



September 25, 2000

RECEIVED

SEP 26 2000

BUREAU OF AIR REGULATION

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Re: Florida Power Corporation, Hines Energy Complex
REQUEST FOR EXTENSION OF TIME on the *Intent to Issue Title V Air
Operation Permit*
Draft Permit No. 1050234-001-AV

Dear Ms. Carter:

On December 8, 1999, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues need to be resolved. Accordingly, FPC requests an enlargement of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including November 30, 2000, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Michael Kennedy at (727) 826-4334.

Sincerely,

A handwritten signature in cursive script that reads "Robert Manning".

Robert A. Manning, Esq.
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP
Doug Beason, DEP, OGC

9/29/00 cc: Scott Sheplak
Russell Widen

139505.1



July 26, 2000

RECEIVED

JUL 27 2000

BUREAU OF AIR REGULATION

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Re: Florida Power Corporation, Hines Energy Complex
REQUEST FOR EXTENSION OF TIME on the *Intent to Issue Title V Air
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Sincerely,

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Robert A. Manning, Esq.
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP
Doug Beason, DEP, OGC

7/27/00 cc: Scott Sheplak
Russell Winder

139505.1



June 22, 2000

RECEIVED

JUN 23 2000

Ms. Kathy Carter
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

BUREAU OF AIR REGULATION

Re: Florida Power Corporation, Hines Energy Complex
REQUEST FOR EXTENSION OF TIME on the *Intent to Issue Title V Air
Operation Permit*
Draft Permit No. 1050234-001-AV

Dear Ms. Carter:

On December 8, 1999, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues need to be resolved. Accordingly, FPC requests an enlargement of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including July 31, 2000, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Michael Kennedy at (727) 826-4334.

Sincerely,

A handwritten signature in cursive script that reads "Robert A. Manning".

Robert A. Manning, Esq.
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP
Doug Beason, DEP, OGC

6/26/00 cc: Scott Sheplak
Russell Widen

115215.1



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

May 25, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, CEP
Director Environmental Services
Florida Power Corporation
Post Office Box 14042, MAC BB1A
St. Petersburg, Florida 33733

Re: Request for Additional Information Regarding AC Permit Modification
FPC Hines Energy Power Block I, 1050234-002-AC

Dear Mr. Pardue:

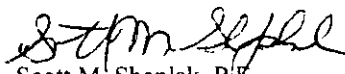
On May 22, 2000, the Department received your request for a permit amendment to include revised heat input curves for Units 1A and 1B at Florida Power Corporation's (FPC) Hines Energy Complex. The revised heat input curves for both natural gas and oil were a result of an adjustment to improve the performance of the units.

However, in order to continue processing your application, the Department will need the below additional information pursuant to Rule 62-4.055(1), F.A.C. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. We understand that there is an approximate 1% increase at ISO conditions in the overall maximum heat input from the original permitted limit. At the upper end of the temperature range, the maximum heat input for both natural gas and oil firing, reflect an increase of 5% or more over the current permit's curve. Please provide actual test data for both oil-firing and natural gas-firing to support such a change at the high temperature ranges.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. As a result, at a minimum your response to Item number 1, above should be certified by a professional engineer registered in the State of Florida. Material changes to the application should also be accompanied by a new certification statement by the authorized representative or responsible official. Permit applicants are advised that Rule 62-4.055(1), F.A.C., now requires applicants to respond to requests for information within 90 days. If there are any questions, please call Russell Wider at 850/921-9585.

Sincerely,


Scott M. Sheplak, P.E.
Administrator
Title V Section

/raw

cc:
Bill Thomas, P.E., SWD

5/30/00 cc: Russell Wider "More Protection, Less Process"
Reading Title
xc: Mike Halpin
Printed on recycled paper.

Is your RETURN ADDRESS completed on the reverse side?

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

I also wish to receive the following services (for an extra fee):
 1. Addressee's Address
 2. Restricted Delivery
 Consult postmaster for fee.

3. Article Addressed to:
 Mr. W. Jeffrey Pardue, CEP
 Director Environmental Services
 Florida Power Corporation
 Post Office Box 14042, MAC BB1A
 St. Petersburg, Florida 33733

4a. Article Number
 Z 094 212 827

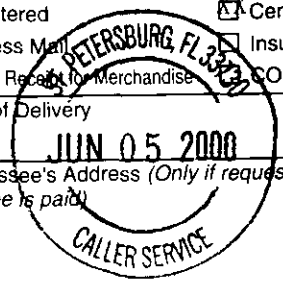
4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
 JUN 05 2000

5. Received By: (Print Name)

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

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



Thank you for using Return Receipt Service.

Z 094 212 827

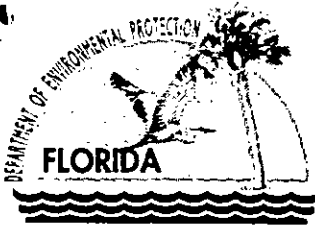
US Postal Service
Receipt for Certified Mail

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

Send to	Mr - W. Jeffrey Pardue
Street Number	Post Office Box 14042
Post Office, State, & ZIP Code	St - Petersburg, FL MAC BB1A 33733
Postage	\$ 3 3733
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	5 30 00 FPC - Hines Energy Power Block I, 1050234-002-AC

PS Form 3800, April 1995

File



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

March 23, 2000

R. Douglas Neeley, Chief
Air and Radiation Technology Branch
US EPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Request for approval of a Custom Fuel Monitoring Schedule for Florida Power Corporation - Hines Energy Complex

Dear Mr. Neeley:

Enclosed is a copy of Florida Power Corporation's (FPC) Hines Energy Complex request for approval of the use of a custom fuel monitoring schedule. FPC plans to operate two combustion turbines (CTs), 1A and 1B, that are subject to New Source Performance Standards (NSPS 40 CFR 60, Subpart GG). Each combustion turbine consist of a combined cycle Westinghouse 501F Combustion Turbine, each with a nominal generator rating of 170 MW and both incorporate an unfired heat recovery steam generator.

Please send your written comments on or approval of the applicant's proposed custom fuel monitoring schedule. The plan is based on the August 14, 1987 EPA guidance memorandum (see Attachment A). The Subpart GG limit on SO₂ emissions is 150 ppmvd @ 15% O₂ or a fuel sulfur limit of 0.8% sulfur. Neither of these limits could be conceivably be violated by use of pipeline quality natural gas which has a maximum SO₂ emission rate of 0.0006 lb/MMBTU (40 CFR 75 Appendix D Section 2.3.1.4). The sulfur content of pipeline quality natural gas in Florida has been estimated at a maximum of 0.003% sulfur. New No. 2 fuel oil having a maximum sulfur content of 0.5%, by weight, shall be used when not firing natural gas.

The Department recommends your approval of the custom fuel monitoring schedule. If you have any questions on this matter please contact me at 850/921-9585.

Sincerely,

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

CHF/sms/raw

Enclosures
FPC-Hines Energy Complex Request

cc: Scott Osbourn, FPC

"More Protection, Less Process"

Printed on recycled paper.



February 9, 2000

RECEIVED

FEB 10 2000

Mr. Clair Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Magnolia Park Courtyard
Tallahassee, FL 32301

BUREAU OF AIR REGULATION

Dear Mr. Fancy:

Re: Florida Power Corporation's Hines Energy Complex
Customized Fuel Monitoring Schedule

Florida Power Corporation (FPC) has been permitted for the use of natural gas at the above referenced site. The two combustion turbines (CTs), 1A and 1B, are subject to New Source Performance Standards (NSPS 40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any CT to monitor the sulfur and nitrogen content of the fuel as follows: 1) If the turbine fuel is supplied by a bulk storage tank, then the sulfur and nitrogen content are to be determined whenever new fuel is transferred into the bulk storage tank, and 2) If the turbine fuel is supplied without an intermediate bulk storage tank, then daily monitoring of the sulfur and nitrogen content of the fuel is required.

Since the natural gas used by the CTs does not pass through an intermediate bulk storage tank, FPC is hereby requesting a customized fuel monitoring schedule as allowed by 40 CFR 60.334(b)(2). While firing natural gas, FPC requests the following customized fuel monitoring schedule which was developed based on an EPA guidance memorandum (Attachment A):

1. Monitoring of natural gas nitrogen content shall not be required in accordance with page 2 of the EPA guidance memorandum attached.
2. Sulfur Monitoring
 - a) Analysis for sulfur content of the natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3245-81; and ASTM D4048-82 as referenced in 40 CFR 60.335(b)(2).
 - b) Effective on the approval date of the customized fuel monitoring schedule, sulfur monitoring shall be conducted twice a month for six months. If this monitoring shows little variability in the 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 the monitoring, required by 2(b) above, of the sulfur content of the natural gas shows little variability and the calculated sulfur dioxide emissions represent consistent compliance with the sulfur dioxide emission limits, specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d) Should any sulfur analysis, as required by items 2(b) or 2(c) above, indicate noncompliance with 40 CFR 60.333, FPC will notify the Department of Environmental Protection (DEP) of such excess emission and the customized fuel monitoring schedule shall be re-examined. The sulfur content of the natural gas shall be monitored weekly during the interim period while this schedule is being re-examined.
3. FPC will notify the DEP of any change in natural gas supply for re-examination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content varying by more than 10 grains/1000 of gas) shall be considered as a change in natural gas supply. Sulfur content of the natural gas will be monitored weekly during the interim period when this monitoring schedule is being re-examined.
 4. Records of sample analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPC for a period of three years, and be available for inspection by appropriate regulatory personnel.
 5. FPC will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Perry Stream 1 Lab.

