009.4	1010	1025	
PCD Observed (psig)	56.3	53.9	53.4	54.5	
Combustor Air Inlet Temperature (T-1, °F)	81.0	92.6	93.3	89.0	
Turbine Exhaust Stack Temperature (T-7, °F)	883	888	889	887	
Gas Compressor Suction Pressure (psig)	745.6	732.0	705.1	727.6	
Gas Compressor Suction Temperature (°F)	81.0	81.0	81.0	81.0	
Gas Compressor Discharge Pressure (psig)	917.6	898.6	867.3	894.5	
Gas Compressor Discharge Temperature (°F)	110.0	110.0	110.0	110.0	
Compressor Flow (MMSCFD)	596.1	603.0	613.0	604.0	
Turbine Fuel Data (Residue Gas)					
Fuel Heating Value (Btu/SCF, Gross)	1032	1032	1032	1032	
Fuel Specific Gravity	0.5838	0.5838	0.5838	0.5838	
O2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	8676	8676	8676	8676	
CO2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	1024	1024	1024	1024	
Total Sulfur in Fuel (grains Sulfur/100 SCF fuel)	0.088	0.088	0.088	0.088	10
Fuel Flow (MMSCFH)	0.0107	0.0107	0.0107	0.0107	0.0156
Heat Input (MMBtu/hr)	11.01	11.05	11.07	11.04	15.76
Brake-specific Fuel Consumption (Btu/bhp-hr)	10418	10945	10957	10773	
Ambient Conditions					
Atmospheric Pressure ("Hg)	29.89	29.92	29.93	29.91	
Temperature (°F): Dry bulb	80.5	88.5	90	86	
(°F): Wet bulb	79.3	79.5	82	80	
Humidity (lbs moisture/lb of air)	0.0208	0.0191	0.0207	0.0202	
Measured Emissions					
NOx (ppmv, dry basis)	30.3	30.7	29.9	30.3	
NOx (ppmv @ 15% O2)	44.1	44.9	43.7	44.3	
NOx (ppmv @ 15% O2, ISO Day)	54.6	52.6	52.5	53.2	150†
CO (ppmv, dry basis)	40.2	41.3	42.0	41.2	
O2 (% volume, dry basis)	16.85	16.87	16.86	16.86	
CO2 (% volume, dry basis)	2.28	2.37	2.24	2.30	
Visible Emissions (% opacity)	0	0	0	0	10
Fo (fuel factor, range = 1.600-1.834 for NG)	1.78	1.70	1.80	1.76	
Stack Volumetric Flow Rates					
via Pitot Tube Traverse (SCFH, dry basis)	5.19E+05	5.11E+05	5.01E+05	5.11E+05	
via O2 "F-factor" (SCFH, dry basis)	4.93E+05	4.97E+05	4.97E+05	4.96E+05	
via CO2 "F-factor" (SCFH, dry basis)	4.95E+05	4.77E+05	5.06E+05	4.93E+05	
Calculated Emission Rates (via pitot tube)					
NOx (lbs/hr)	1.88	1.88	1.79	1.85	3.95
CO (lbs/hr)	1.52	1.54	1.53	1.53	5.88
SO2 (lbs/hr, Based on fuel flow and fuel sulfur)	0.003	0.003	0.003	0.003	0.44
NOx (tons/yr)	8.2	8.2	7.8	8.1	17.30
CO (tons/yr)	6.7	6.7	6.7	6.7	25.75
SO2 (tons/yr, Based on fuel flow and fuel sulfur)	0.012	0.012	0.012	0.012	1.94
NOx (g/bhp-hr)	0.81	0.84	0.80	0.82	1.49
CO (g/bhp-hr)	0.65	0.69	0.69	0.68	2.22

† Sub part GG, NSPS NOx standard

Gas Fuel F Factor & Heating Value Calculation

Client Florida Gas Transmission Company
 Sample ID pipeline natural gas (residue gas)
 Time 6:23
 Date 7/25/95

CALCULATION OF DENSITY AND HEATING VALUE @ 60°F and 30 in Hg

Component	% Volume	Molecular Wt.	Density (lb/ft3)	% volume		Component Gross Btu/lb	Weight Fract. Btu	Gross Heating Value (Btu/SCF)	Volume Fract. Btu
				Density	weight %				
Hydrogen		2.016	0.0053	0.00000	0.0000	61100	0.00	325.0	0
Oxygen		32.000	0.0846	0.00000	0.0000	0	0.00	0.0	0
Nitrogen	0.3840	28.016	0.0744	0.00029	0.6397	0	0.00	0.0	0
CO2	0.8050	44.010	0.1170	0.00094	2.1090	0	0.00	0.0	0
CO		28.010	0.0740	0.00000	0.0000	4347	0.00	322.0	0
Methane	95.8620	16.041	0.0424	0.04065	91.0145	23879	21733.35	1013.0	971.082
Ethane	2.3000	30.067	0.0803	0.00185	4.1356	22320	923.07	1792.0	41.216
Ethylene		28.051	0.0746	0.00000	0.0000	21644	0.00	1614.0	0
Propane	0.3750	44.092	0.1196	0.00045	1.0043	21661	217.54	2590.0	9.7125
propylene		42.077	0.1110	0.00000	0.0000	21041	0.00	2336.0	0
Isobutane	0.0900	58.118	0.1582	0.00014	0.3188	21308	67.93	3363.0	3.0267
n-butane	0.0720	58.118	0.1582	0.00011	0.2551	21257	54.22	3370.0	2.4264
Isobutene		56.102	0.1480	0.00000	0.0000	20840	0.00	3068.0	0
Isopentane	0.0320	72.144	0.1904	0.00006	0.1364	21091	28.77	4008.0	1.28256
n-pentane	0.0190	72.144	0.1904	0.00004	0.0810	21052	17.05	4016.0	0.76304
n-hexane	0.0600	86.169	0.2274	0.00014	0.3055	20940	63.98	4762.0	2.8572
H2S		34.076	0.0911	0.00000	0.0000	7100	0.00	647.0	0
total	100.00	Average Density		0.04466	100.0000	Gross Heating Value		Gross Heating Value	
		Specific Gravity		0.58377		Btu/lb	23106	Btu/SCF	1032.4

CALCULATION OF F FACTORS

Component	Mol. Wt.	C Factor	H Factor	% volume	Fract. Wt.	Weight Percents			
						Carbon	Hydrogen	Nitrogen	Oxygen
Hydrogen	2.016	0	1	0.00	0.0000				
Oxygen	32.000	0	0	0.00	0.0000				0
Nitrogen	28.016	0	0	0.38	10.7581			0.637383014	
CO2	44.010	0.272273	0	0.81	35.4281	0.57149832			1.52597
CO	28.010	0.42587	0	0.00	0.0000	0			0
Methane	16.041	0.75	0.25	95.86	1537.7223	68.32856815	22.7761894		
Ethane	30.067	0.8	0.2	2.30	69.1541	3.277713975	0.81942849		
Ethylene	28.051	0.85714	0.14286	0.00	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.38	16.5345	0.801499135	0.17811114		
Propene	42.077	0.85714	0.14286	0.00	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.09	5.2306	0.256467027	0.0534478		
n-butane	58.118	0.82759	0.17247	0.07	4.1845	0.205173621	0.04275824		
Isobutene	56.102	0.85714	0.14286	0.00	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.03	2.3086	0.113980444	0.02279664		
n-pentane	72.144	0.83333	0.16667	0.02	1.3707	0.067675889	0.0135355		
n-hexane	86.169	0.83721	0.16279	0.06	5.1701	0.256448311	0.04986469		
H2S	34.076	0	0.058692	0.00	0.0000	0	0		
Totals				99.99900	1687.8617	73.87902487	23.96	0.637383014	1.52597

