TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

Florida Gas Transmission Company
2405 Lucien Way, Suite 200
Maitland, FL 32751-7047

Compressor Station No. 26

Facility ID No. 0170035

PROJECT

Project No. 0170035-015-AC
Application for Minor Air Construction Permit
Modification of Maximum Fuel Heat Input Rate for Turbine Nos. 2601 and 2603

COUNTY

Citrus, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

July 22, 2011
Revised August 8, 2011

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Prepared by David Zell

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Project Description:

A. Applicant:

Mr. David W. Shellhouse
Vice President, Southeast Operations
Florida Gas Transmission Company
2405 Lucien Way, Suite 200
Maitland, FL 32751-7047

B. Professional Engineer:

Mr. Thomas W. Davis, P.E.
Environmental Consulting & Technology, Inc.
3701 Northwest 98th Street
Gainesville, FL 32606-5004

C. Project Location:

Compressor Station No. 26 is an existing natural gas transmission line compressor station facility located at 245 North Maylen Road in Lecanto, Florida

D. Project Summary:

The project is the requested construction permit modification to increase the maximum permitted fuel heat input rate for existing Turbine Nos. 2601 and 2603 (from 62 to 66.6 MMBtu/hour for Engine 2601, and from 158 to 174.5 MMBtu/hour for Engine No. 2603).

E. Application Information:

Application Received on: 06/01/11

Additional Information Requested* on: 06/14/11

Additional Information Received* and application complete on: 06/15/11

(information requested and received was a construction permit modification application processing fee)*

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	Y/N	Comments
Rule 62-210.300, F.A.C. - Project Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C.	Y	Not exempt from general permitting requirements
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	the existing facility is not a major source nor is the modification at a PSD major level
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	N	natural gas transmission line is not a source of unconfined particulate matter emissions
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	natural gas transmission line operations are a potential source of VOC and odors
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	N	there is no applicable source category
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	not located in an area subject to VOC RACT

Subject to:	Y/N	Comments
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	not located in an area subject to PM RACT
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	Y	there are two exempt emergency generator SI RICE engines subject to NSPS 40 CFR 60 Subpart JJJJ
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	Y	there is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS – 40 CFR 63)	Y	the above emergency generators engines are subject to NESHAP 40 CFR 63 Subpart ZZZZ, but there are no requirements other than meeting NSPS Subpart JJJJ
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	facility is a non-Title V minor source
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	NOx, CO and VE testing is required for EU Nos. 001 and 004

III. Summary of Emissions

Pollutant	EU No. and brief description	Increase in Potential Emissions (& resulting new PTE) in TPY**	Allowable Emissions *(see Conditions A.4. and B.4.in permit)*
PM/PM_{10}	001 – TC Engine No. 2601	0.1 (1.9)	*NOT APPLICABLE*
	004 – TC Engine No. 2603	0.4 (5.0)	*NOT APPLICABLE*
	Facility*	0.5 (7.0)	*NOT APPLICABLE*
VOC	001 – TC Engine No. 2601	*negligible* (0.9)	*NOT APPLICABLE*
	004 – TC Engine No. 2603	*negligible* (2.4)	*NOT APPLICABLE*
	Facility *	*negligible* (3.8)	*NOT APPLICABLE*
NOx	001 – TC Engine No. 2601	1.9 (26.4)	25 ppmvd @ 15% O_2 & 187 ppmvd @ 15% O_2 & ISO conditions
	004 – TC Engine No. 2603	3.6 (41.1)	15 ppmvd @ 15% O_2 & 25 ppmvd @ 15% O_2
	Facility *	5.5 **(68.5)**	*NOT APPLICABLE*

Pollutant	EU No. and brief description	Increase in Potential Emissions (& resulting new PTE) in TPY**	Allowable Emissions *(see Conditions A.4. and B.4.in permit)*
SO2	001 – TC Engine No. 2601	0.5 (8.0)	Fuel sulfur content < 10 gr S/100 SCF gas & 0.8% S by weight
	004 – TC Engine No. 2603	2.0 (21.0)	Fuel sulfur content < 10 gr S/100 SCF gas & 0.060 lb/MMBtu
	Facility *	2.5 (29.1)	*NOT APPLICABLE*
CO	001 – TC Engine No. 2601	2.2 (32.0)	50 ppmvd @ 15% O_2
	004 – TC Engine No. 2603	3.4 (41.7)	25 ppmvd @ 15% O_2
	Facility *	5.6 **(75.7)**	*NOT APPLICABLE*
Total HAP	001 – TC Engine No. 2601	*negligible* (0.30)	*NOT APPLICABLE*
	004 – TC Engine No. 2603	*negligible* (0.785)	*NOT APPLICABLE*
	Facility *	*negligible* (1.15)	*NOT APPLICABLE*
Visible Emissions (VE)	001 – TC Engine No. 2601	*NOT APPLICABLE*	10% Opacity
	004 – TC Engine No. 2603	*NOT APPLICABLE*	10% Opacity
	Facility	*NOT APPLICABLE*	20% Opacity

Emission Table Notes -

** Facility totals include two emergency engines operating @ 500 hrs/yr.*

*** Turbine Compressor (TC) Engine Potential Emissions Notes – Potential emissions are based on operation for 8,760 hours/year. PM/PM10 and VOC emissions based on AP-42 Ef (Table 3.1-2a – VOC: 2.5 ppmvd; PM/PM10: 0.0066 lb/MMBtu). CO and NOx emissions are based on emission limits (which are based on manufacturer data. SO2 emissions are based on fuel sulfur content limit. "Increase in potential emissions" are the increases in potential emissions associated with the increase in maximum fuel heat input rates. "Resulting new PTE" are the potential emissions at the new higher maximum fuel heat input rates.*

IV. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

V. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).