Data from natural gas at the Perry Stream 1 site is considered representative of the sulfur content of the natural gas at the Hines Energy Complex site, since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas.

If you or your staff have any questions about this request, please do not hesitate to contact me at (727) 826-4258.

Sincerely,



Scott H. Osbourn
Senior Environmental Engineer

Attachments

cc/attach: Mike Harley, DEP
David McNeal, EPC Region IV

APPENDIX A

05 07-92 11:45AM FROM EPA FPS/SSCD



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

A50 14 1327

OFFICE OF
AIR AND WATERSMEMORANDUM

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

FROM: John B. Rasnic, Chief *John B. Rasnic*
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 schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

05 07-92 11:45AM FROM EPA PFS/SSCD

TO 09195413470

PC06/007

2

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 SSCD for approval.

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

Attachment

cc: John Cranshaw
Cecilia Walsh
Robert Ajax
Evel Sale

05-07-92 11:45AM FROM EPA FPS/SSCD

TO 89195413470

P007/007

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.

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
2/4/00	10:13 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0399	0.0618	0.0584	0.0780	0.0647
Propane	0.3042	0.5191	0.4072	0.4065	0.4696
Iso-Butane	0.0634	0.0996	0.0845	0.0849	0.1002
N-Butane	0.0637	0.0999	0.0867	0.0856	0.1015
Iso-Pentane	0.0210	0.0335	0.0295	0.0319	0.0349
N-Pentane	0.0136	0.0228	0.0197	0.0223	0.0231
Nitrogen	0.3152	0.5219	0.4157	0.4338	0.4240
Methane	96.8441	94.9065	95.8467	95.6607	95.3330
C02	0.7471	0.8188	0.7725	0.8190	0.7900
Ethane	1.5878	2.9161	2.2790	2.3772	2.6591
Totals	100.0000	100.0000	100.0000	100.0000	100.0000

Btu	1025.9	1039.8	1033.7	1034.8	1038.6	Dry Btu/cf @ 14.
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Gravity	0.5776	0.5898	0.5841	0.5857	0.5875	Real Relative De
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Total Sulfur	2.1598	1.9099	0.0109			PPM
	0.1350	0.1194	0.0007			Grains/hcf

Current H2O	1.0546		1.3329		2.4171	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/27/00	9:36 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0379	0.0569	0.0490	0.0610	0.0610	
Propane	0.3228	0.5049	0.4430	0.3910	0.4468	
Iso-Butane	0.0696	0.1037	0.0929	0.0863	0.0961	
N-Butane	0.0693	0.1045	0.0960	0.0885	0.0937	
Iso-Pentane	0.0182	0.0278	0.0304	0.0307	0.0302	
N-Pentane	0.0106	0.0160	0.0190	0.0209	0.0189	
Nitrogen	0.2799	0.4551	0.3635	0.3492	0.4096	
Methane	96.7553	94.9585	95.5421	95.8182	95.3860	
CO2	0.7517	0.7362	0.7637	0.8119	0.7501	
Ethane	1.6846	3.0365	2.6004	2.3423	2.7076	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>SpC</i>	<i>73.99</i>		<i>74.0</i>			
Btu	1027.3	1041.6	1037.4	1034.5	1038.4	Dry Btu/cf @ 14.
Gravity	0.5782	0.5889	0.5857	0.5845	0.5866	Real Relative De
Total Sulfur	2.4506	1.4602	0.0185			PPM
	0.1532	0.0913	0.0012			Grains/hcf
Current H2O	0.4220		0.9945		3.1768	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/19/00	8:36 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0379	0.0617	0.0535	0.0475	0.0647	
Propane	0.3841	0.5713	0.4875	0.3996	0.4669	
Iso-Butane	0.0885	0.1267	0.1048	0.0871	0.0987	
N-Butane	0.0852	0.1310	0.1045	0.0862	0.0972	
Iso-Pentane	0.0238	0.0359	0.0276	0.0274	0.0319	
N-Pentane	0.0141	0.0231	0.0173	0.0175	0.0202	
Nitrogen	0.2813	0.5276	0.4871	0.4780	0.4518	
Methane	96.4578	94.6409	95.2774	96.1293	95.3840	
CO2	0.8008	0.7079	0.7198	0.6508	0.7524	
Ethane	1.8265	3.1739	2.7207	2.0767	2.6322	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>90C</i>	<i>73.95</i>		<i>73.93</i>			
Btu	1029.8	1045.0	1038.3	1032.1	1038.1	Dry Btu/cf @ 14.
Gravity	0.5806	0.5914	0.5867	0.5817	0.5869	Real Relative De
Total Sulfur	2.1425	2.0357	2.4638			PPM
	0.1339	0.1272	0.1540			Grains/hcf
Current H2O	1.0115		2.0580		2.6243	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/14/00	1:01 PM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0276	0.0519	0.0395	0.0394	0.0485	
Propane	0.3077	0.4878	0.4875	0.3827	0.4361	
Iso-Butane	0.0651	0.1069	0.1025	0.0783	0.0870	
N-Butane	0.0717	0.1129	0.1129	0.0842	0.0893	
Iso-Pentane	0.0154	0.0293	0.0253	0.0194	0.0240	
N-Pentane	0.0097	0.0193	0.0166	0.0122	0.0147	
Nitrogen	0.2885	0.4895	0.4602	0.3406	0.4157	
Methane	96.9612	95.0759	95.3038	96.3866	95.3884	
CO2	0.7231	0.6884	0.6688	0.6345	0.7606	
Ethane	1.5300	2.9381	2.7829	2.0221	2.7355	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>°C</i>	<i>73.97</i>		<i>74.02</i>			
Btu	1025.5	1040.9	1039.4	1032.0	1037.2	Dry Btu/cf @ 14.
Gravity	0.5766	0.5881	0.5865	0.5799	0.5861	Real Relative De
Total Sulfur	3.0228	2.1775	1.8278			PPM
	0.1889	0.1361	0.1142			Grains/hcf
Current H2O	0.6559		2.1064		2.2099	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/10/00	8:17 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0371	0.0582	0.0459	0.0437	0.0544	
Propane	0.3131	0.5072	0.4489	0.3632	0.4509	
Iso-Butane	0.0670	0.0985	0.0931	0.0745	0.0896	
N-Butane	0.0656	0.0995	0.0942	0.0740	0.0889	
Iso-Pentane	0.0198	0.0307	0.0283	0.0234	0.0269	
N-Pentane	0.0116	0.0197	0.0175	0.0147	0.0167	
Nitrogen	0.2643	0.5007	0.3737	0.3059	0.4017	
Methane	96.8488	94.7209	95.5171	96.2065	95.3893	
CO2	0.7341	0.7196	0.7447	0.7325	0.7243	
Ethane	1.6387	3.2451	2.6366	2.1616	2.7574	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>% C</i>	<i>24.01</i>		<i>74.01</i>			
Btu	1027.0	1043.0	1037.7	1032.2	1038.5	Dry Btu/cf @ 14.
Gravity	0.5775	0.5900	0.5857	0.5813	0.5862	Real Relative De
Total Sulfur	0.0000	0.0000	2.1007			PPM
	0.0000	0.0000	0.1313			Grains/hcf
Current H2O	0.8492		0.0000		2.5552	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/22/99	1:32 PM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0412	0.0578	0.1010	0.0486	0.0569	
Propane	0.3546	0.4996	0.5018	0.4398	0.4036	
Iso-Butane	0.0712	0.0945	0.1502	0.0836	0.0820	
N-Butane	0.0652	0.0889	0.1499	0.0819	0.0777	
Iso-Pentane	0.0203	0.0299	0.1003	0.0291	0.0268	
N-Pentane	0.0117	0.0197	0.0999	0.0194	0.0171	
Nitrogen	0.3252	0.5014	0.4963	0.3883	0.4648	
Methane	96.4145	94.7714	95.1485	95.7549	95.4581	
C02	0.7715	0.7759	0.9989	0.7679	0.7675	
Ethane	1.9245	3.1609	2.2531	2.3865	2.6455	
Totals	100.0000	100.0000	100.0162	100.0000	100.0000	
<i>°C</i>	<i>73.93</i>		<i>73.64</i>			
Btu	1029.1	1041.3	1041.1	1034.8	1035.6	Dry Btu/cf @ 14.
Gravity	0.5801	0.5898	0.5934	0.5844	0.5857	Real Relative De
Total Sulfur	0.0000	0.0000	2.3329			PPM
	0.0000	0.0000	0.1458			Grains/hcf
Current H2O	1.0503		1.8785		1.7265	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS						
Spot Analysis of Natural Gas for Delivery in Florida						
		Date	Time			
		12/16/99	8:11 AM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0372	0.0484	0.0403	0.0338	0.0461	
Propane	0.2710	0.3993	0.3504	0.2783	0.3291	
Iso-Butane	0.0580	0.0726	0.0705	0.0581	0.0676	
N-Butane	0.0521	0.0677	0.0645	0.0526	0.0635	
Iso-Pentane	0.0201	0.0265	0.0256	0.0204	0.0232	
N-Pentane	0.0121	0.0168	0.0159	0.0130	0.0144	
Nitrogen	0.3348	0.5269	0.4476	0.3405	0.4012	
Methane	96.5959	95.1176	95.5687	96.6597	95.7989	
CO2	0.7823	0.7238	0.7745	0.5732	0.7301	
Ethane	1.8366	3.0004	2.6419	1.9705	2.5257	
Totals	100.0000	100.0000	100.0161	100.0000	100.0000	
<i>% Carbon</i>	<i>73.87</i>		<i>73.84</i>			
Btu	1026.2	1037.2	1033.5	1029.3	1033.2	Dry Btu/cf @ 14.7
Gravity	0.5785	0.5867	0.5843	0.5772	0.5829	Real Relative De
Total Sulfur	0.0000	0.0000	2.2571			PPM
	0.0000	0.0000	0.1411			Grains/hcf
Current H2O	1.0564		1.9475		2.0028	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS						
Spot Analysis of Natural Gas for Delivery in Florida						
		Date	Time			
		12/3/99	11:17 AM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0352	0.0504	0.0533	0.0710	0.0568	

