Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

January 23, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Draft Air Permit Modification No. 1130037-008-AC
Santa Rosa Compressor Station No. 12

Dear Mr. Craig:

Enclosed is one copy of the draft air permit modification to change the CO emission rates and to remove certain load restrictions related to turbine No. 1208 (EU 010). The equipment is installed at Compressor Station No. 12, which is located north of Munson on Highway 191 approximately 5 miles north of Highway 4 in Santa Rosa County, Florida. The permit changes will result in no CO emissions changes, and only slight VOC annual emission increases. The Department's "Technical Evaluation and Preliminary Determination", "Intent to Issue Permit Modification", and the "Public Notice of Intent to Issue Permit Modification" are included.

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

Please submit any written comments you wish to have considered concerning the Department's proposed action to J. K. Pennington, Administrator of the North Permitting Section, at the above letterhead address. If you have any other questions, please contact Mike Halpin at 850/921-9519.

Sincerely,

T. Vielhauer, Chief
Bureau of Air Regulation

TV/mph

Enclosures

In the Matter of an
Application for Air Permit by:

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

Authorized Representative:
Mr. Rick Craig, V.P. Southeastern Operations

Compressor Station No. 12
Draft Air Permit No. 1130037-008-AC
Air Permit Modifications
Santa Rosa County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy of Draft Permit Modification attached) for the proposed project as detailed in the application and the enclosed Technical Evaluation and Preliminary Determination, for the reasons stated below. The applicant, Florida Gas Transmission Company, applied on January 15, 2004 to the Department to modify the air permit to change the CO and VOC emission rates and to remove certain load restrictions related to turbine No. 1208 (EU 010). The project is located at the existing Compressor Station No. 12, which is approximately 5 miles north of Highway 4 in Santa Rosa County, Florida.

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

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

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

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

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

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

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

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

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

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

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

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

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

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally

delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

T. Vielhauer, 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 Modification package (including the Public Notice of Intent to Issue Air Construction Permit Modification, Technical Evaluation and Preliminary Determination, and the Draft Permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1/27/04 to the person(s) listed:

Mr. Rick Craig, FGT*
Mr. Jacob Krautsch, FGT
Mr. David Holmes Parham, P.E.
Mr. Duane Pierce, AQMcs, LLC
Ms. Sandra Veazey, NWD
Mr. Greg Worley, EPA Region 4

Clerk Stamp

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

(Clerk) 1/27/04 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Permit No. 1130037-008-AC

Florida Gas Transmission Company
Santa Rosa Compressor Station No. 12

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to the Florida Gas Transmission Company Department to modify the permit to change the Carbon Monoxide (CO) and Volatile Organic Compounds (VOC) emission rates and to remove certain load restrictions related to turbine no. 1208 (EU 010). The equipment is installed at existing Compressor Station No. 12, which is located north of Munson on Highway 191 approximately 5 miles north of Highway 4 in Santa Rosa County, Florida. The applicant's authorized representative is Mr. Rick Craig, Vice President Southeastern Operations. The applicant's mailing address is Florida Gas Transmission Company, p. o. Box 1188, Houston, TX 77251.

The originally permitted limits for turbine no. 1208 and the related restrictions were set based upon information provided by the turbine manufacturer. During years 2002 and 2003, FGT conducted testing which showed the emission rates of CO to be much lower than originally permitted. Based upon this test data, FGT seeks to decrease such emission rates and related load restrictions. As a result of this request, there will be no increase in the annual emissions of CO, nor any other permitted air pollutant except for VOC's. An incidental increase in VOC emissions (4.6 TPY) will occur as an effect of the removal of the load restrictions.

Because potential emissions of at least one regulated pollutant exceed 250 tons per year, the existing facility is classified as a major source of air pollution with respect to Rule 62-212.400, F.A.C, the Prevention of Significant Deterioration (PSD) of Air Quality. The existing station is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS). This project is not subject to PSD preconstruction review because the net emissions increases are less than each of the corresponding PSD significant emissions rates.

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

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

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name,

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

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

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

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

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

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

Department of Environmental Protection
Northwest District Office
Air Resources Section
160 Governmental Center
Pensacola, FL 32501-5794
Telephone: 850/595-8300
Fax: 850/595-4417

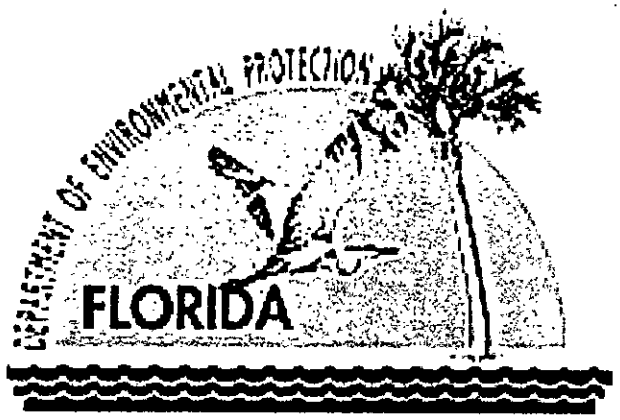
The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer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

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

Draft Air Construction Permit Modification
Santa Rosa Compressor Station No. 12
Florida Gas Transmission Company

