Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 29, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Clayton A. Roesler
Division Environmental Specialist
Florida Gas Transmission Company
Post Office Box 945100
Maitland, Florida 32794 5100

Dear Mr. Roesler:

RE: Approval of Custom Fuel Monitoring Schedule
Florida Gas Transmission Company (FGT)
AC62-229319 and 1230034-002-AC, (PSD-FL-202), Station 15, Taylor County
AC09-229441 and 0170035-001-AC, Station 26, Citrus County
AC29-228821 and 0570438-002-AC, Station 30, Hillsborough County

This is in response to your request dated April 12,1996, regarding approval of FGT's proposed Custom Fuel Monitoring Schedule pursuant to 40 CFR 60, Subpart GG for the above mentioned turbines and sites. Attached please find EPA's approval of this request. The approved Custom Fuel Monitoring Schedule shall be attached to the above mentioned permits and shall become a part of each permit.

If you have any questions regarding this matter, please call Teresa Heron at (850) 921-9529 or David McNeal at (404)562-9102.

Sincerely,

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

AAL/th/kt

Enclosure

cc: Jerry Campbell, EPCHC
Jerry Kissel, SWD
Chris Kirts, NED
Barry Andrews, ENSR

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. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Douglas Neeley, Chief
ART Branch
US EPA Region 4
61 Forsyth St.
Atlanta, GA 30303

4a. Article Number
Z 333 612 503

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

7. Date of Delivery
SEP 1998 9-17-98

5. Received By: *(Print Name)* Bruce Bike

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

6. Signature: *(Addressee or Agent)*
X

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

PS Form **3811**, December 1994 102595-97-B-0179 Domestic Return Receipt

Z 333 612 503

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

Sent to Doug Neeley	
Street & Number EPA	
Post Office, State, & ZIP Code Atlanta GA	
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 FET 9-15-98	

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

September 11, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. Douglas Neeley, Chief
Air and Radiation Technology Branch
U. S. Environmental Protection Agency - Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Re: Florida Gas Transmission Company
Custom Fuel Monitoring Schedule - Compressor Stations

Dear Mr. Neeley:

We request action on our attached letter dated December 23, 1997 regarding a custom fuel monitoring schedule for Florida Gas Transmission Company (FGT). We need to update the Department's ARMS database and to close out that permitting action.

It is possible that this one "fell through the cracks" since in some cases the applicants requested these actions directly from EPA. Also, we might have mailed it to your old address. In any case, applicants are now processing them through the state. We in-turn send them to EPA with the appropriate documentation for your review and approval (or denial). Most recent ones have been handled promptly.

If you have any questions regarding this matter, please call me or Teresa Heron at (850) 488-1344 or Clayton Roesler of Florida Gas Transmission Company at (407)875-5865.

Sincerely,

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

AAL/th

Enclosures

cc: Clayton Roesler, FGT

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 23, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. Douglas Neeley, Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics Management Division
100 Alabama Street S.W.
Atlanta, Georgia 30303-3104

Re: Florida Gas Transmission Company
Custom Fuel Monitoring Schedule - Compressor Stations

Dear Mr. Neely:

The Florida Department of Environmental Protection requests approval of custom fuel monitoring schedules for the above mentioned company. The proposed schedules and supporting data needed for approval of the request have been enclosed for your review. The requests are for combustion turbines located at FGT Compressor Stations 30, 26, and 15, located in Duval, Citrus, and Taylor Counties, respectively. These units are subject to 40 CFR 60 Subpart GG. Pursuant to 40 CFR 60.334(b) (2), the U.S. EPA Administrator has approval authority for the custom fuel monitoring schedule. Station 15 was also subjected to PSD review.

The Department recommends approval of FGT's request and notes that FGT is the main gas supplier in Florida. Other requesters for custom fuel monitoring schedules typically rely on FGT's data in complying with their own monitoring requirements. We are advising all applicants to submit their requests through the Department.

It is the Department understanding that this request was previously sent to EPA by Florida Gas Transmission (FGT) sometime in June or July 1996. However, we have no record of any actions taken on the request, which is why it is being re-submitted.

If you have any questions regarding this matter, please call me or Teresa Heron of this Department at (850) 488-1344 or Clayton Roesler of FGT at (407)875-5865.