CALCULATED VALUES		
O2 F Factor (dry)	8676	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O2 F Factor (wet)	10657	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	1981	SCF of Water/MM Btu of Fuel Burned @ 0% excess air
Combust. Moisture	18.59	volume % water in flue gas @ 0% excess air
CO2 F Factor	1024	DSCF of CO2/MM Btu of Fuel Burned @ 0% excess air
Carbon Dioxide	11.80	volume % CO2 in flue gas @ 0% O2
Predicted Fo Factor	1.77	EPA Method 3a Fo value
Fuel VOC % (non-C1)	6.38%	non-methane fuel VOC content
Fuel VOC % (non-C1,C2)	2.17%	non-methane non-ethane fuel VOC content



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 21, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Weatherford
Division Environmental Specialist
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

RE: Request for Amendment to Air Construction Permit
AC29-228821 (Station No. 30) Hillsborough County
AIRS ID 0570438-002 AC

The Department is in receipt of your letters dated April 12 and May 10, 1996, requesting to amend the above permit to include the EPA custom fuel monitoring schedule and to modify specific conditions Nos. 1, 2 and 8.

The Department has reviewed this request and hereby amends the above mentioned permit as follows:

SPECIFIC CONDITION No. 1

This condition will be modified to exclude the emission limits standard for all pollutants except for NO_x and SO₂. The emissions expressed in units of mass (TPY) will remain as a condition of the permit. This facility has already demonstrated initial compliance with the permit limits.

FROM:

POLLUTANT	lbs/hr	tons/yr	Emission Factor
NOx *	8.92	39.05	0.62 g/bhp-hr
CO	6.46	28.29	0.45 g/bhp-hr
VOC(s) (non-methane)	0.37	1.62	0.26 g/bhp-hr
PM	0.35	1.51	5 lbs/MMscf
PM10	0.35	1.51	5 lbs/MMscf
S02	1.97	8.62	10 gr S/100scf

*NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

TO:

Standard for Sulfur Dioxide [40 CFR 60.333(a)]

The owner or operator shall not cause to be discharge into the atmosphere from any gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Annual emissions shall not exceed 8.62 TPY.

Standard for Nitrogen Oxides

NOx emissions shall not exceed 42 ppmv at 15% oxygen on a dry basis. (Based on a 100% load conditions). Annual emissions shall not exceed 39.05 TPY.

SPECIFIC CONDITION No. 2

FROM:

Visible Emissions shall not exceed 10% opacity.

TO:

Visible emissions shall not exceed 20% opacity.

SPECIFIC CONDITION No. 8

FROM:

Compliance with the allowable emission limits shall be determined within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial start-up and annually thereafter except as provided in Specific Condition 10, below, by the following reference methods as described in 40 CFR 60, Appendix A (July 1992 version) and adopted by reference in Chapter 17-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 10	Determination of the Carbon Monoxide from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines
Method 18	Measurement of Gaseous Organic Compounds Emissions by Gas Chromatography
Method 25A	Determination of Total Gaseous Organic Concentrations Using a Flame Ionization Analyzer

TO:

Compliance with the allowable emission limits shall be determined by the following EPA reference methods as described in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines

Since this source already demonstrated initial compliance with permitted emission limits, subsequent testing frequency (in operating permits) shall be as determined by the DEP Southwest District office.

Mr. Allan Weatherford
Florida Gas Transmission
Station No. 26
Page 4

CUSTOM FUEL MONITORING SCHEDULE

The custom monitoring schedule, when approved by EPA, will be incorporated by reference. Currently, EPA is in the process of approving the FGT request.

This letter must be attached to the above mentioned permit and shall become a part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

Attachment to be Incorporated

Mr. Allan Weatherford's letters of April 12 and May 10, 1996.



Florida Gas Transmission Company

P. O. Box 945100, Maitland, Florida 32794-5100 (407) 875-5800

August 1, 1996

Teresa Herron
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

AUG 6 1996

**BUREAU OF
AIR REGULATION**

Dear Ms. Herron:

Enclosed please find the publication affidavit from the Tampa Tribune for the proposed permit amendment, Intent to Issue for permits 0170035-001-AC, 0570438-002-AC, and 1230034-002-AC.

If you have any questions or need any additional information, please call me at (407)-875-5865.

Sincerely,

Clay Roesler
Division Environmental Specialist

CR/wlb

cc: Air Permit File
Compressor Stations 15, 26, and 30

enclosure

THE TAMPA TRIBUNE

Published Daily

Tampa, Hillsborough County, Florida

State of Florida }
County of Hillsborough } ss.

Before the undersigned authority personally appeared R. Putney, who on oath says that he is Accounting Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of _____

PUBLIC NOTICE

was published in said newspaper in the issues of
JULY 24, 1996

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough 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 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.

R. Putney

Sworn to and subscribed before me, this 29 day
of JULY, A.D. 1996

Personally Known _____ or Produced Identification _____
Type of Identification Produced _____

(SEAL) *Ima Kennedy*

INA S. KENNEDY
Notary Public, State of Florida
My comm. expires April 21, 2000
No. CC548841



AIR CONSTRUCTION PERMIT AMENDMENTS STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit Nos.: 0170035-001-AC-Hillsborough County, 0570438-002-AC-Citrus County. The Department of Environmental Protection gives notice of its intent to issue an air construction permit amendments to Florida Gas Transmission Company (FGT) for permit revisions to eliminate emissions limitations and revise testing requirements which exceed those specified by rule for its units located at Compressor Station No. 30, Northeast of Plant City on SR 582 in Hillsborough County, and Compressor Station No. 26, Northwest of Lecanto in Citrus County.

These facilities burn clean natural gas and during initial compliance testing, demonstrated compliance with all of the required emission standards. This amendment will delete testing requirements for carbon monoxide, particulate matter and volatile organic compounds because they are not required by the New Source Performance Standard (NSPS) for Gas Turbines or necessary for Prevention of Significant Deterioration (PSD) per Rule 62-212.400, F.A.C. Deleting the requirements will not result in increased emissions of any of these pollutants, but will simplify the applicable permits and reduce annual testing costs.

The visible emissions requirements for these units will be revised from 10 percent capacity to 20 percent in accordance with the Rule 62-296.320, F.A.C. A Best Available Control Technology determination was not required. The applicant's name and address is Florida Gas Transmission Company, Post Office Box 945160, Maitland, Florida.