DEP FILE: 1130037-008-AC



Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section

January 23, 2004

1. GENERAL PROJECT INFORMATION

1.1 Applicant Name and Address

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

Authorized Representative:
Rick Craig, V.P. Southeastern Operations

1.2 Facility Description and Location

Florida Gas Transmission Company operates the existing facility as a compressor station for the natural gas pipeline serving Florida. Compressor Station No. 12 is located north of Munson on Highway 191, approximately 5 miles north of Highway 4 in Santa Rosa County, Florida. The compressor station consists of five 2000 bhp reciprocating compressor engines, one 4100 bhp reciprocating compressor engine, one 13,000 bhp gas turbine compressor engine, one 15,700 bhp gas turbine compressor engine, and miscellaneous support equipment. The UTM coordinates are Zone 16, 510.8 km East, and 3419.0 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

1.3 Standard Industrial Classification Code (SIC)

SIC No. 4922 – Natural Gas Transmission

1.4 Regulatory Categories

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

Title IV: The facility has no units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution because potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

PSD: Because potential emissions are greater than 250 tons per year for at least one regulated air pollutant, the facility is a major source of air pollution in accordance with the requirements of the Prevention of Significant Deterioration (PSD) of Air Quality Program (Rule 62-212.400, F.A.C.). Projects resulting in net emissions increases greater than the Significant Emissions Rates specified in Table 62-212.400-2, F.A.C. are subject to the PSD new source preconstruction review requirements.

1.5 Project Description

The existing facility permit was modified during August 2001 so as to incorporate Engine No. 1208 (the 15,700 bhp gas turbine) as well as miscellaneous changes to Engines 1204, 1205 and 1207. Engine 1208 is a Pignone PGT-10B engine compressor and the fuel is exclusively natural gas. Upon the original permitting, FGT had acquired limited data on the Pignone engine and as a result requested conservative permit limits for Carbon Monoxide. The Department granted the FGT request, however imposed limitations on operating hours in the mid-load ranges (between 50% and 90%) in order to minimize impacts. Additionally, FGT was required to keep records of all hours of operation within this load range as a means of demonstrating compliance. The original permitted emission levels did not trigger a BACT Review.

At this time, FGT has gained sufficient operational data on the Pignone engine performance, and as a result wishes to gain relief from the limitations referred to above. In summary, the CO emission engine levels are adequately low such that FGT can commit to an emission limit which is unchanging over the load range.

On an annual, 8-hour or hourly basis, the newly requested CO permit limit yields emissions which are less than or equal to those in the original permit.

2. APPLICABLE REGULATIONS

2.1 State Regulations

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

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

2.2 Federal Regulations

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

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

2.3 PSD Applicability for Project

The proposed project is located in Santa Rosa County, an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS). The facility is an existing PSD-major source and is subject to the new source preconstruction review requirements. However, emission changes from this permit modification do not exceed PSD thresholds; in fact the potential emissions alone equate to 30.8 TPY which is far below the threshold.

Table 1. Potential Emission Changes of CO (Tons Per Year) and PSD Applicability

Load Range	Existing Potential Emissions (TPY)	Existing Emission rates (lb/hr)	Revised Potential Emissions (TPY)	Revised Emission rates (lb/hr)	Subject To PSD?
50% – 70%	NA	22.5	NA	7.03	No – 1hr and 8hr emission rates decrease
70% - 90%	NA	10.2	NA	7.03	
100%	30.8	5.1	30.8	7.03	No – TPY does not change

3. EXISTING PERMIT REQUIREMENTS

The existing permit authorized installation of the Pignone Model No. PGT-10B gas turbine as a compressor engine with a capacity of 15,700 bhp. Although the unit was permitted to operate continuously (8760 hours per year), low-load operation was restricted as follows:

- Operation between 50% and 90% of base load shall not exceed 2190 hours during any consecutive 12 months.
- Of this authorized low-load operation, operation between 50% and 70% of base load shall not exceed 438 hours during any consecutive 12 months.
- Except for startup and shutdown, operation below 50% base load is prohibited.

Additionally, record-keeping was required in order to validate the above-referenced hours of operation.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that requested permit modification will comply with all applicable state and federal air pollution regulations as conditioned by the original permit. The Department notes that an incidental increase of (annual only) VOC emissions will occur, by virtue of the removal of the hours of operation limitation. The annual PTE of VOC's was originally 2.0 TPY and will need to be revised upwards to a total of 6.6 TPY. No air quality modeling analysis is required because the project does not result in a significant increase in emissions.

M. P. Halpin, P.E.

DRAFT

PERMITTEE:

Florida Gas Transmission Company
1400 Smith Street
Houston, TX 77002

Authorized Representative:
Mr. Rick Craig, V.P. Southeastern Operations

Santa Rosa Compressor Station No. 12
Air Permit No. 1130037-008-AC
Facility ID No. 1130037
SIC No. 4922
Permit Expires: December 31, 2004

PROJECT AND LOCATION

This permit authorizes the construction of a new 15,700 bhp gas turbine compressor engine (No. 1208), the up-rating of an existing gas turbine compressor engine (No. 1207) to 13,000 bhp, and modification of two existing reciprocating internal combustion compressor engines (Nos. 1204 and 1205). The new equipment will be installed at Compressor Station No. 12, which is located north of Munson on Highway 191, approximately 5 miles north of Highway 4 in Santa Rosa County, Florida. The UTM coordinates are Zone 16, 510.8 km East, and 3419.0 km North.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Part 60 of the Code of Federal Regulations. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This permit is a modification of Permit No. 1130037-003-AC to revise the CO emission standard and specific load restrictions. It does not authorize new construction and the expiration date is extended simply to allow ample time for inclusion of the subject revisions into the Title V permit.