Propane	0.2610	0.3680	0.3575	0.2720	0.4164	
Iso-Butane	0.0611	0.0820	0.0797	0.0643	0.0868	
N-Butane	0.0557	0.0778	0.0788	0.0631	0.0869	
Iso-Pentane	0.0216	0.0324	0.0271	0.0197	0.0305	
N-Pentane	0.0139	0.0210	0.0168	0.0112	0.0205	
Nitrogen	0.2779	0.5326	0.3790	0.2624	0.4601	
Methane	96.9383	95.2920	96.1373	96.7178	95.6113	
CO2	0.7552	0.6190	0.7031	0.9584	0.6921	
Ethane	1.5801	2.9247	2.1674	1.5601	2.5385	
Totals	100.0000	100.0000	100.0184	100.0000	100.0000	
<i>% Carbon</i>	73.95		73.99			
Btu	1025.1	1038.0	1032.5	1024.8	1036.3	Dry Btu/cf @ 14.7
Gravity	0.5768	0.5855	0.5818	0.5798	0.5849	Real Relative De
Total Sulfur	0.0000	0.0000	1.8959			PPM
	0.0000	0.0000	0.1185			Grains/hcf
Current H2O	1.2687		0.5732		2.1064	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/23/99	11:45 AM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0548	0.0552	0.0542	0.0401	0.0538	
Propane	0.3744	0.3617	0.3764	0.2823	0.4391	
Iso-Butane	0.0839	0.0796	0.0772	0.0625	0.0869	
N-Butane	0.0882	0.0789	0.0777	0.0632	0.0919	
Iso-Pentane	0.0325	0.0289	0.0288	0.0188	0.0271	
N-Pentane	0.0219	0.0194	0.0192	0.0111	0.0175	
Nitrogen	0.2725	0.5357	0.5040	0.2897	0.5056	
Methane	95.9240	95.3899	95.3164	96.8965	95.1365	
CO2	0.9590	0.7432	0.7590	0.7927	0.7130	
Ethane	2.1889	2.7075	2.7871	1.5431	2.9286	
Totals	100.0000	100.0000	100.0182	100.0000	100.0000	
<i>T_{0C}</i>	73.82		73.83			
Btu	1032.1	1035.0	1035.8	1024.9	1038.7	Dry Btu/cf @ F
Gravity	0.5845	0.5856	0.5861	0.5774	0.5872	Real Relativ
Total Sulfur	0.0000	0.0000	4.0891			PPM
	0.0000	0.0000	0.2556			Grains/hcf
Current H2O	0.6361		0.9461		2.8660	Lbs. Per

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/11/99	6:20 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components

Hexane	0.0373	0.0587	0.0527	0.0444	0.0618
Propane	0.2098	0.3702	0.3487	0.2592	0.4669
Iso-Butane	0.0493	0.0781	0.0733	0.0600	0.0960
N-Butane	0.0447	0.0732	0.0696	0.0546	0.1053
Iso-Pentane	0.0197	0.0304	0.0301	0.0236	0.0367
N-Pentane	0.0129	0.0204	0.0199	0.0151	0.0273
Nitrogen	0.2740	0.5533	0.5314	0.3408	0.5119
Methane	97.2083	95.1355	95.4265	96.7409	95.5093
CO2	0.8160	0.7168	0.7364	0.7742	0.8058
Ethane	1.3278	2.9634	2.7114	1.6871	2.3790
Totals	100.0000	100.0000	100.0205	100.0000	100.0000

% C

73.83

73.8

Btu	1021.3	1037.2	1034.5	1025.5	1035.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5753	0.5868	0.5852	0.5780	0.5867	Real Relative Density
Total Sulfur	0.0000	0.0000	4.6816			PPM
	0.0000	0.0000	0.2926			Grains/hcf
Current H2O	0.1864		1.3605		1.8992	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/3/99	11:39 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0282	0.0409	0.0473	0.0409	0.0457	
Propane	0.2682	0.3392	0.3766	0.3728	0.3245	
Iso-Butane	0.0574	0.0707	0.0723	0.0756	0.0670	
N-Butane	0.0576	0.0734	0.0766	0.0771	0.0639	
Iso-Pentane	0.0169	0.0270	0.0260	0.0267	0.0254	
N-Pentane	0.0103	0.0182	0.0172	0.0174	0.0165	
Nitrogen	0.2563	0.5170	0.4325	0.3953	0.4169	
Methane	97.1756	95.6385	95.7480	96.0127	95.7778	
C02	0.7271	0.6821	0.7464	0.6468	0.7780	
Ethane	1.4023	2.5931	2.4570	2.3348	2.4842	
Totals	100.0000	100.0000	100.0186	100.0000	100.0000	
<i>90 C</i>	<i>73.98</i>		<i>73.89</i>			
Btu	1023.8	1033.5	1033.6	1033.8	1032.3	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5753	0.5835	0.5837	0.5819	0.5833	Real Relative Density
Total Sulfur	1.0270	3.1360	2.0091			PPM
	0.0642	0.1960	0.1256			Grains/hcf
Current H2O	0.3702		3.1354		3.4530	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
10/6/99	1:21 PM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0770	0.0644	0.0634	0.0506	0.0570	
Propane	0.7735	0.5079	0.5021	0.3434	0.4663	
Iso-Butane	0.1812	0.1132	0.1054	0.0768	0.0976	
N-Butane	0.1814	0.1188	0.1145	0.0836	0.1094	
Iso-Pentane	0.0557	0.0374	0.0350	0.0265	0.0348	
N-Pentane	0.0351	0.0248	0.0236	0.0169	0.0236	
Nitrogen	0.2505	0.5217	0.4711	0.2462	0.4804	
Methane	94.8370	94.5372	94.9015	96.7198	95.2449	
CO2	0.9096	0.7324	0.7472	0.7445	0.7505	
Ethane	2.6989	3.3422	3.0361	1.6917	2.7354	
Totals	100.0000	100.0000	100.0250	100.0000	100.0000	
Btu	1049.2	1044.8	1042.3	1029.5	1038.7	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5944	0.5916	0.5897	0.5791	0.5876	Real Relative Density
Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf
Current H2O	0.0035		0.0000		6.1464	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
9/30/99	6:19 AM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0453	0.0623	0.0656	0.0502	0.0546	
Propane	0.3230	0.4867	0.5366	0.3958	0.4891	
Iso-Butane	0.0703	0.0988	0.1048	0.0892	0.1033	
N-Butane	0.0688	0.1002	0.1061	0.0870	0.1063	
Iso-Pentane	0.0248	0.0323	0.0370	0.0265	0.0316	
N-Pentane	0.0161	0.0218	0.0251	0.0168	0.0202	
Nitrogen	0.2629	0.5530	0.5011	0.2784	0.5299	
Methane	96.7850	94.6722	94.8201	96.4197	95.0949	
CO2	0.7258	0.6451	0.6423	0.7126	0.7059	
Ethane	1.6779	3.3275	3.1614	1.9239	2.8643	
Totals	100.0000	100.0000	100.0246	100.0000	100.0000	
Btu	1028.3	1043.8	1044.5	1032.4	1039.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5783	0.5899	0.5897	0.5808	0.5881	Real Relative Density
Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf
Current H2O	3.9311		0.6906		2.6934	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
9/13/99	9:38 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components