The Department will issue the FINAL Permit Amendment in accordance with the conditions of the enclosed DRAFT Permit Amendment unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions:

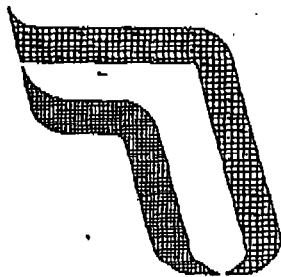
The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written Comments should be provided to the Department of Environmental Protection, Bureau of Air Regulation, Blair Stone Road, MS 5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit Amendment, the Department shall issue a Revised DRAFT Permit Amendment and require, if applicable, another Public Notice.

In addition, any person whose substantial interests are affected by this proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (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, MS 35, Tallahassee, Florida 32399-3000 within 14 days of publication of this Notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number, and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

Protection Commission
1410 North 21st Street
Tampa, Florida 33605
(813) 272-5530
3166 7/23/96

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this DRAFT Permit Amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice. In the Office of General Counsel of the Department. Failure to petition within the allotted time frame constitutes a waiver of any rights such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 60Q-20.10, Florida Administrative Code. 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 the Department offices listed below. The complete project file includes the Draft Permit Amendment and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review, Section of the Department's Tallahassee address and at (904) 488-1344. Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8219 (813) 744-6100 Hillsborough County Environmental



FLORIDA GAS TRANSMISSION

a Division of

ENRON CORP

TECHNICAL OPERATIONS
MAITLAND, FLORIDA
PHONE 407-875-5800
FAX 407-875-5896

*Kim - Please update
socket & advise*

*Teresa. Copy is
acceptable but we
would want original
Al*

for record.

F A X

(ARE FRIENDLY)

To: TERESA HERRON
From: CLAY ROESLER /wrb
Date: 7-30-96
Time:
No. Pages to Follow: 2

Comments:

*Thank you for your patience. Please give me a
call if you need any further information.*

Wendy (407)-875-5846

...reports filed shall be made available for public inspection. Further comments received will result in a significant change in the DRAFT Permit Amendment and require, if applicable, another Public Notice.

In addition, any person whose substantial interests are affected by this proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (s. 120.57). The petition must contain the information set forth below and must be filed with the Office of General Counsel of the Department of Environmental Protection, 111 S. Moultrie Ave., Tallahassee, Florida 90001, within 15 days of publication of a notice of the proposed decision. A copy of the petition to the applicant of the address indicated below by the Department of Environmental Protection within the 15-day period prior to the hearing or any other administrative proceeding determination (hearing) is required. (2001) 120.57

The petition must contain the following information in the form, and the telephone number used by which the applicant's notice and address, the Department Permit File Number and the community watershed project's address: (a) A statement of how and when each petitioner received notice of the Department's action or proposed action; (b) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (c) A statement of the reasons why the petitioner's interests are affected; (d) A statement of facts which petitioner believes warrants reversal or modification of the Department's action or proposed action; (e) A statement of which rules or statutes petitioner believes have been violated or modified by the Department's action or proposed action; (f) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petitioner files the administrative proceeding, the Department's action will be subject to review by the Department's Administrative Law Judge. Accordingly, the Department's action will be subject to review by the Administrative Law Judge. The Department's action will be subject to review by the Administrative Law Judge. The Department's action will be subject to review by the Administrative Law Judge.

DRAFT Permit Amendment. Persons whose substantial interests will be affected by any action of the Department with respect to the application have the right to petition to become a party to the proceedings. The petition must conform to the requirements specified above and be filed in accordance with the Office of General Counsel of the Department. Failure to file a petition within the specified time frame constitutes a waiver of any rights such person has to request a hearing under Section 120.57, F.S. and to participate as a party to the proceeding. Any subsequent intervention will only be at the discretion of the presiding officer upon motion filed pursuant to Rule 400.2010, Florida Administrative Code.

A complete project file is available for public inspection during normal business hours, 8:30 a.m. to 5:00 p.m. Monday through Friday, upon request at the offices of the Department listed below. The complete project file includes the Draft Permit Amendment and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review, Section of the Department's Tallahassee address and at (904) 437-1344.

Department of Environmental Protection
Bureau of Air Regulation
111 S. Moultrie Drive, Suite 4
Tallahassee, Florida 90001
Division of Environmental Protection
Southwest District Office
2004 Coconut Palm Drive
Coconut Ridge, Florida 33405
Hillsborough County Environmental
Protection
1410 North 21st Street
Tampa, Florida 33605
(813) 273-6629
3166 7/20/96



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 2, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Weatherford
Environmental Specialist
Florida Gas Transmission Company
Maitland, Florida 32794-5100

RE: DRAFT Permit Amendment Nos:
0170035-001-AC Hillsborough County
0570438-002 -AC Citrus County
1230034- 002-AC Taylor County

Dear Mr. Weatherford:

Attached is one copy of the Proposed Permit Amendment, Intent to Issue, and Public Notice of Intent to Issue (for publication by Florida Gas Transmission) for each of the above mentioned facilities located in Florida.

The "*PUBLIC NOTICE*" must be published by the applicant within 30 days of receipt of this letter. The applicant shall provide Proof of publication, i.e., newspaper affidavit, to the permitting authority office within 7 (seven) days of publication.

Please submit any written comments you wish to have considered concerning the proposed action to Mr. A. A. Linero, P.E., Administrator, New Source Review Section. If you have any other questions, please contact Teresa Heron at (904)488-1344.

Sincerely,

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

CHF/th/t

Enclosure

Copies furnished to:

Robert Leech, NED
Bill Thomas, SWD
Rick Kirby, EPCHC

BEST AVAILABLE COPY

Is your RETURN ADDRESS completed on the reverse?

your name and address on the reverse of this form so that we can return this card to you.

- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

3. Article Addressed to:
 Allan Weatherford, ES
 Fla. Gas Transmission
 PO Box 945100
 Mayland, FL
 32794-5100

4a. Article Number
 P339 251 122

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 7-12-96

5. Signature (Addressee)
 [Signature]

6. Signature (Agent)
 [Signature]

8. Addressee's Address (Only if requested and fee is paid)

1. Addressee's Address
 2. Restricted Delivery
 Consult postmaster for fee.

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

P 339 251 122

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	Allan Weatherford
Street & Number	Fla. Gas Transmi
Post Office, State, & ZIP Code	Mayland, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	7-9-96
	Hillsboro Citrus Taylor

PS Form 3800, April 1995

INTENT TO ISSUE AIR CONSTRUCTION PERMIT AMENDMENT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an
Application for Permit by:

Mr. Allan Weatherford
Environmental Specialist
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

DRAFT Permit Amendment Nos:

AC 29-228821 Hillsborough County

AC 09-229441 Citrus County

AC 62-229319 Taylor County

Station 30
Station 26
Station 15

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit amendment (copy of DRAFT Permit amendment enclosed) for a portion of the proposed changes at the sources detailed in the application specified above, for the reasons stated below.

The applicant, Florida Gas Transmission Company (FGT), applied on May 10, 1996 to the Department for permit revisions to eliminate emissions limitations and revise testing requirements which exceed those specified by rule for its compressor stations located at Compressor Station No. 30, Northeast of Plant City on SR 582 in Hillsborough County, Compressor Station No. 26, Northwest of Lecanto in Citrus County, and Compressor Station No. 15, North of Perry on C-361 in Taylor County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that air construction permit amendments as well as approval from EPA (of the Custom Fuel Monitoring Schedule) are required prior to operating these facilities as proposed.