CONTENTS

Michael G. Cooke, Director
Division of Air Resources Management

(Date)

FACILITY AND PROJECT DESCRIPTION

The existing facility operates as a compressor station in Santa Rosa County for the Florida Gas Transmission Company's natural gas pipeline. The project will add a new 15,700 bhp gas turbine compressor engine (No. 1208), up-rate existing gas turbine compressor engine (No. 1207) to 13,000 bhp, and modify two existing reciprocating internal combustion compressor engines (Nos. 1204 and 1205). After the project is complete, the facility will consist of the following emissions units.

ID	Emission Unit Description
004	**FGT No. 1204**: One modified 2000 bhp natural gas-fired reciprocating internal combustion engine (Cooper-Bessemer Model No. LS-8-SG) was installed as a compressor engine in 1966.
005	**FGT No. 1205**: One modified 2000 bhp natural gas-fired reciprocating internal combustion engine (Cooper-Bessemer Model No. LS-8-SG) was installed as a compressor engine 1968.
006	**FGT No. 1206**: One 4100 bhp natural gas-fired reciprocating internal combustion engine (Dresser-Rand Model No. TVC-10) was installed as a compressor engine in 1991.
007	**FGT Nos. 1201 to 1203**: Three 2000 bhp natural gas-fired reciprocating internal combustion engines (Cooper-Bessemer Model No. LS-8-SG) were installed as compressor engines in 1958.
008	**FGT No. 1207**: One 13,000 bhp gas turbine (Solar Model No. Mars 90-T-13000S) was originally installed as a compressor engine in January 2001 and up-rated later in 2001.
009	**Miscellaneous Unregulated Emissions Units**
010	**FGT No. 1208**: A new 15,700 bhp gas turbine (Nuovo Pignone Model No. PGT-10B) to be installed as a compressor engine in 2001.

{Note: Emissions units 001, 002, and 003 are "inactive".}

REGULATORY CLASSIFICATION

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

Title IV: The facility has no units subject to the acid rain provisions of the Clean Air Act.

Title V: Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

PSD: The project is located in an area designated as "attainment" or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. Potential emissions of at least one regulated pollutant exceed 250 tons per year. Therefore, the facility is classified as a major source of air pollution with respect to Rule 62-212.400, F.A.C, the Prevention of Significant Deterioration (PSD) of Air Quality. Because potential emissions from this project do not exceed the PSD Significant Emissions Rates (Table 62-212.400-2), the project is not subject to the PSD preconstruction review requirements.

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

RELEVANT DOCUMENTS

The permit application and additional information received to make it complete are not a part of this permit; however, the information is specifically related to this permitting action and is on file with the Department.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct or modify emissions units regulated by this permit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Department's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794 and phone number 850/595-8364.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northwest District Office at 160 Governmental Center, Pensacola, Florida 32501-5794 and phone number 850/595-8364.

3. Appendices: The following Appendices are attached as part of this permit.

   - Appendix CF: Citation Format
   - Appendix FM: Custom Fuel Monitoring Plan for Gas Turbines Subject to NSPS Subpart GG
   - Appendix GC: General Conditions [Rule 62-4.160, F.A.C.]
   - Appendix GG: NSPS Subpart GG Requirements for Gas Turbines
   - Appendix SC: Standard Conditions [applicable requirements from Chapters 62-4, 62-210, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).]

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Part 60 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation, and copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. EU-004 and 005: FGT Nos. 1204 and 1205, Modified Reciprocating Compressor Engines

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

Emissions Unit No. 004 and 005 (FGT Nos. 1204 and 1205)
Modified Reciprocating Compressor Engines

Description: Each modified reciprocating internal combustion engine is a Cooper-Bessemer Model No. LS-8-SG that is used as a compressor engine for the natural gas pipeline. Engine No. 1204 was installed in 1966 and Engine No. 1205 was installed in 1968.

Fuel: Each engine fires pipeline-quality natural gas (SCC No 2-02-002-54). The maximum natural gas firing rate is approximately 15,900 cubic feet per hour based on a heat content of 1040 BTU per SCF of gas.

Capacity: At 16.5 mmBTU per hour of heat input, each engine produces approximately 2000 bhp. After initial startup, the engines are intended to operate at or near capacity.

Controls: The efficient combustion of pipeline-quality natural gas at high temperatures minimizes emissions of PM/PM_{10}, SO_2, and VOC. A catalytic converter reduces emissions of CO and VOC. Modifications to the engine turbocharger increase the air manifold pressure and airflow to each cylinder, which reduces NOx emissions.

Stack Parameters: When operating at capacity, exhaust gases exit a 28 feet tall stack that is 1.44 feet in diameter with a flow rate of approximately 11,600 acfm at 700° F.