Hexane	0.0342	0.0505	0.0506	0.0402	0.0433
Propane	0.3268	0.4660	0.4270	0.3656	0.4775
Iso-Butane	0.0758	0.0962	0.0885	0.0845	0.1004
N-Butane	0.0759	0.1078	0.0994	0.0856	0.1162
Iso-Pentane	0.0204	0.0288	0.0254	0.0226	0.0299
N-Pentane	0.0122	0.0204	0.0170	0.0133	0.0210
Nitrogen	0.2509	0.4283	0.4278	0.2315	0.4610
Methane	96.8040	95.4136	95.5509	96.7469	95.4330
CO2	0.7768	0.7050	0.7115	0.7297	0.6731
Ethane	1.6229	2.6835	2.6019	1.6800	2.6446
Totals	100.0000	100.0000	100.0162	100.0000	100.0000

Btu	1027.2	1038.7	1036.9	1029.6	1038.6	Dry Btu/cf @ 14.730 psia and 60 degrees F
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Gravity	0.5782	0.5863	0.5852	0.5788	0.5861	Real Relative Density
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Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf

Current H2O	3.1777		0.9185		0.0000	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS
 Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
8/24/99	11:51 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0528	0.0612	0.0586	0.0567	0.0650	
Propane	0.4241	0.5438	0.5378	0.5112	0.5810	
Iso-Butane	0.0996	0.1243	0.1164	0.1092	0.1206	
N-Butane	0.0983	0.1489	0.1275	0.1157	0.1285	
Iso-Pentane	0.0322	0.0393	0.0340	0.0344	0.0355	
N-Pentane	0.0203	0.0277	0.0225	0.0230	0.0246	
Nitrogen	0.2609	0.4699	0.4562	0.3861	0.4664	
Methane	96.2941	95.0410	95.2362	95.5085	95.0649	
CO2	0.8763	0.6529	0.6538	0.7490	0.7047	
Ethane	1.8413	2.8909	2.7570	2.5063	2.8087	
Totals	100.0000	100.0000	100.0231	100.0000	100.0000	
Btu	1031.6	1044.1	1042.1	1039.0	1043.0	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5828	0.5894	0.5879	0.5867	0.5894	Real Relative Density
Total Sulfur	1.0090	0.4910	2.8000			PPM
	0.0631	0.0307	0.1750			Grains/hcf
Current H2O	0.5687		1.9406		0.0000	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
8/11/99	8:47 AM

	Perry 36" Stream #1 Mole%	Perry 30" Stream #2 Mole%	Brooker 24" Stream Mole%	Gainsville 8" Stream Mole%	West Palm 24" Stream Mole%	
Components						
Hexane	0.0439	0.0616	0.0590	0.0467	0.0683	
Propane	0.3392	0.4647	0.4663	0.2709	0.3989	
Iso-Butane	0.0754	0.0857	0.0925	0.0679	0.0843	
N-Butane	0.0681	0.0822	0.0930	0.0603	0.0793	
Iso-Pentane	0.0239	0.0337	0.0319	0.0246	0.0320	
N-Pentane	0.0145	0.0212	0.0219	0.0149	0.0209	
Nitrogen	0.2507	0.4662	0.4186	0.2491	0.4516	
Methane	96.7842	95.1065	95.4107	96.8029	95.3136	
C02	0.7690	0.6701	0.7057	0.7250	0.7177	
Ethane	1.6311	3.0081	2.7005	1.7377	2.8334	
Totals	100.0000	100.0000	100.0212	100.0000	100.0000	
Btu	1027.9	1041.0	1039.0	1027.9	1038.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5785	0.5875	0.5864	0.5778	0.5865	Real Relative Density
Total Sulfur	0.7570	1.0340	2.8000			PPM
	0.0473	0.0646	0.1750			Grains/hcf
Current H2O	0.5687		2.5276		0.0000	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/23/99	7:54 AM			
		Perry	Perry	Brooker	Gainsville	West Palm
		36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
		Mole%	Mole%	Mole%	Mole%	Mole%
Components						
Hexane	0.0567	0.0727	0.0746	0.0483	0.0688	
Propane	0.3312	0.4992	0.4344	0.3423	0.4705	
Iso-Butane	0.0826	0.1096	0.0970	0.0824	0.1044	
N-Butane	0.0729	0.1102	0.0897	0.0788	0.1069	
Iso-Pentane	0.0302	0.0408	0.0388	0.0274	0.0341	
N-Pentane	0.0199	0.0287	0.0279	0.0169	0.0213	
Nitrogen	0.2612	0.4524	0.4262	0.2808	0.4385	
Methane	96.5787	95.1458	95.4690	96.4521	95.2670	
CO2	0.7837	0.5658	0.6383	0.7398	0.6597	
Ethane	1.7828	2.9749	2.7041	1.9311	2.8288	
Totals	100.0000	100.0000	100.0274	100.0000	100.0000	
Btu	1029.8	1044.5	1040.2	1030.8	1041.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5801	0.5880	0.5862	0.5803	0.5874	Real Relative Density
Total Sulfur	N/A	N/A	N/A			PPM
	N/A	N/A	N/A			Grains/hcf
Current H2O	1.0961		1.2776		2.5552	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time				
		7/12/99	12:18 PM				
		Perry	Perry	Brooker	Gainsville	West Palm	
		36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
		Mole%	Mole%	Mole%	Mole%	Mole%	
Components							
Hexane	0.0570	0.0607	0.0660	0.0550	0.0655		
Propane	0.3973	0.4974	0.5038	0.4407	0.5397		
Iso-Butane	0.0906	0.0979	0.1006	0.0902	0.1040		
N-Butane	0.0919	0.1000	0.1037	0.0943	0.1048		
Iso-Pentane	0.0327	0.0309	0.0321	0.0311	0.0321		
N-Pentane	0.0220	0.0205	0.0202	0.0220	0.0213		
Nitrogen	0.2552	0.5135	0.4684	0.3387	0.4509		
Methane	96.3134	94.8700	94.9456	95.8567	94.9503		
CO2	0.8060	0.6266	0.6598	0.5187	0.6630		
Ethane	1.9338	3.1826	3.1000	2.5525	3.0683		
Totals	100.0000	100.0000	100.0211	100.0000	100.0000		
Btu	1032.6	1043.3	1043.3	1040.0	1043.8	Dry Btu/cf @ 14.730 psia and 60 degrees F	
Gravity	0.5822	0.5888	0.5889	0.5831	0.5891	Real Relative Density	
Total Sulfur	0.6920	1.4820	2.8000			PPM	
	0.0432	0.0926	0.1750			Grains/hcf	
Current H2O	1.6191	2.2928		3.1768	Lbs. Per MMcf		

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/7/99	8:33 AM			
		Perry	Perry	Brooker	Gainsville	West Palm
		36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
		Mole%	Mole%	Mole%	Mole%	Mole%
Components						
Hexane	0.0355	0.0556	0.0540	0.0543	0.0597	
Propane	0.3281	0.5068	0.4868	0.5075	0.5072	
Iso-Butane	0.0746	0.1007	0.0948	0.0947	0.0993	
N-Butane	0.0718	0.1049	0.0992	0.0984	0.1046	
Iso-Pentane	0.0207	0.0288	0.0280	0.0282	0.0288	
N-Pentane	0.0125	0.0192	0.0180	0.0187	0.0188	
Nitrogen	0.2524	0.4533	0.4500	0.4286	0.4752	
Methane	96.6698	95.1051	95.1740	95.1923	95.0719	
CO2	0.7814	0.6382	0.6491	0.7077	0.6640	
Ethane	1.7532	2.9874	2.9462	2.8697	2.9705	
Totals	100.0000	100.0000	100.0189	100.0000	100.0000	
Btu	1028.1	1042.3	1041.2	1040.6	1041.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5789	0.5878	0.5872	0.5875	0.5881	Real Relative Density
Total Sulfur	0.6920	1.4820	2.8000	PPM		
	0.0432	0.0926	0.1750	Grains/hcf		
Current H2O	1.2531		1.8646		2.9696	Lbs. Per MMcf



RECEIVED

MAR 02 2000

BUREAU OF AIR REGULATION

February 28, 2000

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Hines Energy Complex
REQUEST FOR EXTENSION OF TIME on the *Intent to Issue Initial Title V Air Permit*
Draft Permit No. 1050234-001-AV

On December 8, 1999, Florida Power Corporation (FPC) received the above-referenced *Intent to Issue Initial Title V Air Operation Permit*. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including March 31, 2000, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

Handwritten signature of W. Jeffrey Pardue in black ink.