The Department will issue the permit amendment as stated in the attached Department letter unless a petition for an administrative proceeding (hearing) is filed in accordance with Section 120.57, F.S. The Department will not act on the Custom Fuel Monitoring Schedule until approval is given by EPA.

The Department intends to issue these air construction permit amendments based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the sources will comply with all appropriate provisions of Chapters 62-4, 62-210, 62-212, 62-272, 62-275, 62-296, and 62-297,

Pursuant to Section 403.815, F.S., and Rule 62-103.150, 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 AMENDMENT." The notice shall be published one time only within 30 (thirty) days of receipt of this notice in the legal advertisement section of a newspaper of general circulation in the area affected. 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 each county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. 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 the address below within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit

The Department will issue FINAL Permit Amendment, in accordance with the conditions of the enclosed DRAFT Permit Amendment 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 14 (fourteen) days from the date of publication of "*PUBLIC NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT.*" Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit Amendment, the Department shall issue a Revised DRAFT Permit Amendment and require, if applicable, another Public Notice.

In addition, any persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) through the Office of General Counsel of the Department at the address listed below. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of the receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated below at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the proposed source is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by petitioner, if any;
- (e) A statement of facts which the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this DRAFT Permit Amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above, and be filed (received) within 14 days of receipt of this intent with in the Office of General Counsel of the Department at the address listed below. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 60Q-2.010, F.A.C.

Executed in Tallahassee, Florida.



C. H. Fancy, Chief
Bureau of Air Regulation

Florida Gas Transmission
AC29-228821 Hillsborough County, AC09-229441 Citrus County, AC62-229319 Taylor County

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **INTENT TO ISSUE PERMIT AMENDMENT** and all copies were certified mailed before the close of business on 7-9-96 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kew Jaber 7-9-96
Clerk Date

Enclosures

Referenced regulatory agency offices:

Permitting Authority Office
Department of Environmental Protection
Bureau of Air Regulation
2600 Blairstone Road, MS 5505
Tallahassee, Florida, 32399-2400
(904)488-1344

Legal Office
Department of Environmental Protection
Office of General Counsel
3900 Commonwealth Boulevard, MS 35
Tallahassee, Florida, 32399-3000
(904)488-9730

PUBLIC NOTICE OF INTENT TO ISSUE
AIR CONSTRUCTION PERMIT AMENDMENTS

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit Nos: 0170035-001-AC - Hillsborough County
0570438-002-AC - Citrus County

The Department of Environmental Protection (Department) gives notice of its intent to issue air construction permit amendments to Florida Gas Transmission Company (FGT) for permit revisions to eliminate emissions limitations and revise testing requirements which exceed those specified by rule for its units located at Compressor Station No. 30, Northeast of Plant City on SR 582 in Hillsborough County, and Compressor Station No. 26, Northwest of Lecanto in Citrus County.

These facilities burn clean natural gas and, during initial compliance testing, demonstrated compliance with all of the required emission standards. This amendment will delete emission standards and testing requirements for carbon monoxide, particulate matter and volatile organic compounds because they are not required by the the New Source Performance Standard (NSPS) for Gas Turbines or necessary for Prevention of Significant Deterioration (PSD) per Rule 62-212.400, F.A.C. Deleting the requirements will not result in increased emissions of any of these pollutants, but will simplify the applicable permits and reduce annual testing costs.

The visible emissions requirements for these units will be revised from 10 percent opacity to 20 percent in accordance with the Rule 62-296.320, F.A.C. A Best Available Control Technology determination was not required. The applicant's name and address is Florida Gas Transmission Company, Post Office Box 945100, Maitland, Florida.

The Department will issue the FINAL Permit Amendment, in accordance with the conditions of the enclosed DRAFT Permit Amendment 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 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department of Environmental Protection, Bureau of Air Regulation, 2600 Blair Stone Road, MS 5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit Amendment, the Department shall issue a Revised DRAFT Permit Amendment and require, if applicable, another Public Notice.

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The Petition shall contain the following information; (a) The name, address, and the telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

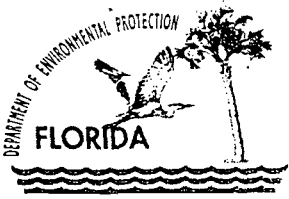
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Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301
(904)488-1344

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8219
(813)744-6100

Hillsborough County Environmental
Protection Commission
1410 North 21st Street
Tampa, Florida 33605
(813)272-5530



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

DRAFT
July 2, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Weatherford
Division Environmental Specialist
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794-5100

Dear Mr. Weatherford:

RE: Request for Amendments to Air Construction Permits:
AC 29-228821 (Station No 30) Hillsborough County
AC 09-229441 (Station No. 26) Citrus County
AC 62-229319 (Station No. 15) Taylor County

The Department is in receipt of your letter dated April 12 and May 10, 1996, requesting to amend the above permits to include the EPA custom fuel monitoring schedule and to modify specific conditions Nos. 1, 2 and 8 of the first two permits.

The Department has reviewed this request and hereby amends the above mentioned permits as follows:

PERMITS: AC 29-228821 and AC 09-229441

SPECIFIC CONDITION NO. 1

This condition will be modified to exclude the emission limits standard for all pollutants except for nitrogen oxides (NO_x) and sulfur dioxide (SO₂). The emissions expressed in units of mass (TPY) will remain as a condition of the permit. This facility has already demonstrated initial compliance with the permit limits.

DRAFT

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

DRAFT

FROM:

PERMIT AC 29-228821

POLLUTANT	lbs/hr	tons/yr	Emission Factor
NOx	3.95	17.3	1.49 g/bhp-hr
CO	5.88	25.75	2.22 g/bhp-hr
VOC(s) (non-methane)	0.25	1.10	0.95 g/bhp-hr
PM	0.077	0.34	5 lbs/MMscf
PM10	0.077	0.34	5 lbs/MMscf
S02	0.44	1.94	10 gr S/100scf

**NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

* Based on 100% load conditions.

PERMIT AC 09-229441

POLLUTANT	lbs/hr	tons/yr	Emission Factor
NOx	8.92	39.05	0.62 g/bhp-hr
CO	6.46	28.29	0.45 g/bhp-hr
VOC(s) (non-methane)	0.37	1.62	0.26 g/bhp-hr
PM	0.35	1.51	5 lbs/MMscf
PM10	0.35	1.51	5 lbs/MMscf
S02	1.97	8.62	10 gr S/100scf

**NOx emission standard shall not exceed 42 ppmv at 15% oxygen on a dry basis.

* Based on 100% load conditions.

TO:

Standard for Sulfur Dioxide [40 CFR 60.333(a)]

The owner or operator shall not cause to be discharge into the atmosphere from any gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Annual emissions shall not exceed 1.94 TPY (AC29-228221) and 8.62 TPY (AC09-229441).

DRAFT

Standard for Nitrogen Oxides

NOx emissions shall not exceed 42 ppmv at 15% oxygen on a dry basis (Based on a 100% load conditions). Annual emissions shall not exceed 17.3 TPY (AC 29-228221) and 39.05 TPY (AC 09-229441).

SPECIFIC CONDITION No. 2

FROM:

Visible Emissions shall not exceed 10% opacity.