{Permitting Note: The existing natural gas compressor station is a major source with respect to the PSD preconstruction review program. The compressor engines were installed prior to implementation of the PSD program. However, specific modifications are being made in this project to obtain actual emissions decreases for use in a netting analysis that shows the project to be minor with respect PSD. Therefore, the control systems, fuel specifications, operational restrictions, emissions standards, monitoring provisions, and reporting requirements of this section are established in accordance with Rule 62-212.400, F.A.C.}

EQUIPMENT

1. Engine Turbocharger Modifications: The permittee is authorized to physically modify the turbocharger for each reciprocating compressor engine in order to increase the air manifold pressure and airflow to each cylinder. The purpose of this modification is to increase the air-to-fuel mixture and decrease the cylinder temperatures, which will result in lower NOx emissions. Each control system shall be readjusted to include the new engine performance parameters and operating set points. The permittee shall tune, maintain, and operate the modified engine and control system to preserve the reduced NOx emissions. [Applicant Request]

PERFORMANCE RESTRICTIONS

2. Permitted Capacity: The maximum heat input rate to each modified reciprocating compressor engine shall not exceed 16.5 mmBTU per hour while producing approximately 2000 bhp based on a higher heating value (HHV) of 1040 BTU per SCF for natural gas. [Rule 62-210.200(PTE), F.A.C.]

3. Authorized Fuel: The modified reciprocating compressor engines shall fire only pipeline-quality natural gas with a maximum of 10 grains of sulfur per 100 standard cubic feet of natural gas. The custom fuel monitoring plan for the gas turbine (FGT Unit No. 1208) shall serve as the compliance demonstration for the fuel sulfur limit. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]

4. Restricted Operation: The hours of operation of each modified reciprocating compressor engine are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

A. EU-004 and 005: FGT Nos. 1204 and 1205, Modified Reciprocating Compressor Engines

EMISSIONS STANDARDS

5. Emissions Standards: Emissions from each modified reciprocating compressor engine shall not exceed the following limits for carbon monoxide (CO), nitrogen oxides (NOx), opacity, particulate matter (PM), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Pollutant	Standards	Equivalent Maximum Emissions [f]		Rule Basis [g]
		lb/hour	TPY	
CO [a]	0.8 gram/bhp-hour	3.5	15.5	Avoid Rule 62-212.400, F.A.C.
NOx [b]	5.4 gram/bhp-hour	23.8	104.3	Avoid Rule 62-212.400, F.A.C.
SO_2 [c]	10 grains of sulfur per 100 SCF of gas	0.5	2.0	Avoid Rule 62-212.400, F.A.C.
Opacity [d]	10% opacity, 6-minute average	Not Applicable		Avoid Rule 62-212.400, F.A.C.
PM [e]	Good combustion practices (Factor: 0.00999 lb/mmBTU)	0.2	0.7	Avoid Rule 62-212.400, F.A.C.
VOC [e]	Good combustion practices (Factor: 0.1 gram/bhp-hour)	0.4	1.9	Avoid Rule 62-212.400, F.A.C.

a. The CO standard is based on a 3-hour test average as determined by EPA Method 10.

b. The NOx standard is based on a 3-hour test averages as determined EPA Method 7E.

c. The fuel sulfur specification is based on the maximum limit specified by Federal Energy Regulatory Commission (FERC) and effectively limits the potential SO_2 emissions. Expected fuel sulfur levels are less than 1 grain per 100 SCF of natural gas from the pipeline. Compliance by record keeping.

d. The opacity standard is based on a 6-minute average, as determined by EPA Method 9.

e. For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions are based on data in Table 3.2-2 of AP-42. Equivalent maximum VOC emissions are based on test data. No testing required.

f. Equivalent maximum emissions are based on the maximum expected emissions (or the emissions standard) at permitted capacity and 8760 hours of operation per year.

g. The emissions standards of this permit ensure that the project does not trigger the PSD preconstruction review requirements of Rule 62-212.400, F.A.C.

EMISSIONS PERFORMANCE TESTING

6. Initial Compliance Tests: Each modified reciprocating compressor engine shall be tested to demonstrate initial compliance with the emissions standards for CO, NOx, and visible emissions. The initial tests shall be conducted within 60 days after achieving at least 90% of the maximum permitted capacity, but not later than 180 days after initial operation of the modified engine. CO and NOx performance tests shall be conducted concurrently at permitted capacity. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)1, F.A.C.]

7. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each modified reciprocating compressor engine shall be tested to demonstrate compliance with the emissions standards for NOx and visible emissions. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule and 62-297.310(7)(a)4, F.A.C. and to avoid Rule 62-212.400, F.A.C.]

8. Tests Prior to Renewal: Within the 12-month period prior to expiration of the operation permit, each modified reciprocating compressor engine shall be tested to demonstrate compliance with the emission standards for CO, NOx, and visible emissions. CO and NOx performance tests shall be conducted concurrently at permitted capacity. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)3, F.A.C.]

9. Test Notification: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. [Rule 62-297.310(7)(a)9, F.A.C.]

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

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)

Tests shall also be conducted in accordance with the requirements specified in Section 4, Appendix SC of this permit. The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

RECORDS AND REPORTS

11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 4, Appendix SC of this permit. For each test run, the report shall also indicate the natural gas firing rate (cubic feet per hour), heat input rate (mmBTU per hour), and the power output (bhp). [Rule 62-297.310(8), F.A.C.]

12. Operational Data: The permittee shall adequately monitor the fuel consumption rate and hours of operation for use in submittal of the required Annual Operating Report. At least once per calendar quarter, a trained engine analyst shall inspect each modified engine, estimate the exhaust NOx concentration with a portable analyzer, and adjust engine performance as necessary. These inspections shall be recorded in a permanent log and made available for inspection upon request of the Department. [Rule 62-4.070(3), F.A.C.]