W. Jeffrey Pardue, C.E.P.
Director, Environmental Services Department
Title V Responsible Official

Handwritten signature of Robert A. Manning in black ink.

Robert A. Manning, Esq.
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP
Doug Beason, DEP OGC

2/2/00 cc: Scott Sheplak
Russell Wider

Russell 2.10-



RECEIVED

FEB 10 2000

February 9, 2000

BUREAU OF AIR REGULATION

Scott Sheplak, P.E.
Bureau of Air Regulation
Division of Air Resources Management
Department of Environmental Protection
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

Re: Hines Energy Complex
Draft Title V Permit No.: 1050234-001-AV

Florida Power Corporation (FPC) is providing comments related to the draft Title V permit dated December 1, 1999. Our comments are directed at specific conditions for the facility and emissions units. The comments are presented below in the same order as the conditions appear in the initial draft permit. FPC has filed a *Request for Extension of Time* until February 29, 2000. In this regard, if we are unable to resolve each of the issues described below before this time, FPC intends to file an additional Request for Extension. Accordingly, at your earliest convenience after reviewing this letter, please contact me at (727) 826-4258 to discuss.

1. On the Placard Page under "Referenced attachments made a part of this permit", another two appendices should be added containing 1) a "Table of NO_x (lb/hr) vs. Inlet Temperature" and 2) a "Description of Start-up Sequence for a Two-on-One Configuration". In addition, the heat input curve, contained in the draft permit and referenced under Appendix G-1, is not the most recent version that was contained in the permit revision dated May 27, 1999 (DEP File No. 1050234-002-AC, PSD-FL-195A). A copy of this revised heat input curve, as well as the other two necessary references, are transmitted with this letter as Attachment A.
2. Subsection A, Facility Description- Delete the first sentence (because it is redundant) and revise the second sentence to read as follows: "Power Block 1 consists of two combined cycle combustion turbines, with heat recovery steam generators (HRSGs), for a nominal total of 500 MWs... Emissions from the each CT and the ~~Steam Boiler~~ HRSG combination are vented through a single stack."

3. Section III, Subsection A.- Revise the description to read as follows: "Emission units 001 and 002 each consist of ~~two~~ a combined cycle Westinghouse 501F Combustion Turbines, each with a nominal generator rating of 170 MW and a maximum heat input rating of 1,866 MMBtu/hr (LHV) while firing natural gas and 1,999 MMBtu/hr (LHV) while firing fuel oil."
4. Condition A.1- Please clarify that the heat input ratings are based on the fuel's lower heating value (LHV), by denoting as LHV. Also, below this condition, add the standard Title V language regarding the purpose of the heat input limits.
5. Condition A.3- The fuel oil sulfur content should be 0.05%, not 0.5%, by weight.
6. Condition A.5(a)- Revise the description to read as follows: "Manufacturer's curves for the NO_x emission rate correction to other temperatures at different loads shall be were provided to the DEP and are now a part of this permit (Appendix G-1) for review 90 days after selection of the CT. Subject to approval by the Department for technical validity applying sound engineering principles."
7. Page 9, footnote "g" to the emission limit table- All language after the first sentence should be deleted. This language refers to actions to be taken after the selection of the CT vendor and is no longer necessary for inclusion in the Title V permit.
8. Page 10, footnote "i"- This footnote references a date of November 1, 2000 by which the SCR system may be removed and replaced by new dry low NO_x (DLN) burners, capable of achieving the NO_x permit limit. Siemens-Westinghouse Power Corporation (SWPC, formerly Westinghouse) has supplied information (Attachment B) that indicates significant progress to date on achieving this goal, however, it is not likely that FPC could obtain and install such technology by November 1, 2000. FPC requests that the deadline date be extended by one year (to November 1, 2001) in order to allow SWPC sufficient time to further develop their DLN technology. **(It should be noted that the enclosure in Attachment B includes a request by SWPC that the contents of the attachment remain confidential.)**
9. Excess Emissions, Condition A.7- It appears that some language is missing from this condition. Beginning with the second sentence, the condition should read as follows: "During a cold start-up to combined cycle operation, up to four hours of excess emissions are allowed in a 24-hour period. Cold start-up is defined as a start-up to combined cycle operation following a steam turbine shutdown of greater than 48 hours. During a warm start-up to combined cycle operation, up to three hours of excess emissions are allowed in a 24-hour period. Warm start-up is defined as a start-up to combined cycle operation following a steam turbine shutdown lasting at least of greater than 8 hours and less than 48 hours.

10. Condition A.9- The references to 40 CFR Part 75 should be put into context with Part 60 and the word "or" should be added. The following is suggested: "...or 40 CFR Part 75, whichever is more stringent."
11. Condition A.11- Under separate cover, FPC has submitted a request for a Custom Fuel Monitoring Schedule (Attachment C). FPC requests that the permit language in Condition A.11 be revised in accordance with the letter.
12. Monitoring of Operations and Test Methods and Procedures (pages 11 and 12)- VOC emissions need to be addressed within these two sections. The appropriate test method given within the existing PSD permit is either Reference Method 18 or Method 25A. Further, mention should be made that compliance testing for VOCs was only required initially.
13. Condition A.13- The condition should read as follows: "The test methods for particulate emissions shall be either EPA Method 5 or Method 17..."
14. Condition A.18- The condition seems to imply that no testing is required for particulate matter, CO and visible emissions if liquid fuel is burned less than 400 hours per year. Is this the case, or does this language apply only to compliance testing for the fuel oil-related emission limits? The permit language needs to be made clearer in this regard.
15. Condition A.22- This condition arguably requires FPC to keep daily records of the heating value of each fuel. A recommendation to make this clearer might read as follows: "...the permittee shall maintain daily records of natural gas and fuel oil consumption for each turbine and , as well as recent records of the heating value for each fuel." Also, this condition should require record retention for five years, not two years.
16. Condition A.24- The rule cite provided (40 CFR 52.21) only applies if a PSD program is delegated and not approved, and there is disagreement as to whether this provision is in Florida's program at all. Rather, the condition should reference and cite the original permit (i.e., PSD-FL-195A).
17. Condition A.2 of the Acid Rain Permit- FPC requests that the reference to NO_x be deleted.
18. Appendix I-1. FPC requests that Item 7 be deleted as Title V is not intended to cover motor vehicles.
19. Table 1-1. The sulfur content should be corrected to 0.05% and the headings should be consistent with the PSD permit. Specifically, the term "standards" should be changed to "basis" and the heading "allowable emissions" should only be above the lb/hr and TPY columns.
20. Table 2-1. In the column entitled "CMS", what is the purpose and meaning of the term "power output"?

Mr. Sheplak
February 9, 2000
Page 4

FPC appreciates the opportunity to comment on the Initial Title V Permit. Thank you again for your prompt attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Osbourn", with a long horizontal flourish extending to the right.