TO:

Visible emissions shall not exceed 20% opacity.

SPECIFIC CONDITION No. 8

FROM:

Compliance with the allowable emission limits shall be determined within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial start-up and annually thereafter except as provided in Specific Condition 10, below, by the following reference methods as described in 40 CFR 60, Appendix A (July 1992 version) and adopted by reference in Chapter 17-297, F.A.C.

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 10	Determination of the Carbon Monoxide from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines
Method 18	Measurement of Gaseous Organic Compounds Emissions by Gas Chromatography
Method 25A	Determination of Total Gaseous Organic Concentrations Using a Flame Ionization Analyzer

TO:

Compliance with the allowable emission limits shall be determined by the following EPA reference methods as described in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C.

DRAFT

Method 1	Sample and Velocity Traverses
Method 2	Volumetric Flow Rate
Method 3 or 3A	Gas Analysis
Method 9	Determination of the Opacity of the Emissions from Stationary Sources
Method 20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Gas Turbines

Since this source already demonstrated initial compliance with permitted emission limits, subsequent testing frequency (in operating permits) shall be as determined by the Hillsborough County Environmental Protection Commission (EPCHC).

CUSTOM FUEL MONITORING SCHEDULE

AC 29-228821, AC 09-229441 and AC 62-229319

The custom monitoring schedule will be incorporated by reference after approval by EPA, will be incorporated by reference. Currently, EPA is in the process of reviewing FGT request.

This letter must be attached to the above mentioned permits and shall become a part of each permit.

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/th/t

Attachment to be Incorporated

Mr. Allan Weatherford's letters of April 12 and May 10, 1996.

cc: Robert Leech, NED
Bill Thomas, SWD
Rick Kirby, EPCHC

Florida Department of
Environmental Protection

Memorandum

TO: Clair Fancy
THRU: A. A. Linero *aa*
FROM: Teresa Heron *TH by aa*
DATE: July 2, 1996
SUBJECT: Florida Gas Transmission - Amendments
Hillsborough County, Citrus County and Taylor County

~~Clair - We will
issue subsequent
notice when EPA
approves customized
Fuel Monitoring Schedule
AL~~

Attached is a letter modifying a construction permit for the above mentioned facilities. These facilities burn clean natural gas and, during initial compliance testing, demonstrated compliance with all of the required emission standards. This amendment will delete emission standards and testing requirements for carbon monoxide, particulate matter and volatile organic compounds because they are not required by the New Source Performance Standard (NSPS) for Gas Turbines or necessary for Prevention of Significant Deterioration (PSD) per Rule 62-212.400, F.A.C. Deleting the requirements will not result in increased emissions of any of these pollutants, but will simplify the applicable permits and reduce annual testing costs.

In addition, the visible emissions requirements for these units will be revised from 10 percent opacity to 20 percent in accordance with the Rule 62-296.320, F.A.C.

I recommend your approval and signature.

TH/t

COMMISSION

DOTTIE BERGER
PHYLLIS BUSANSKY
JOE CHILLURA
CHRIS HART
JIM NORMAN
ED TURANCHIK
SANDRA WILSON

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL &
WATER MANAGEMENT DIVISION
1900 - 9TH AVENUE
TAMPA, FLORIDA 33605
TELEPHONE (813) 272-5960
FAX (813) 272-5157

AIR MANAGEMENT DIVISION
TELEPHONE (813) 272-5530
WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

RECEIVED

MAY 20 1996

BUREAU OF
AIR REGULATION

M E M O R A N D U M

DATE: May 15, 1996

TO: Clair Fancy, DARM

FROM: Carlos Gonzalez ^{CA} **THRU:** Jerry Campbell, P.E. ^{JC}
Rick Kirby, P.E. ^{RK}

SUBJECT: Florida Gas Transmission (FGT) Company letter of April 12, 1996, Air Permit AC29-228821 (Gas Turbine 3003, Station 30 near Plant City, Hillsborough County)

We have reviewed the above letter which focuses mainly on changes to Specific Condition Nos. 1, 2 and 8 of the permit. We have also reviewed the compliance and inspection files associated with this NSPS source. FGT is listed as a Title V source.

NSPS, Subpart GG only regulates NOx and SO₂ emissions, and remains silent for CO, VOC, TSP, PM₁₀ and opacity. If the Department were to enforce the applicable regulations (NSPS), then the request has merit and the EPC will share the Department's view on this matter.

Regarding the request for the custom monitoring schedule for sampling and analysis of nitrogen and sulfur in the natural gas fuel, the EPC has no objection to this since it appears to be basically a laboratory exercise. In a conversation with Mr. Weatherford of FGT, he indicated that they will use a gas chromatography and the ASTM methods referenced in Subpart GG.

Our files indicate that Air Permit AC29-228821 expired on June 30, 1995. Since this permit was issued by DARM, we expect any request for extension to go to your office. We have not received either the request or the extension. If it is appropriate to address this matter during the request review process, please do. There may also be some fees involved.

cag



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

Rec'd 4/17/96

April 12, 1996

CERTIFIED

Mr. Clair Fancy
Florida Department of Environmental Protection
Northwest District Branch Office
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

Re: Florida Gas Transmission Company - Station 30
Air Permit No. AC29-228821

Florida Gas Transmission Company (FGT) requests that certain modifications be made to the above referenced construction permit and also requests approval for a custom monitoring schedule for sampling and analyzing nitrogen and sulfur in the natural gas.

The permitted unit is a minor source at a minor facility. Changes are requested to eliminate requirements that exceed those specified by rule without significantly impacting reasonable compliance oversight.

Specifically, FGT requests the following changes to the referenced permit:

Change Specific Condition 1 so that all emissions limiting standards are omitted except for NOx and SO2 standards. The standards should be consistent with the standards that are applicable to the source in NSPS (40CFR61) and should be expressed in the units defined in the standard rather than in pounds per hour (lbs/hr) or tons per year (TPY).

Change Specific Condition 2 to read: "Visible emissions shall not exceed 20% opacity."

Revise Specific Condition 8 so that the test requirements are limited to:

-Annual Testing: for visible emissions by Method 9

-Initial and Prior to Renewal Testing: for Nox by Methods 1,2,3A, and 20

NOTE: The initial tests, as currently specified in the permit, were completed and showed compliance with all permit limits. FGT is requesting the change to affect only the "annual" and "prior to renewal" testing requirements.

Additionally, pursuant to Specific Condition 13, FGT requests approval of a custom monitoring schedule for sampling and analyzing nitrogen and sulfur in its fuel gas (a copy of this request has also been sent to Hillsborough County EPC for their consideration). The permitted gas turbine burns only highly regulated pipeline quality natural gas that contains negligible amounts of nitrogen and sulfur. The initial compliance tests (attached) show the nitrogen and sulfur concentrations in the gas to be much less than the respective permit limits. The nitrogen and sulfur content of the fuel gas, supplied through FGT's pipeline, has historically been and will remain relatively constant at levels far below those of regulatory interest.

If you have any questions or would like to arrange a meeting to discuss these changes, please call me at (407) 875-5816.

Sincerely,

A handwritten signature in black ink, appearing to read "Allan Weatherford", written in a cursive style.