B. EU-008: FGT No. 1207, Up-Rated Gas Turbine Compressor Engine

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

Emissions Unit No. 008 (FGT No. 1207): Up-Rated Gas Turbine Compressor Engine
Description: The up-rated 13,000 bhp gas turbine is a Solar Model No. Mars 90-T-13000S that is used as a compressor engine for the natural gas pipeline. Engine No. 1207 was originally installed in January of 2001.
Fuel: The gas turbine fires pipeline-quality natural gas (SCC No 2-02-002-01). The maximum natural gas firing rate is approximately 108,470 cubic feet per hour based on a heat content of 1040 BTU per SCF of gas.
Capacity: At 112.8 mmBTU per hour of heat input, the gas turbine produces approximately 13,000 bhp. After initial startup, the gas turbine is intended to operate at or near capacity.
Controls: The efficient combustion of pipeline-quality natural gas at high temperatures minimizes emissions of CO, PM/PM10, SO_2, and VOC. NOx emissions are reduced with dry low-NOx combustion technology.
Stack Parameters: When operating at capacity, exhaust gases exit a rectangular stack (7.5 feet by 8 feet) that is 58 feet tall with a flow rate of approximately 179,500 acfm at 870° F.

{Permitting Note: The existing natural gas compressor station is a major source with respect to the PSD preconstruction review program. The project includes up-rating the existing gas turbine (FGT No. 1207) installed in January of 2001. As such, it is part of the netting analysis that shows the project to be minor with respect to PSD. Therefore, the control systems, fuel specifications, operational restrictions, emissions standards, monitoring provisions, and reporting requirements of this section are established in accordance with Rule 62-212.400, F.A.C.}

APPLICABLE STANDARDS AND REGULATIONS

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

EQUIPMENT

2. Up-Rated Gas Turbine (FGT No. 1207): The permittee is authorized to up-rate the recently installed Solar Model No. Mars 90-T-13000S gas turbine from 10,350 bhp to 13,000 bhp. The permittee shall tune, operate and maintain the gas turbine's dry low-NOx combustion system to reduce emissions of nitrogen oxides below the permitted limits. Ancillary equipment includes the automated Solar Turbotronic gas turbine control system, an inlet air filtration system, and a rectangular stack (7.5 feet by 8.0 feet) that is 58 feet tall. [Applicant Request]

PERFORMANCE RESTRICTIONS

3. Permitted Capacities: The maximum heat input rate to the gas turbine shall not exceed 112.8 mmBTU per hour while producing approximately 13,078 bhp based on a compressor inlet air temperature of 59° F, 100% load, and a higher heating value (HHV) of 1040 BTU per SCF for natural gas. Heat input rates will vary depending upon gas turbine characteristics, load, and ambient conditions. For the gas turbine, the permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial testing. Performance data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.]

4. Authorized Fuel: The gas turbine shall fire only pipeline-quality natural gas with a maximum of 10 grains of sulfur per 100 standard cubic feet of natural gas. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]

5. Restricted Operation: The hours of operation for the gas turbine are not limited (8760 hours per year). Except for startup and shutdown, operation below 50% base load is prohibited. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

6. Emissions Standards: Emissions from the gas turbine shall not exceed the following limits for carbon monoxide (CO), nitrogen oxides (NOx), opacity, particulate matter (PM), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Pollutant	Standards	Equivalent Maximum Emissions [f]		Rule Basis [g]
		lb/hour	TPY	
CO [a]	50.0 ppmvd @ 15% O_2	12.4	54.5	Avoid Rule 62-212.400, F.A.C.
NOx [b]	25.0 ppmvd @ 15% O_2	10.2	44.7	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.332
SO_2 [c]	10.0 grains of sulfur per 100 SCF of gas	3.1	13.6	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.332
Opacity [d]	10% opacity, 6-minute average	Not Applicable		Avoid Rule 62-212.400, F.A.C.
PM [e]	Good combustion practices (Factor: 0.00999 lb/mmBTU)	0.7	3.3	Avoid Rule 62-212.400, F.A.C.
VOC [e]	Good combustion practices (Factor: 2.5 ppmvd @ 15% O_2)	0.4	1.6	Avoid Rule 62-212.400, F.A.C.

a. The CO standard is based on a 3-hour test average as determined by EPA Method 10.

b. The NOx standards is based a 3-hour test average as determined EPA Method 20.

c. The fuel sulfur specification is based on the maximum limit specified by Federal Energy Regulatory Commission (FERC) and effectively limits the potential SO_2 emissions. Expected fuel sulfur levels are less than 1 grain per 100 SCF of natural gas from the pipeline.

d. The opacity standard is based on a 6-minute average, as determined by EPA Method 9.

e. For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions are based on vendor data. Equivalent maximum VOC emissions were conservatively assumed to be 10% of the vendor's data for total unburned hydrocarbon. No testing required.

f. Equivalent maximum emissions are based on the maximum expected emissions, permitted capacity, a compressor inlet air temperature of 59° F, and 8760 hours of operation per year. For comparison purposes, the permittee shall provide a reference table with the initial compliance test report of mass emission rates versus the compressor inlet temperatures. Each test report shall include measured mass emission rates for CO, NOx and SO_2. Mass emission rates for SO_2 shall be calculated based on actual fuel sulfur content and fuel flow rate. For tests conducted at 59° F or greater, measured mass emission rates shall be compared to the equivalent maximum emissions above. For tests conducted below 59° F,

measured mass emission rates shall be compared to the tabled mass emission rates provided by the manufacturer based on compressor inlet temperatures.

g. The emissions standards of this permit ensure that the project does not trigger the PSD preconstruction review requirements of Rule 62-212.400, F.A.C.