Sincerely,

12/23

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

AAL/th/t

Enclosures

cc: Clayton Roesler, FGT

1230034-002-AC

Florida Gas Transmission Company

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

NORTHEAST DISTRICT
RECEIVED
APR 17 1996
DEP - JACKSONVILLE

CERTIFIED

April 12, 1996

Ms. Rita Felton
Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B-200
Jacksonville, FL 32256-7577

Dear Ms. Felton:

Re: Florida Gas Transmission Company - Station 15
Turbine Compressor 1507, Air Permit No. AC62-229319

Florida Gas Transmission Company (FGT) requests approval for a custom monitoring schedule for sampling and analyzing nitrogen and sulfur in the natural gas fuel for each of the referenced turbine units.

Pursuant to Specific Condition 13, FGT requests approval of a custom monitoring schedule for sampling and analyzing nitrogen and sulfur in its fuel gas. 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 Glenn Sellars
Roy Smith
Norman Tedder

TABLE 2
Summary of Results
Unit No. 1507

Florida Gas Transmission Company
Compressor Station No. 15
6 miles N of Perry on C-361 in Taylor County, FL
Solar Mars Model 90S
Technicians: CDC, LJB, DLD

Test Number	15C-4	15C-5	15C-6		FDEP Permit Limits
Date	8/29/95	8/29/95	8/29/95		
Start Time	8:50	9:13	10:37		
Stop Time	9:00	10:21	11:50		
Turbine/Compressor Operation				*Averages*	
Power Turbine Speed (NPT, %)	94.6	94.2	93.3	*94.0*	
Gas Producer Speed (NGP, %)	100.9	100.8	100.5	*100.7*	
Estimated Horsepower (Solar Compressor Shaft, bhp)	11301	11326	11254	*11294*	11261*
Engine Compressor Discharge Pressure (PCD, psig)	180.6	179.4	176.3	*178.8*	
Combustor Air Inlet Temperature (T-1, °F)	84.0	85.9	88.5	*86.1*	
Power Turbine Exhaust Temperature (T-5, °F)	1290	1290	1291	*1290*	
Gas Compressor Suction Pressure (psig)	765.3	768.9	779.5	*771.2*	
Gas Compressor Suction Temperature (°F)	72.9	72.3	72.0	*72.4*	
Gas Compressor Discharge Pressure (psig)	1059.0	1065.8	1071.4	*1065.4*	
Gas Compressor Discharge Temperature (°F)	128.1	128.3	127.7	*128.0*	
Compressor Flow (MMSCFD)	580.3	574.0	572.2	*575.5*	
Turbine Fuel Data (Residue Gas)					
Fuel Heating Value (Btu/SCF, HHV)	1034	1034	1034	*1034*	
Fuel Specific Gravity	0.5840	0.5840	0.5840	*0.5840*	
O2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	8674	8674	8674	*8674*	
CO2 "F-factor" (DSCFex/MMBtu @ 0% excess air)	1024	1024	1024	*1024*	
Total Sulfur in Fuel (grains Sulfur/100 SCF fuel)	0.059	0.059	0.059	*0.059*	10
Fuel Flow (MMSCFH)	0.0921	0.0915	0.0920	*0.0919*	0.1265
Heat Input (MMBtu/hr)	95.29	94.67	95.16	*95.04*	131.59
Ambient Conditions					
Atmospheric Pressure ("Hg)	29.82	29.84	29.86	*29.84*	
Temperature (°F): Dry bulb	79	80	82	*80*	
(°F): Wet bulb	74	76	72	*74*	
Humidity (lbs moisture/lb of air)	0.0166	0.0180	0.0138	*0.0161*	
Measured Emissions					
NOx (ppmv, dry basis)	23.9	24.0	23.4	*23.8*	
NOx (ppmv @ 15% O2)	27.5	27.7	27.2	*27.5*	42.0
NOx (ppmv @ 15% O2, ISO Day)	31.2	32.0	28.8	*30.7*	81.2†
CO (ppmv, dry basis)	0.9	1.1	1.3	*1.1*	
O2 (% volume, dry basis)	15.78	15.79	15.82	*15.80*	
CO2 (% volume, dry basis)	2.92	2.97	2.96	*2.95*	
Visible Emissions (% opacity)	0	0	0	*0*	10
Fo (fuel factor, range = 1.600-1.834 for NG)	1.75	1.72	1.72	*1.73*	
Stack Volumetric Flow Rates					
via Pitot Tube Traverse (SCFH, dry basis)	4.17E+06	4.02E+06	3.80E+06	*4.00E+06*	
via O2 "F-factor" (SCFH, dry basis)	3.37E+06	3.36E+06	3.40E+06	*3.38E+06*	
via CO2 "F-factor" (SCFH, dry basis)	3.34E+06	3.26E+06	3.29E+06	*3.30E+06*	
Calculated Emission Rates (via pitot tube)					
NOx (lbs/hr)	11.9	11.5	10.6	*11.3*	16.14
CO (lbs/hr)	0.27	0.32	0.36	*0.32*	11.71
SO2 (lbs/hr, Based on fuel flow and fuel sulfur)	0.016	0.015	0.016	*0.015*	3.61
NOx (tons/yr)	52.2	50.5	46.5	*49.7*	70.70
CO (tons/yr)	1.2	1.4	1.6	*1.4*	51.30
SO2 (tons/yr, Based on fuel flow and fuel sulfur)	0.068	0.068	0.068	*0.068*	15.83
NOx (g/bhp-hr)	0.48	0.46	0.43	*0.46*	0.58
CO (g/bhp-hr)	0.011	0.013	0.014	*0.013*	0.42