Allan Weatherford
Division Environmental Specialist

c Charlie Thompson
 Roy Smith
 Curt Gavin
 Ray Glass
 Eric Peterson, Hillsborough County EPC


Table 2
Summary of Results Unit No. 3003

Company: Florida Gas Transmission Co.
 Plant: Compressor Station No. 30
 Location: 4 miles NE of Plant City
 Hillsborough Co., FL on SR 582
 Source: Solar Saturn T-1001S-312F
 Technicians: CDC, LJB, DD

Test Number	30C-1	30C-2	30C-3	Averages	FDEP Permit Limits
Date	7/25/95	7/25/95	7/25/95		
Start Time	8:30	10:10	11:35		
Stop Time	9:44	11:10	12:35		
Turbine/Compressor Operation					
Power Turbine Speed (% NPT)	80.9	79.9	80.5	80.4	
Gas Producer Speed (% NGP)	96.8	95.9	96.0	96.2	
Horsepower (site bhp, via FGT cmprsr thruput calc.)	1057	1009.4	1010	1025	
PCD Observed (psig)	56.3	53.9	53.4	54.5	
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Gas Compressor Discharge Pressure (psig)	917.6	898.6	867.3	894.5	
Gas Compressor Discharge Temperature (°F)	110.0	110.0	110.0	110.0	
Compressor Flow (MMSCFD)	596.1	603.0	613.0	604.0	
Turbine Fuel Data (Residue Gas)					
Fuel Heating Value (Btu/SCF, Gross)	1032	1032	1032	1032	
Fuel Specific Gravity	0.5838	0.5838	0.5838	0.5838	
O2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	8676	8676	8676	8676	
CO2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	1024	1024	1024	1024	
Total Sulfur in Fuel (grains Sulfur/100 SCF fuel)	0.088	0.088	0.088	0.088	10
Fuel Flow (MMSCFH)	0.0107	0.0107	0.0107	0.0107	0.0156
Heat Input (MMBtu/hr)	11.01	11.05	11.07	11.04	15.76
Brake-specific Fuel Consumption (Btu/bhp-hr)	10418	10945	10957	10773	
Ambient Conditions					
Atmospheric Pressure ("Hg)	29.89	29.92	29.93	29.91	
Temperature (°F): Dry bulb	80.5	88.5	90	86	
(°F): Wet bulb	79.3	79.5	82	80	
Humidity (lbs moisture/lb of air)	0.0208	0.0191	0.0207	0.0202	
Measured Emissions					
NOx (ppmv, dry basis)	30.3	30.7	29.9	30.3	
NOx (ppmv @ 15% O2)	44.1	44.9	43.7	44.3	
NOx (ppmv @ 15% O2, ISO Day)	54.6	52.6	52.5	53.2	150†
CO (ppmv, dry basis)	40.2	41.3	42.0	41.2	
O2 (% volume, dry basis)	16.85	16.87	16.86	16.86	
CO2 (% volume, dry basis)	2.28	2.37	2.24	2.30	
Visible Emissions (% opacity)	0	0	0	0	10
Fo (fuel factor, range = 1.600-1.834 for NG)	1.78	1.70	1.80	1.76	
Stack Volumetric Flow Rates					
via Pitot Tube Traverse (SCFH, dry basis)	5.19E+05	5.11E+05	5.01E+05	5.11E+05	
via O2 "F-factor" (SCFH, dry basis)	4.93E+05	4.97E+05	4.97E+05	4.96E+05	
via CO2 "F-factor" (SCFH, dry basis)	4.95E+05	4.77E+05	5.06E+05	4.93E+05	
Calculated Emission Rates (via pitot tube)					
NOx (lbs/hr)	1.88	1.88	1.79	1.85	3.95
CO (lbs/hr)	1.52	1.54	1.53	1.53	5.88
SO2 (lbs/hr, Based on fuel flow and fuel sulfur)	0.003	0.003	0.003	0.003	0.44
NOx (tons/yr)	8.2	8.2	7.8	8.1	17.30
CO (tons/yr)	6.7	6.7	6.7	6.7	25.75
SO2 (tons/yr, Based on fuel flow and fuel sulfur)	0.012	0.012	0.012	0.012	1.94
NOx (g/bhp-hr)	0.81	0.84	0.80	0.82	1.49
CO (g/bhp-hr)	0.65	0.69	0.69	0.68	2.22

† Sub part GG, NPSX NOx standard

Gas Fuel F Factor & Heating Value Calculation

Client Florida Gas Transmission Company 
 Sample ID pipeline natural gas (residue gas)
 Time 6:23
 Date 7/25/95

CALCULATION OF DENSITY AND HEATING VALUE @ 60°F and 30 in Hg

Component	% Volume	Molecular Wt.	Density (lb/ft ³)	% volume		Component Gross Btu/lb	Weight Fract. Btu	Gross Heating Value (Btu/SCF)	Volume Fract. Btu
				x Density	weight %				
Hydrogen		2.016	0.0053	0.00000	0.0000	61100	0.00	325.0	0
Oxygen		32.000	0.0846	0.00000	0.0000	0	0.00	0.0	0
Nitrogen	0.3840	28.016	0.0744	0.00029	0.6397	0	0.00	0.0	0
CO ₂	0.8050	44.010	0.1170	0.00094	2.1090	0	0.00	0.0	0
CO		28.010	0.0740	0.00000	0.0000	4347	0.00	322.0	0
Methane	95.8620	16.041	0.0424	0.04065	91.0145	23879	21733.35	1013.0	971.082
Ethane	2.3000	30.067	0.0803	0.00185	4.1356	22320	923.07	1792.0	41.216
Ethylene		28.051	0.0746	0.00000	0.0000	21644	0.00	1614.0	0
Propane	0.3750	44.092	0.1196	0.00045	1.0043	21661	217.54	2590.0	9.7125
propylene		42.077	0.1110	0.00000	0.0000	21041	0.00	2336.0	0
Isobutane	0.0900	58.118	0.1582	0.00014	0.3188	21308	67.93	3363.0	3.0267
n-butane	0.0720	58.118	0.1582	0.00011	0.2551	21257	54.22	3370.0	2.4264
Isobutene		56.102	0.1480	0.00000	0.0000	20840	0.00	3068.0	0
Isopentane	0.0320	72.144	0.1904	0.00006	0.1364	21091	28.77	4008.0	1.28256
n-pentane	0.0190	72.144	0.1904	0.00004	0.0810	21052	17.05	4016.0	0.76304
n-hexane	0.0600	86.169	0.2274	0.00014	0.3055	20940	63.98	4762.0	2.8572
H ₂ S		34.076	0.0911	0.00000	0.0000	7100	0.00	647.0	0

total	100.00	Average Density	0.04466	100.0000	Gross Heating Value	Gross Heating Value
		Specific Gravity	0.58377		Btu/lb	Btu/SCF
					23106	1032.4