EMISSIONS PERFORMANCE TESTING

7. Initial Compliance Tests: The gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NOx, and visible emissions. The initial tests shall be conducted within 60 days after achieving at least 90% of the maximum permitted capacity, but not later than 180 days after initial operation of the gas turbine. The initial NOx performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load. Each of the three low-load NOx performance tests shall consist of three, 20-minute test runs. The peak load NOx performance test shall consist of three, 1-hour test runs. The CO performance tests shall be conducted concurrently with the NOx performance tests at peak load. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)1, F.A.C.; 40 CFR 60.8 and 60.335]

8. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NOx, and visible emissions. CO and NOx emissions shall be tested concurrently at permitted capacity. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule and 62-297.310(7)(a)4, F.A.C. and to avoid Rule 62-212.400, F.A.C.]

9. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and, 60.8]

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

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

Tests shall also be conducted in accordance with the requirements specified in Section 4, Appendix SC of this permit. The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

RECORDS AND REPORTS

11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 4, Appendix SC of this permit. In addition, NOx emissions shall be corrected to ISO ambient atmospheric conditions and compared to the NSPS Subpart GG standard identified in Appendix GG of this permit for each required test. For each run, the test report shall also indicate the natural gas firing rate (cubic feet per hour), heat input rate (mmBTU per hour), the power output (bhp), percent base load, and the inlet compressor temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.332]

12. Custom Fuel Monitoring Schedule: In lieu of the NSPS fuel monitoring requirements of 40 CFR 60.334 of Subpart GG, the Department approves the custom fuel-monitoring schedule specified in Appendix FM of this permit. [Rule 62-4.070(3); 40 CFR 60.334]

13. Operational Data: Using the automated gas turbine control system, the permittee shall monitor and record heat input (mmBTU), power output (bhp), and hours of operation for the gas turbine. Within the first 10 days of each month, the permittee shall summarize the following information: average heat input (mmBTU per hour); average power output (bhp); and total hours of gas turbine operation. The average heat input for the month shall be based on the contracted heat content (mmBTU per SCF) of the natural gas for the given month. This information shall also be used for submittal of the required Annual Operating Report. [Rule 62-4.070(3), F.A.C.]

C. EU-010: FGT No. 1208, New Gas Turbine Compressor Engine

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

Emissions Unit No. 010 (FGT No. 1208): New Gas Turbine Compressor Engine
Description: The new 15,700 bhp gas turbine is a Pignone Model No. PGT-10B to be used as a compressor engine for the natural gas pipeline.
Fuel: The gas turbine fires pipeline-quality natural gas (SCC No 2-02-002-01). The maximum natural gas firing rate is approximately 129,600 cubic feet per hour based on a heat content of 1040 BTU per SCF of gas.
Capacity: At 134.8 mmBTU per hour of heat input, the gas turbine produces approximately 15,700 bhp. After initial startup, the gas turbine is intended to operate between 50% and 100% of base load.
Controls: The efficient combustion of pipeline-quality natural gas at high temperatures minimizes emissions of carbon monoxide (CO), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC). NOx emissions are reduced with dry low-NOx combustion technology.
Stack Parameters: When operating at capacity, exhaust gases exit a 7.6 feet diameter stack that is 61.5 feet tall with a flow rate of approximately 215,200 acfm at 910° F.

APPLICABLE STANDARDS AND REGULATIONS

{Permitting Note: The existing natural gas compressor station is a major source with respect to the PSD preconstruction review program. The project includes adding a new gas turbine (FGT No. 1208) to increase the compressor station capacity. As such, it is part of the netting analysis that shows the project to be minor with respect to PSD. Therefore, the control systems, fuel specifications, operational restrictions, emissions standards, monitoring provisions, and reporting requirements of this section are established in accordance with Rule 62-212.400, F.A.C.}

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

EQUIPMENT

2. New Gas Turbine (FGT No. 1208): The permittee is authorized to install, tune, operate, and maintain a new Pignone Model No. PGT-10B gas turbine to be used as a compressor engine for the natural gas pipeline. The gas turbine design shall incorporate dry low-NOx combustion technology to reduce emissions of nitrogen oxides below the permitted limits. Ancillary equipment includes an automated gas turbine control system, an inlet air filtration system, and a 7.6 feet diameter stack that is 61.5 feet tall. The permittee identifies the new gas turbine compressor engine as FGT No. 1208. [Applicant Request; Design]

PERFORMANCE RESTRICTIONS

3. Permitted Capacity: The maximum heat input rate to the gas turbine shall not exceed 134.8 mmBTU per hour while producing approximately 15,700 bhp based on a compressor inlet air temperature of 59° F, 100% load, and a higher heating value (HHV) of 1040 BTU per SCF for natural gas. Heat input rates will vary depending upon gas turbine characteristics, load, and ambient conditions. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Performance data shall be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rule 62-210.200(PTE), F.A.C.]

4. Authorized Fuel: The gas turbine shall fire only pipeline-quality natural gas with a maximum of 10 grains of sulfur per 100 standard cubic feet of natural gas. [Applicant Request; Rule 62-210.200(PTE), F.A.C.]