* 100% of permitted output at ambient temperature of 80°F
† EPA NSPS Performance Standard

Gas Fuel F Factor & Heating Value Calculation

Client Florida Gas Transmission Company
Sample ID pipeline natural gas (residue gas), St. 15
Time 16:02
Date 8/28/95

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

Component	% Volume	Molecular Wt.	Density (lb/ft3)	% volume x Density	weight %	Component Gross Btu/lb	Weight Fract. Btu	Gross Heating Value (Btu/SCF)	Volume Fract. Btu
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	0.3630	28.016	0.0744	0.00027	0.6045	0	0.00	0.0	0
CO2	0.7530	44.010	0.1170	0.00088	1.9719	0	0.00	0.0	0
CO		28.010	0.0740	0.00000	0.0000	4347	0.00	322.0	0
Methane	95.8760	16.041	0.0424	0.04065	90.9870	23879	21726.77	1013.0	971.224
Ethane	2.3070	30.067	0.0803	0.00185	4.1464	22320	925.47	1792.0	41.3414
Ethylene		28.051	0.0746	0.00000	0.0000	21644	0.00	1614.0	0
Propane	0.3970	44.092	0.1196	0.00047	1.0627	21661	230.20	2590.0	10.2823
propylene		42.077	0.1110	0.00000	0.0000	21041	0.00	2336.0	0
Isobutane	0.0970	58.118	0.1582	0.00015	0.3435	21308	73.19	3363.0	3.26211
n-butane	0.0800	58.118	0.1582	0.00013	0.2833	21257	60.21	3370.0	2.696
Isobutene		56.102	0.1480	0.00000	0.0000	20840	0.00	3068.0	0
Isopentane	0.0340	72.144	0.1904	0.00006	0.1449	21091	30.56	4008.0	1.36272
n-pentane	0.0210	72.144	0.1904	0.00004	0.0895	21052	18.84	4016.0	0.84336
n-hexane	0.0720	86.169	0.2274	0.00016	0.3665	20940	76.74	4762.0	3.42864
H2S		34.076	0.0911	0.00000	0.0000	7100	0.00	647.0	0
total	100.00				100.0000				

Average Density	0.04468
Specific Gravity	0.58403

Gross Heating Value		Gross Heating Value	
Btu/lb	23142	Btu/SCF	1034.4

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		0		
Oxygen	32.000	0	0	0.00	0.0000				0
Nitrogen	28.016	0	0	0.36	10.1698			0.602268295	
CO2	44.010	0.272273	0	0.75	33.1395	0.534352898			1.42678
CO	28.010	0.42587	0	0.00	0.0000	0			0
Methane	16.041	0.75	0.25	95.88	1537.9469	68.3093034	22.7697678		
Ethane	30.067	0.8	0.2	2.31	69.3646	3.286282746	0.82157069		
Ethylene	28.051	0.85714	0.14286	0.00	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.40	17.5045	0.848157315	0.18847963		
Propene	42.077	0.85714	0.14286	0.00	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.10	5.6374	0.276296178	0.0575802		
n-butane	58.118	0.82759	0.17247	0.08	4.6494	0.227873136	0.04748883		
Isobutene	56.102	0.85714	0.14286	0.00	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.03	2.4529	0.121052399	0.02421106		
n-pentane	72.144	0.83333	0.16667	0.02	1.5150	0.074767658	0.01495389		
n-hexane	86.169	0.83721	0.16279	0.07	6.2042	0.307606285	0.05981203		
H2S	34.076	0	0.0586923	0.00	0.0000	0	0		
Totals				100.00000	1688.5843	73.98569201	23.98	0.602268295	1.42678