CALCULATION OF F FACTORS

Component	Mol. Wt.	C Factor	H Factor	% volume	Fract. Wt.	Weight Percents			
						Carbon	Hydrogen	Nitrogen	Oxygen
Hydrogen	2.016	0	1	0.00	0.0000				
Oxygen	32.000	0	0	0.00	0.0000				0
Nitrogen	28.016	0	0	0.38	10.7581			0.637383014	
CO ₂	44.010	0.272273	0	0.81	35.4281	0.57149832			1.52597
CO	28.010	0.42587	0	0.00	0.0000	0			0
Methane	16.041	0.75	0.25	95.86	1537.7223	68.32856815	22.7761894		
Ethane	30.067	0.8	0.2	2.30	69.1541	3.277713975	0.81942849		
Ethylene	28.051	0.85714	0.14286	0.00	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.38	16.5345	0.801499135	0.17811114		
Propene	42.077	0.85714	0.14286	0.00	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.09	5.2306	0.256467027	0.0534478		
n-butane	58.118	0.82759	0.17247	0.07	4.1845	0.205173621	0.04275824		
Isobutene	56.102	0.85714	0.14286	0.00	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.03	2.3086	0.113980444	0.02279664		
n-pentane	72.144	0.83333	0.16667	0.02	1.3707	0.067675889	0.0135355		
n-hexane	86.169	0.83721	0.16279	0.06	5.1701	0.256448311	0.04986469		
H ₂ S	34.076	0	0.058692	0.00	0.0000	0	0		

Totals	99.99900	1687.8617	73.87902487	23.96	0.637383014	1.52597
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CALCULATED VALUES		
O ₂ F Factor (dry)	8676	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O ₂ F Factor (wet)	10657	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	1981	SCF of Water/MM Btu of Fuel Burned @ 0% excess air
Combust. Moisture	18.59	volume % water in flue gas @ 0% excess air
CO ₂ F Factor	1024	DSCF of CO ₂ /MM Btu of Fuel Burned @ 0% excess air
Carbon Dioxide	11.80	volume % CO ₂ in flue gas @ 0% O ₂
Predicted F _o Factor	1.77	EPA Method 3a F _o value
Fuel VOC % (non-C1)	6.38%	non-methane fuel VOC content
Fuel VOC % (non-C1,C2)	2.17%	non-methane non-ethane fuel VOC content



Florida Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Florida Gas Transmission Company
P.O. Box 1188
Houston, Texas 77251-1188

Permit Number: AC 29-228821
Expiration Date: June 30, 1995
County: Hillsborough
Latitude/Longitude: 28°04'55"N
82°06'01"W

Project: Natural Gas Turbine
No. 3003) Station No. 30

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-210, 212, 272, 275, 296, and 297 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of one natural gas fired turbine and associated support equipment to be located on Griffin Road, 2 miles east of State Highway 36, Plant City, Hillsborough County, Florida. The UTM coordinates are Zone 17, 392.895 km East and 3106.61 km North.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DEP Form 17-1.202(1) Application to Operate/Construct Air Pollution Sources.
2. Florida Gas Transmission's letter dated April 27, 1993.



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

RECEIVED

May 9, 1996

OVERNIGHT MAY 10 1996

BUREAU OF
AIR REGULATION

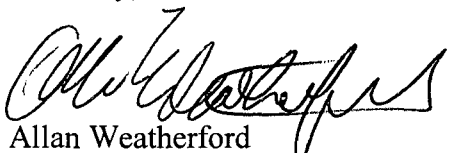
A. A. Linero, P.E.
Administrator
New Source Review Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Sir or Madam:

Enclosed please find our check in the amount of \$250.00 for processing fees for our amendment request for permits AC09-229441, AC62-229319, and AC29-228821.

If you have any questions or need additional information, please call me at (407)-875-5816.

Sincerely,


Allan Weatherford
Division Environmental Specialist

VENDOR NO.
REMITTANCE STATEMENT

VOUCHER NO.	INVOICE DATE	INVOICE NO.	PURCHASE ORDER	AMOUNT		
				GROSS	DISCOUNT	NET
INV050696	5-6-96	INV050696		250.00		
					TOTAL	250.00

SPECIAL INSTRUCTIONS:
Permit AC29-228821/AC09-229441/AC62-229319 amendment application fee

DETACH AND RETAIN THIS STUB FOR YOUR RECORDS.



P. O. Box 1188
Houston, TX 77251-1188

62-20
311

CHECK NO. 0622510560

CHECK DATE 5-9-96

PAY EXACTLY Two hundred and fifty and no/100 DOLLARS

THIS CHECK IS VOID UNLESS PRINTED ON BLUE BACKGROUND

\$250.00

NOT VALID AFTER 90 DAYS

PAY TO THE ORDER OF Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

NOT VALID OVER \$5000.00 UNLESS COUNTERSIGNED

FIELD DISBURSEMENT ACCOUNT

CITIBANK DELAWARE



0570438-002 AC - Link
0170035-001 AC
1230034-002 AC



Department of Environmental Protection

File

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

May 6, 1996

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Allan Wetherford,
Division Environmental Specialist
Florida Gas Transmission
Post Office Box 945100
Maitland, Florida 32794-5100

Dear Mr. Wetherford:

The Bureau of Air Regulation received your request to amend permit AC29-228821, Station 30; AC09-229441, Station 26; AC62-229319, Station 15. According to Rule 62-4.050(4) (q) 4., before we can begin processing your request, we will need a \$250 processing fee. If you have any questions, please call Kanani Winans at (904)488-1344.

Sincerely,

A. A. Linero, P. E.
Administrator
New Source Review Section

AAL/kw

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Allan Wetherford
 Division Environmental Specialist
 Florida Gas Transmission AND FL
 Post Office Box 945100
 Maitland, Florida 32794-5100

4a. Article Number
 2127 633 206

4b. Service Type

Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)

6. Signature (Agent)

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

2 127 633 206



Receipt for Certified Mail

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

PS Form 3800, March 1993

Sent to	William Wetherford
Street and No.	FLT
P.O. State and ZIP Code	Maitland FL 32794
Postage	\$ 5.00
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	AC 62-229317 5-6-94 AC 097 AC 29-228821 2297441



Florida Gas Transmission Company

P. O. Box 945100 Maitland, Florida 32794-5100 (407) 875-5800

April 12, 1996

CERTIFIED

RECEIVED

APR 16 1996

BUREAU OF
AIR REGULATION

Mr. Clair Fancy
Florida Department of Environmental Protection
Northwest District Branch Office
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

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Air Permit No. AC29-228821

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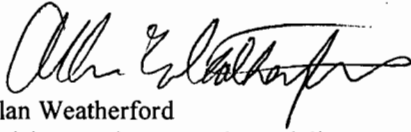
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Allan Weatherford
Division Environmental Specialist

- c Charlie Thompson
- Roy Smith
- Curt Gavin
- Ray Glass
- Eric Peterson, Hillsborough County EPC