5. Restricted Operation: The ~~total~~ hours of operation for the gas turbine are not limited (8760 hours per year). Except for startup and shutdown, operation below 50% base load is prohibited. ~~Operation between 50% and 90% of base load shall not exceed 2190 hours during any consecutive 12 months. Of this authorized low load operation, operation between 50% and 70% of base load shall not exceed 438 hours during any consecutive 12 months.~~ [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

6. Emissions Standards: Emissions from the gas turbine shall not exceed the following limits for carbon monoxide (CO), nitrogen oxides (NOx), opacity, particulate matter (PM), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Pollutant	Standards		Equivalent Maximum Emissions [f]		Rule Basis [g]
	Load	Standard	lb/hour	TPY	
CO [a]	~~90-100%~~	~~15.0 ppmvd @ 15% O_2~~	~~5.1~~	30.8	Avoid Rule 62-212.400, F.A.C.
	~~70-90%~~	~~30.0 ppmvd @ 15% O_2~~	~~10.2~~		
	50-~~70~~100%	~~75.0~~ 21.0 ppmvd @ 15% O_2	~~22.5~~ 7.03		
NOx [b]	50-100%	25.0 ppmvd @ 15% O_2	14.1	61.8	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.332
SO_2 [c]	50-100%	10.0 grains of sulfur per 100 SCF of natural gas	3.7	16.2	Avoid Rule 62-212.400, F.A.C. 40 CFR 60.332
Opacity [d]	50-100%	10% opacity, 6-minute average	Not Applicable		Avoid Rule 62-212.400, F.A.C.
PM [e]	50-100%	Good combustion practices	0.9	3.9	Avoid Rule 62-212.400, F.A.C.
VOC [e]	~~90-100%~~	~~Good combustion practices~~	~~0.3~~	~~2.0~~	Avoid Rule 62-212.400, F.A.C.
	~~70-90%~~	~~Good combustion practices~~	~~0.8~~	6.6	
	50-~~70~~100%	Good combustion practices	1.5		

a. The CO standards are based on 3-hour test average as determined by EPA Method 10. Annual CO emissions were based on emissions standards and restricted hours of operation.

b. The NOx standards are based on a 3-hour test average as determined EPA Method 20.

c. The fuel sulfur specification is based on the maximum limit specified by Federal Energy Regulatory Commission (FERC) and effectively limits the potential SO_2 emissions. Expected fuel sulfur levels are less than 1 grain per 100 SCF of natural gas from the pipeline.

d. The opacity standard is based on a 6-minute average, as determined by EPA Method 9.

e. For both PM and VOC, the efficient combustion of clean fuels is indicated by compliance with opacity and CO standards. Equivalent maximum PM emissions are based on data in Table 3.1-2a in AP-42. Equivalent maximum VOC emissions are based on vendor data. Annual VOC emissions were based on the vendor data and restricted hours of operation. No testing required.

f. Equivalent maximum hourly emissions are the maximum expected emissions based on permitted capacity and a compressor inlet air temperature of 59° F. For comparison purposes, the permittee shall provide a reference table with the initial compliance test report of mass emission rates versus the compressor inlet temperatures. Each test report shall include measured mass emission rates for CO, NOx and SO_2. Mass emission rates for SO_2 shall be calculated based on actual fuel sulfur content and fuel flow rate. For tests conducted at 59° F or greater, measured mass emission rates shall be compared to the equivalent maximum emissions above. For tests conducted below 59° F, measured mass emission rates shall be compared to the tabled mass emission rates provided by the manufacturer based on compressor inlet temperatures.

g. Equivalent maximum annual emissions are based on 8760 hours of operation per year.

h. The emissions standards of this permit ensure that the project does not trigger the PSD preconstruction review requirements of Rule 62-212.400, F.A.C.

EMISSIONS PERFORMANCE TESTING

7. Initial Compliance Tests: The gas turbine shall be tested to demonstrate initial compliance with the emission standards for CO, NOx, and visible emissions. The initial tests shall be conducted within 60 days after achieving at least 90% of the maximum permitted capacity, but not later than 180 days after initial operation of the gas turbine. The initial CO and NOx performance tests shall be conducted at approximately four evenly spaced points between the minimum normal operating load and 100% of peak load. Each of the three low-load CO and NOx performance tests shall consist of three, 20-minute test runs. The peak load CO and NOx performance test shall consist of three, 1-hour test runs. The CO performance tests shall be conducted concurrently with the NOx performance tests. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule 62-297.310(7)(a)1, F.A.C.; 40 CFR 60.8 and 60.335] {Permitting Note: This permit modification does not impose any new, additional testing.}

8. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the gas turbine shall be tested to demonstrate compliance with the emission standards for CO, NOx, and visible emissions. CO and NOx emissions shall be tested concurrently at permitted capacity. SO_2 emissions shall be calculated based on fuel flow and vendor analysis of fuel sulfur content. [Rule and 62-297.310(7)(a)4, F.A.C. and to avoid Rule 62-212.400, F.A.C.]