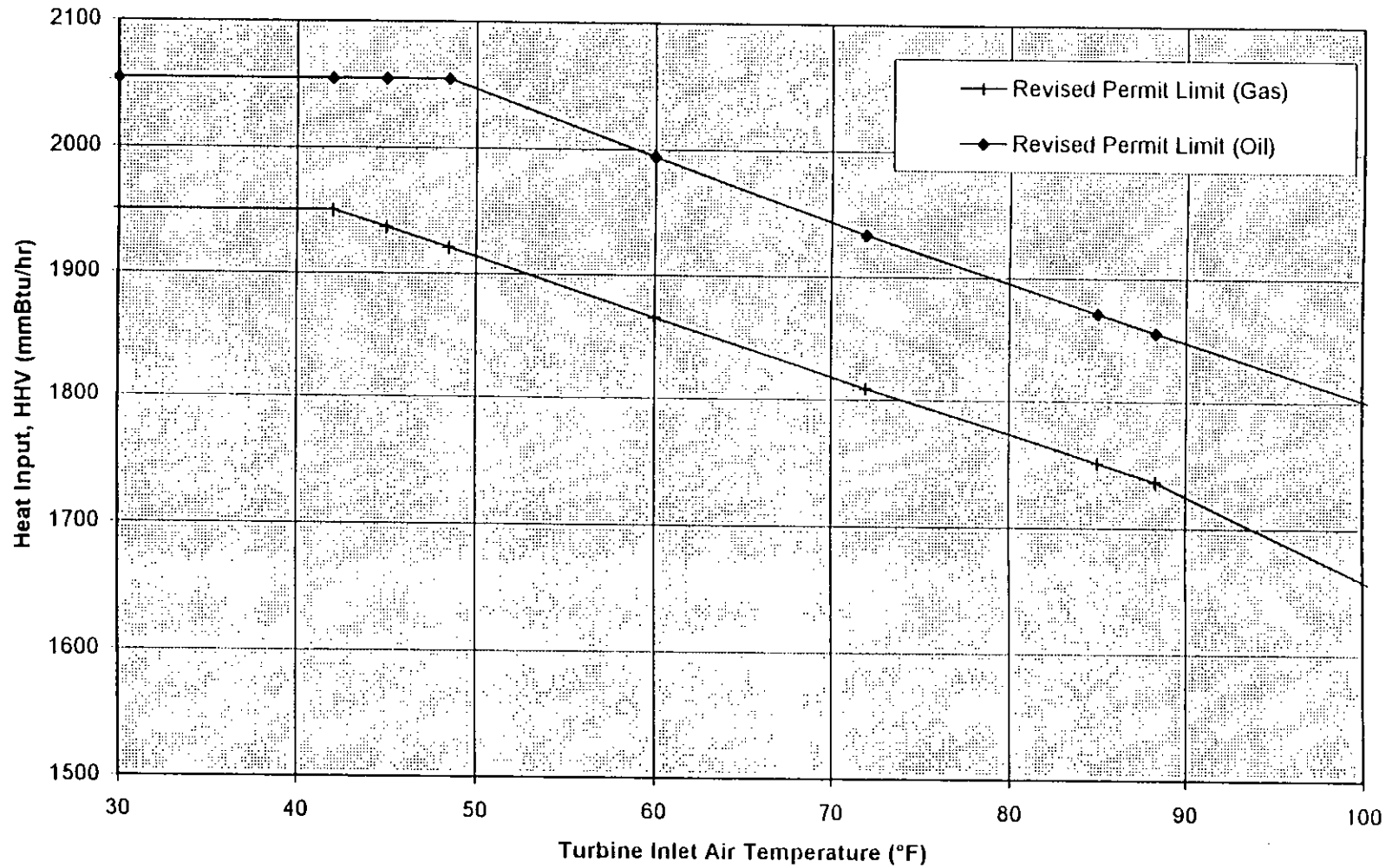
Scott H. Osbourn
Senior Environmental Engineer

Attachments

cc: Ken Kosky, P.E., Golder Assoc.
Robert Manning, HGS&S

ATTACHMENT A

Hines Energy Complex - Power Block 1
CT Heat Input, HHV (per CT) vs. Turbine Inlet Air Temperature



Florida Power Corporation - Hines Energy Project
NOx Emission Rates

Gas Fuel		Oil Fuel	
Temp. °F	NOx, lb/hr	Temp. °F	NOx, lb/hr
20	78.00	20	316.00
21	78.00	21	316.08
22	78.00	22	316.17
23	78.00	23	316.25
24	78.00	24	316.33
25	78.00	25	316.42
26	78.00	26	316.50
27	78.00	27	316.58
28	78.00	28	316.67
29	78.00	29	316.75
30	78.00	30	316.83
31	78.00	31	316.92
32	78.00	32	317.00
33	78.00	33	317.00
34	78.00	34	317.00
35	78.00	35	317.00
36	77.80	36	317.00
37	77.60	37	317.00
38	77.40	38	317.00
39	77.20	39	317.00
40	77.00	40	317.00
41	76.79	41	317.00
42	76.58	42	317.00
43	76.37	43	317.00
44	76.16	44	316.25
45	75.95	45	315.50
46	75.74	46	314.75
47	75.53	47	314.00
48	75.32	48	313.25
49	75.11	49	312.50
50	74.89	50	311.75
51	74.68	51	311.00
52	74.47	52	310.25
53	74.26	53	309.50
54	74.05	54	308.75
55	73.84	55	308.00
56	73.63	56	307.25
57	73.42	57	306.50
58	73.21	58	305.75
59	73.00	59	305.00
60	72.85	60	304.46
61	72.69	61	303.92
62	72.54	62	303.38
63	72.38	63	302.85
64	72.23	64	302.31
65	72.08	65	301.77
66	71.92	66	301.23
67	71.77	67	300.69

Florida Power Corporation - Hines Energy Project
NOx Emission Rates

68	71.62	68	300.15
69	71.46	69	299.62
70	71.31	70	299.08
71	71.15	71	298.54
72	71.00	72	298.00
73	70.86	73	297.23
74	70.71	74	296.46
75	70.57	75	295.69
76	70.43	76	294.92
77	70.29	77	294.15
78	70.14	78	293.38
79	70.00	79	292.62
80	69.83	80	291.85
81	69.67	81	291.08
82	69.50	82	290.31
83	69.33	83	289.54
84	69.17	84	288.77
85	69.00	85	288.00
86	68.80	86	287.30
87	68.60	87	286.60
88	68.40	88	285.90
89	68.20	89	285.20
90	68.00	90	284.50
91	67.80	91	283.80
92	67.60	92	283.10
93	67.40	93	282.40
94	67.20	94	281.70
95	67.00	95	281.00

HINES ENERGY COMPLEX

Start-up Sequence for Two-on-One Configuration

Start-up of a two-on-one (2 x 1) configuration (i.e., 2 CTs and 1 ST) combined cycle unit requires the integration of 3 independent processes. A simple cycle CT mode, a steam turbine cycle, and the combined cycle mode (which includes either 1 x 1 operation or 2 x 1 operation), are the three processes to be started and synchronized. The 2 x 1 combined cycle mode is the most complex and, therefore, the most conservative to consider in this discussion.

Step 1 – Cold start * of each CT/ HRSG requires approximately 1 hour of firing to stabilize process temperatures at about 20 to 30 percent CT megawatt load. (In the 2 x 1 configuration, there would be a slight lag time between start-up of the first CT and the second CT.) This represents the approximate CT load for heating the HRSG steam in order to attain the necessary HRSG steam energy for the process to become stable and controllable. (Warm start * time requirement is the same for this step.)

Step 2 – Approximately 1 hour is required to match steam turbine metal temperatures to the CT/HRSG steam process, and to achieve steam purity. The steam piping to and from the steam turbine as well as the massive steam turbine shell metals must all be warmed up and be within allowable temperature differentials before proceeding to roll the steam turbine, or significant damage will occur.

Step 3 – Approximately 2 hours to roll and hold the steam turbine in accordance with manufacturers' instructions to raise steam and metal temperatures and raise MW output of both each CT and ST. The CT load must be held to maintain the steam energy to the steam turbine. The steam turbine must be ramped up slowly to avoid thermal stresses per the OEM instructions. Turbine life could be significantly reduced if these instructions were not followed. Several hold points must be observed while ramping up in order to "soak" the turbine. More steam can be routed to the turbine, once its synchronized to the grid.

Step 4 – Raise loading of CT to compliance per manufactures' recommendations.

A 3-hour start (termed a warm start) is a Step 3, shortened from 2 hours to 1 hour.

* **Note – Cold start = steam turbine 1st stage throttle temp <400°F (corresponds to a start following a shutdown > 48 hours).**

– **Warm start = steam turbine 1st stage throttle temp of 400-800°F (corresponds to a start following a shutdown > 8 hours and less than 48 hours).**

– **Hot start = steam turbine 1st stage throttle temp >800°F (corresponds to a start following a shutdown < 8 hours).**

ATTACHMENT B

ATTACHMENT C



February 9, 2000

Mr. Clair Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Magnolia Park Courtyard
Tallahassee, FL 32301

Dear Mr. Fancy:

Re: Florida Power Corporation's Hines Energy Complex
Customized Fuel Monitoring Schedule

Florida Power Corporation (FPC) has been permitted for the use of natural gas at the above referenced site. The two combustion turbines (CTs), 1A and 1B, are subject to New Source Performance Standards (NSPS 40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any CT to monitor the sulfur and nitrogen content of the fuel as follows: 1) If the turbine fuel is supplied by a bulk storage tank, then the sulfur and nitrogen content are to be determined whenever new fuel is transferred into the bulk storage tank, and 2) If the turbine fuel is supplied without an intermediate bulk storage tank, then daily monitoring of the sulfur and nitrogen content of the fuel is required.