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Compressor Flow (MMSCFD)	596.1	603.0	613.0	604.0	
Turbine Fuel Data (Residue Gas)					
Fuel Heating Value (Btu/SCF, Gross)	1032	1032	1032	1032	
Fuel Specific Gravity	0.5838	0.5838	0.5838	0.5838	
O2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	8676	8676	8676	8676	
CO2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	1024	1024	1024	1024	
Total Sulfur in Fuel (grains Sulfur/100 SCF fuel)	0.088	0.088	0.088	0.088	10
Fuel Flow (MMSCFH)	0.0107	0.0107	0.0107	0.0107	0.0156
Heat Input (MMBtu/hr)	11.01	11.05	11.07	11.04	15.76
Brake-specific Fuel Consumption (Btu/bhp-hr)	10418	10945	10957	10773	
Ambient Conditions					
Atmospheric Pressure ("Hg)	29.89	29.92	29.93	29.91	
Temperature (°F): Dry bulb	80.5	88.5	90	86	
(°F): Wet bulb	79.3	79.5	82	80	
Humidity (lbs moisture/lb of air)	0.0208	0.0191	0.0207	0.0202	
Measured Emissions					
NOx (ppmv, dry basis)	30.3	30.7	29.9	30.3	
NOx (ppmv @ 15% O2)	44.1	44.9	43.7	44.3	
NOx (ppmv @ 15% O2, ISO Day)	54.6	52.6	52.5	53.2	150†
CO (ppmv, dry basis)	40.2	41.3	42.0	41.2	
O2 (% volume, dry basis)	16.85	16.87	16.86	16.86	
CO2 (% volume, dry basis)	2.28	2.37	2.24	2.30	
Visible Emissions (% opacity)	0	0	0	0	10
Fo (fuel factor, range = 1.600-1.834 for NG)	1.78	1.70	1.80	1.76	
Stack Volumetric Flow Rates					
via Pitot Tube Traverse (SCFH, dry basis)	5.19E+05	5.11E+05	5.01E+05	5.11E+05	
via O2 "F-factor" (SCFH, dry basis)	4.93E+05	4.97E+05	4.97E+05	4.96E+05	
via CO2 "F-factor" (SCFH, dry basis)	4.95E+05	4.77E+05	5.06E+05	4.93E+05	
Calculated Emission Rates (via pitot tube)					
NOx (lbs/hr)	1.88	1.88	1.79	1.85	3.95
CO (lbs/hr)	1.52	1.54	1.53	1.53	5.88
SO2 (lbs/hr, Based on fuel flow and fuel sulfur)	0.003	0.003	0.003	0.003	0.44
NOx (tons/yr)	8.2	8.2	7.8	8.1	17.30
CO (tons/yr)	6.7	6.7	6.7	6.7	25.75
SO2 (tons/yr, Based on fuel flow and fuel sulfur)	0.012	0.012	0.012	0.012	1.94
NOx (g/bhp-hr)	0.81	0.84	0.80	0.82	1.49
CO (g/bhp-hr)	0.65	0.69	0.69	0.68	2.22

† Sub part GG, NSPS NOx standard

Gas Fuel F Factor & Heating Value Calculation

Client **Florida Gas Transmission Company** 
 Sample ID **pipeline natural gas (residue gas)**
 Time **6:23**
 Date **7/25/95**

CALCULATION OF DENSITY AND HEATING VALUE @ 60°F and 30 in Hg

Component	% Volume	Molecular Wt.	Density (lb/ft ³)	% volume		Component Gross Btu/lb	Weight Fract. Btu	Gross Heating Value (Btu/SCF)	Volume Fract. Btu
				x Density	weight %				
Hydrogen		2.016	0.0053	0.00000	0.0000	61100	0.00	325.0	0
Oxygen		32.000	0.0846	0.00000	0.0000	0	0.00	0.0	0
Nitrogen	0.3840	28.016	0.0744	0.00029	0.6397	0	0.00	0.0	0
CO ₂	0.8050	44.010	0.1170	0.00094	2.1090	0	0.00	0.0	0
CO		28.010	0.0740	0.00000	0.0000	4347	0.00	322.0	0
Methane	95.8620	16.041	0.0424	0.04065	91.0145	23879	21733.35	1013.0	971.082
Ethane	2.3000	30.067	0.0803	0.00185	4.1356	22320	923.07	1792.0	41.216
Ethylene		28.051	0.0746	0.00000	0.0000	21644	0.00	1614.0	0
Propane	0.3750	44.092	0.1196	0.00045	1.0043	21661	217.54	2590.0	9.7125
propylene		42.077	0.1110	0.00000	0.0000	21041	0.00	2336.0	0
Isobutane	0.0900	58.118	0.1582	0.00014	0.3188	21308	67.93	3363.0	3.0267
n-butane	0.0720	58.118	0.1582	0.00011	0.2551	21257	54.22	3370.0	2.4264
Isobutene		56.102	0.1480	0.00000	0.0000	20840	0.00	3068.0	0
Isopentane	0.0320	72.144	0.1904	0.00006	0.1364	21091	28.77	4008.0	1.28256
n-pentane	0.0190	72.144	0.1904	0.00004	0.0810	21052	17.05	4016.0	0.76304
n-hexane	0.0600	86.169	0.2274	0.00014	0.3055	20940	63.98	4762.0	2.8572
H ₂ S		34.076	0.0911	0.00000	0.0000	7100	0.00	647.0	0
total	100.00								
		Average Density		0.04466		Gross Heating Value		Gross Heating Value	
		Specific Gravity		0.58377		Btu/lb		Btu/SCF	
				100.0000		23106		1032.4	

CALCULATION OF F FACTORS

Component	Mol. Wt.	C Factor	H Factor	% volume	Fract. Wt.	Weight Percents			
						Carbon	Hydrogen	Nitrogen	Oxygen
Hydrogen	2.016	0	1	0.00	0.0000				
Oxygen	32.000	0	0	0.00	0.0000				0
Nitrogen	28.016	0	0	0.38	10.7581			0.637383014	
CO ₂	44.010	0.272273	0	0.81	35.4281	0.57149832			1.52597
CO	28.010	0.42587	0	0.00	0.0000	0			0
Methane	16.041	0.75	0.25	95.86	1537.7223	68.32856815	22.7761894		
Ethane	30.067	0.8	0.2	2.30	69.1541	3.277713975	0.81942849		
Ethylene	28.051	0.85714	0.14286	0.00	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.38	16.5345	0.801499135	0.17811114		
Propene	42.077	0.85714	0.14286	0.00	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.09	5.2306	0.256467027	0.0534478		
n-butane	58.118	0.82759	0.17247	0.07	4.1845	0.205173621	0.04275824		
Isobutene	56.102	0.85714	0.14286	0.00	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.03	2.3086	0.113980444	0.02279664		
n-pentane	72.144	0.83333	0.16667	0.02	1.3707	0.067675889	0.0135355		
n-hexane	86.169	0.83721	0.16279	0.06	5.1701	0.256448311	0.04986469		
H ₂ S	34.076	0	0.058692	0.00	0.0000	0	0		
Totals				99.99900	1687.8617	73.87902487	23.96	0.637383014	1.52597

CALCULATED VALUES

O ₂ F Factor (dry)	8676	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O ₂ F Factor (wet)	10657	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	1981	SCF of Water/MM Btu of Fuel Burned @ 0% excess air
Combust. Moisture	18.59	volume % water in flue gas @ 0% excess air
CO ₂ F Factor	1024	DSCF of CO ₂ /MM Btu of Fuel Burned @ 0% excess air
Carbon Dioxide	11.80	volume % CO ₂ in flue gas @ 0% O ₂
Predicted Fo Factor	1.77	EPA Method 3a Fo value
Fuel VOC % (non-C1)	6.38%	non-methane fuel VOC content
Fuel VOC % (non-C1,C2)	2.17%	non-methane non-ethane fuel VOC content