CALCULATED VALUES		
O2 F Factor (dry)	8674	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O2 F Factor (wet)	10654	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	1980	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	11.81	volume % CO2 in flue gas @ 0% O2
Predicted Fo Factor	1.77	EPA Method 3a Fo value
Fuel VOC % (non-C1)	6.57%	non-methane fuel VOC content
Fuel VOC % (non-C1,C2)	2.36%	non-methane non-ethane fuel VOC content

6 17 0035-001-AC

RECEIVED
APR 16 1996
BUREAU OF
AIR REGULATION

Florida Gas Transmission Company

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

April 12, 1996

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: Air Permit No. AC09-229441
Florida Gas Transmission Company - Station 26
Citrus County, Lecanto, Florida

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
-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,

Allan Weatherford
Division Environmental Speciaiist

c Charlie Thompson
Roy Smith
Mark Winder
John Ludlow
Eric Peterson, Hillsborough County EPC

Gas Fuel F Factor & Heating Value Calculation

Client: Florida Gas Transmission Company
Sample ID: pipeline natural gas (residue gas)
Time: 6:23
Date: 3/21/95

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

Component	% Volume	Molecular Wt.	Density (lb/ft3)	% volume x Density	weight %	Component Gross Btu/lb	Weight Fract. Btu	Gross Heating Value (Btu/SCF)	Volume Fract. Btu
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	0.4930	28.016	0.0744	0.00037	0.8078	0	0.00	0.0	0
CO2	1.0030	44.010	0.1170	0.00117	2.5844	0	0.00	0.0	0
CO		28.010	0.0740	0.00000	0.0000	4347	0.00	322.0	0
Methane	95.1330	16.041	0.0424	0.04034	88.8320	23879	21212.20	1013.0	963.697
Ethane	2.2510	30.067	0.0803	0.00181	3.9807	22320	888.50	1792.0	40.3379
Ethylene		28.051	0.0746	0.00000	0.0000	21644	0.00	1614.0	0
Propane	0.5020	44.092	0.1196	0.00060	1.3222	21661	286.41	2590.0	13.0018
propylene		42.077	0.1110	0.00000	0.0000	21041	0.00	2336.0	0
Isobutane	0.1490	58.118	0.1582	0.00024	0.5191	21308	110.61	3363.0	5.01087
n-butane	0.1490	58.118	0.1582	0.00024	0.5191	21257	110.35	3370.0	5.0213
Isobutene		56.102	0.1480	0.00000	0.0000	20840	0.00	3068.0	0
Isopentane	0.1000	72.144	0.1904	0.00019	0.4193	21091	88.44	4008.0	4.008
n-pentane	0.1000	72.144	0.1904	0.00019	0.4193	21052	88.27	4016.0	4.016
n-hexane	0.1190	86.169	0.2274	0.00027	0.5960	20940	124.79	4762.0	5.66678
H2S		34.076	0.0911	0.00000	0.0000	7100	0.00	647.0	0
Total	100.00	Average Density		0.04541	100.0000	Gross Heating Value		Gross Heating Value	
		Specific Gravity		0.59356		Btu/lb	22910	Btu/SCF	1040.8