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

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

Tests shall also be conducted in accordance with the requirements specified in Section 4, Appendix SC of this permit. The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Emissions Monitoring Section in accordance with an

alternate sampling procedure pursuant to 62-297.620, F.A.C. [Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

10. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial NSPS performance tests and at least 15 days prior to any other required tests. [Rule 62-297.310(7)(a)9, F.A.C.; 40 CFR 60.7 and, 60.8]

RECORDS AND REPORTS

11. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Section 4, Appendix SC of this permit. In addition, NOx emissions shall be corrected to ISO ambient atmospheric conditions and compared to the NSPS Subpart GG standard identified in Appendix GG of this permit for each required test. For each run, the test report shall also indicate the natural gas firing rate (cubic feet per hour), heat input rate (mmBTU per hour), the power output (bhp), percent base load, and the inlet compressor temperature. [Rule 62-297.310(8), F.A.C.; 40 CFR 60.332]

12. Custom Fuel Monitoring Schedule: In lieu of the NSPS fuel monitoring requirements of 40 CFR 60.334 of Subpart GG, the Department approves the custom fuel-monitoring schedule specified in Appendix FM of this permit. [Rule 62-4.070(3); 40 CFR 60.334]

13. Operational Data: Using the automated gas turbine control system, the permittee shall monitor and record heat input (mmBTU), power output (bhp), and hours of gas turbine operation ~~within each of the following load ranges: 50% to 70% load; 70% to 90% load; and 90% to 100% load~~. Within the first 10 days of each month, the permittee shall summarize the following information: average heat input (mmBTU per hour); average power output (bhp); total hours of gas turbine operation; and hours of gas turbine operation ~~between 50% to 70% load; hours of gas turbine operation between 70% to 90% load; and hours of gas turbine operation between and 90% to 100% load~~. The average heat input for the month shall be based on the contracted heat content (mmBTU per SCF) of the natural gas for the given month. This information shall also be used for submittal of the required Annual Operating Report. [Rule 62-4.070(3), F.A.C.]

D. EU-009: Miscellaneous Unregulated Emissions Units

This permit recognizes the following unregulated emissions units.

Emissions Unit No. 009: Miscellaneous Unregulated Emissions Units	
004	Support equipment includes: • One Caterpillar Model 3412 emergency generator (637 bhp) fired exclusively with natural gas and identified by the permittee as "GEN03"; • One 1 mmBTU/hour air compressor engine fired exclusively with natural gas and identified by permittee as "Air Compressor No. 1"; • Lube oil storage tanks; • Used oil storage tanks; • Blowdown stacks; and • Miscellaneous fugitive emission leaks from valves, flanges, etc.

The emergency generator and air compressor engine are exempt from air pollution construction permitting requirements in accordance with the following rule.

Rule 62-210.300, F.A.C. Permits Required.

(3) Exemptions.

(c) Categorical Exemptions

20. One or more emergency generators located within a single facility provided:

    a. None of the emergency generators is subject to the Federal Acid Rain Program; and

    b. Total fuel consumption by all such emergency generators within the facility is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

21. One or more heating units, general purpose internal combustion engines, or other combustion devices, all of which are located within a single facility, are not listed elsewhere in Rule 62-210.300(3)(a), F.A.C., and are not pollution control devices, provided:

    a. None of the heating units, general purpose internal combustion engines, or other combustion devices that would be exempted is subject to the Federal Acid Rain Program;

    b. Total fuel consumption by all such heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels are used; and

    c. Fuel for the heating units, general purpose internal combustion engines, and other combustion devices that would be exempted is limited to natural gas, diesel fuel, gasoline and propane.

P.E. Certification Statement

Florida Gas Transmission Company
Compressor Station No. 12
Santa Rosa County

DEP File No.: 1130037-008-AC
Facility ID No.: 1130037

Project: Air Construction Permit Modification

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

(Seal)

Michael P. Halpin, P.E.
Registration Number: 31970

1-23-04
Date

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

Telephone: 850/488-0114
Fax: 850/922-6979

Memorandum

Florida Department of
Environmental Protection

TO: Trina Vielhauer

THRU: Jim Pennington

FROM: M. P. Halpin, P.E.

DATE: January 23, 2004

SUBJECT: FGT Compressor Station 12

Attached for approval and signature is a construction permit modification for FGT's Compressor Station No. 12 located in Santa Rosa County. The permit modification is to revise the CO emission rates and remove certain operating restrictions in the low and middle load ranges. The changes will not cause any increases in CO, although an incidental increase in VOC emissions may occur (< 5TPY) as a result (only) of the load limitation removal.

The draft permit is being issued without a BACT Review since the permit revision does not cross any PSD pollutant thresholds. Accordingly, this modification is being issued as a minor modification requiring only 14 days of notice.

I have coordinated this modification with input from Jeff Koerner who has done most of the prior compressor station construction permitting. I recommend your approval and signature.

Attachments

/mph

SENDER: [illegible] **ON DELIVERY**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

'CK CRAIG, V.P. SOUTHEASTERN OPERATIONS
DA GAS TRANSMISSION COMPANY
)FFICE BOX 1188
TON, TEXAS 77251

A. Received by *(Please Print Clearly)*: E. O. Rice
B. Date of Delivery: 01/30/04

C. Signature
X E. O. Rice
☑ Agent
☐ Addressee

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

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

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from ...el)*
7000 2870 0000 7028 3710

PS Form 3811, Ju

102595-99-M-1789

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MR. RICK CRAIG, V.P. SOUTHEASTERN OPERATIONS
FLORIDA GAS TRANSMISSION COMPANY
POST OFFICE BOX 1188
HOUSTON, TEXAS 77251

PS Form 3800, May 2000 — See Reverse for Instructions