Since the natural gas used by the CTs does not pass through an intermediate bulk storage tank, FPC is hereby requesting a customized fuel monitoring schedule as allowed by 40 CFR 60.334(b)(2). While firing natural gas, FPC requests the following customized fuel monitoring schedule which was developed based on an EPA guidance memorandum (Attachment A):

1. Monitoring of natural gas nitrogen content shall not be required in accordance with page 2 of the EPA guidance memorandum attached.
2. Sulfur Monitoring
 - a) Analysis for sulfur content of the natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3245-81; and ASTM D4048-82 as referenced in 40 CFR 60.335(b)(2).
 - b) Effective on the approval date of the customized fuel monitoring schedule, sulfur monitoring shall be conducted twice a month for six months. If this monitoring shows little variability in the 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 the monitoring, required by 2(b) above, of the sulfur content of the natural gas shows little variability and the calculated sulfur dioxide emissions represent consistent compliance with the sulfur dioxide emission limits, specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d) Should any sulfur analysis, as required by items 2(b) or 2(c) above, indicate noncompliance with 40 CFR 60.333, FPC will notify the Department of Environmental Protection (DEP) of such excess emission and the customized fuel monitoring schedule shall be re-examined. The sulfur content of the natural gas shall be monitored weekly during the interim period while this schedule is being re-examined.
3. FPC will notify the DEP of any change in natural gas supply for re-examination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content varying by more than 10 grains/1000 of gas) shall be considered as a change in natural gas supply. Sulfur content of the natural gas will be monitored weekly during the interim period when this monitoring schedule is being re-examined.
 4. Records of sample analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPC for a period of three years, and be available for inspection by appropriate regulatory personnel.
 5. FPC will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Perry Stream 1 Lab.

Data from natural gas at the Perry Stream 1 site is considered representative of the sulfur content of the natural gas at the Hines Energy Complex site, since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas.

If you or your staff have any questions about this request, please do not hesitate to contact me at (727) 826-4258.

Sincerely,



Scott H. Osbourn
Senior Environmental Engineer

Attachments

cc/attach: Mike Harley, DEP
David McNeal, EPC Region IV

APPENDIX A

05 07-92 11:45AM FROM EPA FPS/SSCD



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

AUG 14 1992

OFFICE OF
AIR AND STRATEGICMEMORANDUM

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

FROM: John B. Rasnic, Chief *John B. Rasnic*
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 schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

05 07-92 11:45AM FROM EPA PFS/SSCD

TO 09195413470

PC06/007

2

be bimonthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with §60.133 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 SSCD for approval.

If you have any questions, please contact Sally M. Farsell at PFS 382-2675.

Attachment

cc: John Cranshaw
George Walsh
Robert Ajax
David Sale

05-07-92 11:45AM FROM EPA FPS/SSCD

TO 89195413470

P007/007

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.

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
2/4/00	10:13 AM

	Perry	Perry	Brooker	Gainsville	West Palm
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
	Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0399	0.0618	0.0584	0.0780	0.0647
Propane	0.3042	0.5191	0.4072	0.4065	0.4696
Iso-Butane	0.0634	0.0996	0.0845	0.0849	0.1002
N-Butane	0.0637	0.0999	0.0867	0.0856	0.1015
Iso-Pentane	0.0210	0.0335	0.0295	0.0319	0.0349
N-Pentane	0.0136	0.0228	0.0197	0.0223	0.0231
Nitrogen	0.3152	0.5219	0.4157	0.4338	0.4240
Methane	96.8441	94.9065	95.8467	95.6607	95.3330
CO2	0.7471	0.8188	0.7725	0.8190	0.7900
Ethane	1.5878	2.9161	2.2790	2.3772	2.6591
Totals	100.0000	100.0000	100.0000	100.0000	100.0000

Btu	1025.9	1039.8	1033.7	1034.8	1038.6	Dry Btu/cf @ 14.
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Gravity	0.5776	0.5898	0.5841	0.5857	0.5875	Real Relative De
---------	--------	--------	--------	--------	--------	------------------

Total Sulfur	2.1598	1.9099	0.0109			PPM
	0.1350	0.1194	0.0007			Grains/hcf

Current H2O	1.0546		1.3329		2.4171	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/27/00	9:36 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components

Hexane	0.0379	0.0569	0.0490	0.0610	0.0610
Propane	0.3228	0.5049	0.4430	0.3910	0.4468
Iso-Butane	0.0696	0.1037	0.0929	0.0863	0.0961
N-Butane	0.0693	0.1045	0.0960	0.0885	0.0937
Iso-Pentane	0.0182	0.0278	0.0304	0.0307	0.0302
N-Pentane	0.0106	0.0160	0.0190	0.0209	0.0189
Nitrogen	0.2799	0.4551	0.3635	0.3492	0.4096
Methane	96.7553	94.9585	95.5421	95.8182	95.3860
CO2	0.7517	0.7362	0.7637	0.8119	0.7501
Ethane	1.6846	3.0365	2.6004	2.3423	2.7076
Totals	100.0000	100.0000	100.0000	100.0000	100.0000

73.98 *74.0*

Btu	1027.3	1041.6	1037.4	1034.5	1038.4	Dry Btu/cf @ 14.
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Gravity	0.5782	0.5889	0.5857	0.5845	0.5866	Real Relative De
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Total Sulfur	2.4506	1.4602	0.0185	PPM	
	0.1532	0.0913	0.0012	Grains/hcf	

Current H2O	0.4220		0.9945		3.1768	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS
 FGT SYSTEM CHROMATOGRAPHS
 Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/19/00	8:36 AM

	Perry	Perry	Brooker	Gainsville	West Palm
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
	Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0379	0.0617	0.0535	0.0475	0.0647	
Propane	0.3841	0.5713	0.4875	0.3996	0.4669	
Iso-Butane	0.0885	0.1267	0.1048	0.0871	0.0987	
N-Butane	0.0852	0.1310	0.1045	0.0862	0.0972	
Iso-Pentane	0.0238	0.0359	0.0276	0.0274	0.0319	
N-Pentane	0.0141	0.0231	0.0173	0.0175	0.0202	
Nitrogen	0.2813	0.5276	0.4871	0.4780	0.4518	
Methane	96.4578	94.6409	95.2774	96.1293	95.3840	
CO2	0.8008	0.7079	0.7198	0.6508	0.7524	
Ethane	1.8265	3.1739	2.7207	2.0767	2.6322	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>γ_{oC}</i>	<i>73.95</i>		<i>73.93</i>			
Btu	1029.8	1045.0	1038.3	1032.1	1038.1	Dry Btu/cf @ 14.
Gravity	0.5806	0.5914	0.5867	0.5817	0.5869	Real Relative De
Total Sulfur	2.1425	2.0357	2.4638			PPM
	0.1339	0.1272	0.1540			Grains/hcf
Current H2O	1.0115		2.0580		2.6243	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/14/00	1:01 PM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0276	0.0519	0.0395	0.0394	0.0485
Propane	0.3077	0.4878	0.4875	0.3827	0.4361
Iso-Butane	0.0651	0.1069	0.1025	0.0783	0.0870
N-Butane	0.0717	0.1129	0.1129	0.0842	0.0893
Iso-Pentane	0.0154	0.0293	0.0253	0.0194	0.0240
N-Pentane	0.0097	0.0193	0.0166	0.0122	0.0147
Nitrogen	0.2885	0.4895	0.4602	0.3406	0.4157
Methane	96.9612	95.0759	95.3038	96.3866	95.3884
CO2	0.7231	0.6884	0.6688	0.6345	0.7606
Ethane	1.5300	2.9381	2.7829	2.0221	2.7355
Totals	100.0000	100.0000	100.0000	100.0000	100.0000

70 C 73.97 74.02

Btu	1025.5	1040.9	1039.4	1032.0	1037.2	Dry Btu/cf @ 14.
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Gravity	0.5766	0.5881	0.5865	0.5799	0.5861	Real Relative De
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Total Sulfur	3.0228	2.1775	1.8278
	0.1889	0.1361	0.1142