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		0		
Oxygen	32.000	0	0	0.00	0.0000				0
Nitrogen	28.016	0	0	0.49	13.8119			0.804982658	
CO2	44.010	0.272273	0	1.00	44.1420	0.70047131			1.87034
CO	28.010	0.42587	0	0.00	0.0000	0			0
Methane	16.041	0.75	0.25	95.13	1526.0285	66.7048437	22.2349479		
Ethane	30.067	0.8	0.2	2.25	67.6808	3.15565165	0.78891291		
Ethylene	28.051	0.85714	0.14286	0.00	0.0000	0	0		
Propane	44.092	0.81818	0.181818	0.50	22.1342	1.0554699	0.23454915		
Propene	42.077	0.85714	0.14286	0.00	0.0000	0	0		
Isobutane	58.118	0.82759	0.17247	0.15	8.6596	0.41768188	0.08704503		
n-butane	58.118	0.82759	0.17247	0.15	8.6596	0.41768188	0.08704503		
Isobutene	56.102	0.85714	0.14286	0.00	0.0000	0	0		
Isopentane	72.144	0.83333	0.16667	0.10	7.2144	0.3503892	0.07007952		
n-pentane	72.144	0.83333	0.16667	0.10	7.2144	0.3503892	0.07007952		
n-hexane	86.169	0.83721	0.16279	0.12	10.2541	0.50034078	0.09728799		
H2S	34.076	0	0.058692	0.00	0.0000	0	0		
Totals				99.99900	1715.7994	73.6529195	23.67	0.804982658	1.87034

CALCULATED VALUES		
O2 F Factor (dry)	8688	DSCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
O2 F Factor (wet)	10662	SCF of Exhaust/MM Btu of Fuel Burned @ 0% excess air
Moisture F Factor	1974	SCF of Water/MM Btu of Fuel Burned @ 0% excess air
Combust. Moisture	18.52	volume % water in flue gas @ 0% excess air
CO2 F Factor	1030	DSCF of CO2/MM Btu of Fuel Burned @ 0% excess air
Carbon Dioxide	11.85	volume % CO2 in flue gas @ 0% O2
Predicted Fo Factor	1.76	EPA Method 3a Fo value
Fuel VOC % (non-C1)	8.06%	non-methane fuel VOC content
Fuel VOC % (non-C1,C2)	3.98%	non-methane non-ethane fuel VOC content

Testing By Cubix Corporation - Austin, Texas - Gainesville, Florida

TABLE 2: Summary of Results
Unit No. 2601

Company: Florida Gas Transmission Company
Plant: Compressor Station #26
Location: 2 miles NW of Lecanto in Citrus County
Technicians: CDC, LJB, LAB
Source: Solar Taurus Model 60S Solonox Turbine

Test Number	26C-1	26C-1*	26C-2	26C-3		
Date	3/21/95	3/21/95	3/21/95	3/21/95		
Start Time	9:01	9:01	11:22	13:00		FDEP
Stop Time	10:10	10:10	12:22	14:04	Averages	Permit Limits
Turbine/Compressor Operation						
Power Turbine Speed (%,NPT)	89.6	89.6	86.7	85.5	*87.3*	
Gas Producer Speed (%,NGP)	96.9	96.9	96.5	96.5	*96.6*	
Estimated Horsepower (bhp ISO Day, Solar program)	6439	6439	6149	6243	*6277*	6500
PCD Observed (psig)	134.7	134.7	131.0	131.1	*132.3*	
T-1 Temperature (°F)	72.7	72.7	78.0	78.3	*76.3*	
T-5 Temperature (°F)	1400	1400	1401	1400	*1400*	
Compressor Flow (MMSCFD)	446.7	446.7	473.0	466.7	*462.1*	
Gas Compressor Suction Pressure (psi)	808.5	808.5	833.7	871.1	*837.8*	
Gas Compressor Suction Temperature (°F)	63.9	63.9	63.3	63.3	*63.5*	
Gas Compressor Discharge Pressure (psi)	1027.7	1027.7	1038.5	1039.9	*1035.4*	
Gas Compressor Discharge Temperature (°F)	99.6	99.6	96.0	95.7	*97.1*	
Fuel Data (Residue Gas)						
Fuel Heating Value (Btu/SCF-HHV)	1041	1041	1041	1041	*1041*	
O2 "F-factor", based on fuel analysis	8688	8688	8688	8688	*8688*	
CO2 "F-factor", based on fuel analysis	1030	1030	1030	1030	*1030*	
Total Sulfur in Fuel (grains/100 SCF)	0.063	0.063	0.063	0.063	*0.063*	10
Fuel Flow (MMSCF/hr)	0.0510	0.0510	0.0498	0.0497	*0.0501*	0.0684
Heat Input (MMBtu/hr)	53.05	53.05	51.78	51.70	*52.18*	71.52
Ambient Conditions						
Temperature (°F, wet)	66	66	69	69	*68*	
(°F, dry)	74	74	80	80	*78*	
Atmospheric Pressure ("Hg, abs.)	29.89	29.89	29.87	29.84	*29.87*	
Humidity (lbs/lb of air)	0.0112	0.0112	0.0124	0.0124	*0.0120*	
Measured Emissions						
NOx (ppmv, dry)	24.1	22.0	22.5	23.5	*23.0*	
NOx (ppm @ 15% O2)	28.0	25.6	26.4	27.6	*26.9*	42.0
NOx (ppm @15% O2, ISO Day)	29.4	26.8	27.9	29.2	*28.4*	154.2†
CO (ppmv, dry)	6.7	6.7	5.6	4.8	*5.7*	
O2 (% volume, dry)	15.82	15.82	15.88	15.88	*15.86*	
CO2 (% volume, dry)	3.00	3.00	2.85	2.97	*2.94*	
Fo	1.69	1.69	1.76	1.69	*1.71*	
THC (ppmv, dry as Methane via M-25A)	0.95	0.95	0.30	0.13	*0.46*	
Visible Emissions (% Opacity)	0	0	0	0	*0*	10
Stack Volumetric Flow Rates						
via Pitot Tube Traverse (SCFH, dry)	2.04E+06	2.04E+06	2.02E+06	1.98E+06	*2.01E+06*	
via O2 "F-factor" (SCFH, dry)	1.90E+06	1.90E+06	1.87E+06	1.87E+06	*1.88E+06*	
via CO2 "F-factor" (SCFH, dry)	1.82E+06	1.82E+06	1.87E+06	1.79E+06	*1.83E+06*	
Mass Emissions (via EPA Methods 1-4)						
NOx (lbs/hr)	5.86	5.35	5.44	5.55	*5.53*	8.92
CO (lbs/hr)	0.99	0.99	0.82	0.69	*0.84*	6.46
THC (lbs/hr)	0.081	0.081	0.025	0.011	*0.039*	0.37 ¥
SO2 (lbs/hr, based on fuel flow and fuel sulfur)	0.0092	0.0092	0.0090	0.0089	*0.0090*	1.97
NOx (tons/yr)	25.7	23.4	23.8	24.3	*24.2*	39.1
CO (tons/yr)	4.34	4.34	3.61	3.02	*3.66*	28.29
THC (tons/yr)	0.35	0.35	0.11	0.05	*0.17*	1.62 ¥
SO2 (tons/yr, based on fuel flow and fuel sulfur)	0.040	0.040	0.039	0.039	*0.040*	8.62
NOx (g/bhp-hr)	0.413	0.377	0.401	0.403	*0.400*	0.62
CO (g/bhp-hr)	0.070	0.070	0.061	0.050	*0.060*	0.45
THC (g/bhp-hr)	0.0057	0.0057	0.0019	0.0008	*0.0028*	0.26 ¥

* Reports NOx recalibration value per EPA 40 CFR 60, Appendix A, Method 20, Section 6.2.3.
† EPA 40 CFR 60 Subpart GG NSPS requirement
¥ FDEP Permit limits are for non-methane Volatile Organic Compounds (VOC).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 14 1992

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG

FROM: John B. Rasnic, Chief
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional Offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any scheduled Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.

2. Sulfur Monitoring

   a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).

   b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

   c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.

   d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board ( ) of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO_x emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional Offices are encouraged to contact ESCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to OAQPS for approval.

If you have any questions, please contact Sally M. Farwell at FTS 382-2875.

Attachment

cc: John Crenshaw
George Walsh
Robert Ajax
Earl Salo

Florida Gas Transmission Company

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

RECEIVED

APR 16 1996

BUREAU OF
AIR REGULATION

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,

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		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				Averages	
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 cmprssr thruput 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 Presuure ("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 50
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 x Density	weight %	Component Gross Btu/lb	Weight Fract. Btu	Gross Heating Value (Btu/SCF)	Volume Fract. Btu
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	0.58577			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		0		
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	0.256445311	0.04986469		
H2S	34.076	0	0.058692	0.00	0.0000	0	0		
Totals				99.99900	1687.8617	73.879902487	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

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 14 1987

OFFICE OF AIR AND RADIATION

MEMORANDUM

SUBJECT: Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG

FROM: John B. Rasnic, Chief
Compliance Monitoring Branch

TO: Air Compliance Branch Chiefs
Regions II, III, IV, V, VI and IX

Air Programs Branch Chiefs
Regions I-X

The NSPS for Stationary Gas Turbines (Subpart GG) at 40 CFR 60.334(b)(2) allows for the development of custom fuel monitoring schedules as an alternative to daily monitoring of the sulfur and nitrogen content of fuel fired in the turbines. Regional offices have been forwarding custom fuel monitoring schedules to the Stationary Source Compliance Division (SSCD) for consideration since it was understood that authority for approval of these schedules was not delegated to the Regions. However, in consultation with the Emission Standards and Engineering Division, it has been determined that the Regional Offices do have the authority to approve Subpart GG custom fuel monitoring schedules. Therefore it is no longer necessary to forward these requests to Headquarters for approval.

Over the past few years, SSCD has issued over twenty custom schedules for sources using pipeline quality natural gas. In order to maintain national consistency, we recommend that any scheduled Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

Enclosure

Conditions for Custom Fuel Sampling Schedule for Stationary Gas Turbines

1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.

2. Sulfur Monitoring

   a. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2).

   b. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.

   c. If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample anaylsis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.

   d. Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the State Air Control Board [illegible] of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the State of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.333 at each monitoring frequency; nitrogen monitoring can be waived for pipeline quality natural gas, since there is no fuel-bound nitrogen and since the free nitrogen does not contribute appreciably to NO_x emissions. Please see the attached sample custom schedule for details. Given the increasing trend in the use of pipeline quality natural gas, we are investigating the possibility of amending Subpart GG to allow for less frequent sulfur monitoring and a waiver of nitrogen monitoring requirements where natural gas is used.

Where sources using oil request custom fuel monitoring schedules, Regional Offices are encouraged to contact SSCD for consultation on the appropriate fuel monitoring schedule. However, Regions are not required to send the request itself to OAQPS for approval.

If you have any questions, please contact Sally K. Farrell at FTS 382-2875.

Attachment

cc: John Cranshaw
George Walsh
Robert Ajax
Earl Salo

Clayton A. Roesler

Florida Gas Transmission

Fax

To:	Jim Pennington	**From:**	Clayton A. Roesler
Fax:	850-922-6979	**Pages:**	1 + Cover
Phone:	850-921-9515	**Date:**	August 18, 1998
Re:	Request for Emergency Order	**CC:**	

- **Comments:** Print copy is in the mail.

Thanks.

AC, 8/18/98
FYI & File.
Jim P.
(1) ~~Teresa~~ T-H
(2) Kim - Put in FGT/Taylor Co Station IC file.
CA

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

August 18, 1998

Mr. Jim Pennington
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Dear Mr. Pennington:

Re: Request for Emergency Order
Ambient Uprating at Florida Compressor Stations

Florida Gas Transmission Company (FGT) requests an Emergency Order allowing FGT to Ambient Uprate various compressor units at FGT compressors stations in Florida. Ambient Uprating capability is requested on the following units:

Unit 1206 at Compressor Station 12 in Munson, Florida
Unit 1306 at Compressor Station 13 in Caryville, Florida
Unit 1406 at Compressor Station 14 in Quincy, Florida
Unit 1606 at Compressor Station 16 in Brooker, Florida
Unit 1705 at Compressor Station 17 in Silver Springs, Florida
Unit 1805 at Compressor Station 18 in Orlando, Florida
Units 1901 and 1902 at Compressor Station 19 in Melbourne, Florida
Unit 2005 at Compressor Station 20 in Ft. Pierce, Florida

The request for ambient uprating capability on these engines is due to an explosion caused by lightning at FGT Compressor Station 15 in Perry, Florida. The explosion disabled the pipeline and compressor station, temporarily stopping gas flow to Central and Southern Florida. This request for the Emergency Order for ambient uprating is to compensate for gas compression loss at FGT Compressor Station 15 in Perry, Florida. We are working diligently to restore FGT's Perry Compressor Station.

We appreciate your assistance with this temporary emergency order. If you have any questions or need any additional information, please contact me at 407-875-5840.

Sincerely,

Clayton A. Roesler

Clayton A. Roesler
Division Environmental Specialist

cc: Norman Tedder
Glenn Sellars
Mike Teal
Allan Weatherford