PPM
Grains/hcf

Current H2O	0.6559	2.1064	2.2099	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/10/00	8:17 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0371	0.0582	0.0459	0.0437	0.0544	
Propane	0.3131	0.5072	0.4489	0.3632	0.4509	
Iso-Butane	0.0670	0.0985	0.0931	0.0745	0.0896	
N-Butane	0.0656	0.0995	0.0942	0.0740	0.0889	
Iso-Pentane	0.0198	0.0307	0.0283	0.0234	0.0269	
N-Pentane	0.0116	0.0197	0.0175	0.0147	0.0167	
Nitrogen	0.2643	0.5007	0.3737	0.3059	0.4017	
Methane	96.8488	94.7209	95.5171	96.2065	95.3893	
CO2	0.7341	0.7196	0.7447	0.7325	0.7243	
Ethane	1.6387	3.2451	2.6366	2.1616	2.7574	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>g, c</i>	<i>74.01</i>		<i>74.01</i>			
Btu	1027.0	1043.0	1037.7	1032.2	1038.5	Dry Btu/cf @ 14.
Gravity	0.5775	0.5900	0.5857	0.5813	0.5862	Real Relative De
Total Sulfur	0.0000	0.0000	2.1007			PPM
	0.0000	0.0000	0.1313			Grains/hcf
Current H2O	0.8492		0.0000		2.5552	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/22/99	1:32 PM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0412	0.0578	0.1010	0.0486	0.0569	
Propane	0.3546	0.4996	0.5018	0.4398	0.4036	
Iso-Butane	0.0712	0.0945	0.1502	0.0836	0.0820	
N-Butane	0.0652	0.0889	0.1499	0.0819	0.0777	
Iso-Pentane	0.0203	0.0299	0.1003	0.0291	0.0268	
N-Pentane	0.0117	0.0197	0.0999	0.0194	0.0171	
Nitrogen	0.3252	0.5014	0.4963	0.3883	0.4648	
Methane	96.4145	94.7714	95.1485	95.7549	95.4581	
CO2	0.7715	0.7759	0.9989	0.7679	0.7675	
Ethane	1.9245	3.1609	2.2531	2.3865	2.6455	
Totals	100.0000	100.0000	100.0162	100.0000	100.0000	
<i>73.93</i> Btu	1029.1	1041.3	1041.1	1034.8	1035.6	Dry Btu/cf @ 14.
Gravity	0.5801	0.5898	0.5934	0.5844	0.5857	Real Relative De
Total Sulfur	0.0000	0.0000	2.3329			PPM
	0.0000	0.0000	0.1458			Grains/hcf
Current H2O	1.0503		1.8785		1.7265	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/16/99	8:11 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0372	0.0484	0.0403	0.0338	0.0461	
Propane	0.2710	0.3993	0.3504	0.2783	0.3291	
Iso-Butane	0.0580	0.0726	0.0705	0.0581	0.0676	
N-Butane	0.0521	0.0677	0.0645	0.0526	0.0635	
Iso-Pentane	0.0201	0.0265	0.0256	0.0204	0.0232	
N-Pentane	0.0121	0.0168	0.0159	0.0130	0.0144	
Nitrogen	0.3348	0.5269	0.4476	0.3405	0.4012	
Methane	96.5959	95.1176	95.5687	96.6597	95.7989	
CO2	0.7823	0.7238	0.7745	0.5732	0.7301	
Ethane	1.8366	3.0004	2.6419	1.9705	2.5257	
Totals	100.0000	100.0000	100.0161	100.0000	100.0000	
<i>% Carbon</i>	73.87		73.84			
Btu	1026.2	1037.2	1033.5	1029.3	1033.2	Dry Btu/cf @ 14.7
Gravity	0.5785	0.5867	0.5843	0.5772	0.5829	Real Relative De
Total Sulfur	0.0000	0.0000	2.2571			PPM
	0.0000	0.0000	0.1411			Grains/hcf
Current H2O	1.0564		1.9475		2.0028	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/3/99	11:17 AM

	Perry	Perry	Brooker	Gainsville	West Palm
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
	Mole%	Mole%	Mole%	Mole%	Mole%
Components					
Hexane	0.0352	0.0504	0.0533	0.0710	0.0568

Propane	0.2610	0.3680	0.3575	0.2720	0.4164	
Iso-Butane	0.0611	0.0820	0.0797	0.0643	0.0868	
N-Butane	0.0557	0.0778	0.0788	0.0631	0.0869	
Iso-Pentane	0.0216	0.0324	0.0271	0.0197	0.0305	
N-Pentane	0.0139	0.0210	0.0168	0.0112	0.0205	
Nitrogen	0.2779	0.5326	0.3790	0.2624	0.4601	
Methane	96.9383	95.2920	96.1373	96.7178	95.6113	
CO2	0.7552	0.6190	0.7031	0.9584	0.6921	
Ethane	1.5801	2.9247	2.1674	1.5601	2.5385	
Totals	100.0000	100.0000	100.0184	100.0000	100.0000	
<i>% Carbon</i>	73.95		73.99			
Btu	1025.1	1038.0	1032.5	1024.8	1036.3	Dry Btu/cf @ 14.7
Gravity	0.5768	0.5855	0.5818	0.5798	0.5849	Real Relative De
Total Sulfur	0.0000	0.0000	1.8959			PPM
	0.0000	0.0000	0.1185			Grains/hcf
Current H2O	1.2687		0.5732		2.1064	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/23/99	11:45 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0548	0.0552	0.0542	0.0401	0.0538	
Propane	0.3744	0.3617	0.3764	0.2823	0.4391	
Iso-Butane	0.0839	0.0796	0.0772	0.0625	0.0869	
N-Butane	0.0882	0.0789	0.0777	0.0632	0.0919	
Iso-Pentane	0.0325	0.0289	0.0288	0.0188	0.0271	
N-Pentane	0.0219	0.0194	0.0192	0.0111	0.0175	
Nitrogen	0.2725	0.5357	0.5040	0.2897	0.5056	
Methane	95.9240	95.3899	95.3164	96.8965	95.1365	
CO2	0.9590	0.7432	0.7590	0.7927	0.7130	
Ethane	2.1889	2.7075	2.7871	1.5431	2.9286	
Totals	100.0000	100.0000	100.0182	100.0000	100.0000	
<i>70C</i>	<i>73.82</i>		<i>73.83</i>			
Btu	1032.1	1035.0	1035.8	1024.9	1038.7	Dry Btu/cf @ F
Gravity	0.5845	0.5856	0.5861	0.5774	0.5872	Real Relativ
Total Sulfur	0.0000	0.0000	4.0891			PPM
	0.0000	0.0000	0.2556			Grains/hcf
Current H2O	0.6361		0.9461		2.8660	Lbs. Per

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/11/99	6:20 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0373	0.0587	0.0527	0.0444	0.0618
Propane	0.2098	0.3702	0.3487	0.2592	0.4669
Iso-Butane	0.0493	0.0781	0.0733	0.0600	0.0960
N-Butane	0.0447	0.0732	0.0696	0.0546	0.1053
Iso-Pentane	0.0197	0.0304	0.0301	0.0236	0.0367
N-Pentane	0.0129	0.0204	0.0199	0.0151	0.0273
Nitrogen	0.2740	0.5533	0.5314	0.3408	0.5119
Methane	97.2083	95.1355	95.4265	96.7409	95.5093
CO2	0.8160	0.7168	0.7364	0.7742	0.8058
Ethane	1.3278	2.9634	2.7114	1.6871	2.3790
Totals	100.0000	100.0000	100.0205	100.0000	100.0000

73.8 73.83 73.8

Btu	1021.3	1037.2	1034.5	1025.5	1035.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
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Gravity	0.5753	0.5868	0.5852	0.5780	0.5867	Real Relative Density
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Total Sulfur	0.0000	0.0000	4.6816			PPM
	0.0000	0.0000	0.2926			Grains/hcf

Current H2O	0.1864		1.3605		1.8992	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/3/99	11:39 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0282	0.0409	0.0473	0.0409	0.0457	
Propane	0.2682	0.3392	0.3766	0.3728	0.3245	
Iso-Butane	0.0574	0.0707	0.0723	0.0756	0.0670	
N-Butane	0.0576	0.0734	0.0766	0.0771	0.0639	
Iso-Pentane	0.0169	0.0270	0.0260	0.0267	0.0254	
N-Pentane	0.0103	0.0182	0.0172	0.0174	0.0165	
Nitrogen	0.2563	0.5170	0.4325	0.3953	0.4169	
Methane	97.1756	95.6385	95.7480	96.0127	95.7778	
CO2	0.7271	0.6821	0.7464	0.6468	0.7780	
Ethane	1.4023	2.5931	2.4570	2.3348	2.4842	
Totals	100.0000	100.0000	100.0186	100.0000	100.0000	
<i>90 c</i>	<i>73.98</i>		<i>73.89</i>			
Btu	1023.8	1033.5	1033.6	1033.8	1032.3	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5753	0.5835	0.5837	0.5819	0.5833	Real Relative Density
Total Sulfur	1.0270	3.1360	2.0091			PPM
	0.0642	0.1960	0.1256			Grains/hcf
Current H2O	0.3702		3.1354		3.4530	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
10/6/99	1:21 PM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0770	0.0644	0.0634	0.0506	0.0570
Propane	0.7735	0.5079	0.5021	0.3434	0.4663
Iso-Butane	0.1812	0.1132	0.1054	0.0768	0.0976
N-Butane	0.1814	0.1188	0.1145	0.0836	0.1094
Iso-Pentane	0.0557	0.0374	0.0350	0.0265	0.0348
N-Pentane	0.0351	0.0248	0.0236	0.0169	0.0236
Nitrogen	0.2505	0.5217	0.4711	0.2462	0.4804
Methane	94.8370	94.5372	94.9015	96.7198	95.2449
CO2	0.9096	0.7324	0.7472	0.7445	0.7505
Ethane	2.6989	3.3422	3.0361	1.6917	2.7354
Totals	100.0000	100.0000	100.0250	100.0000	100.0000

Btu	1049.2	1044.8	1042.3	1029.5	1038.7	Dry Btu/cf @ 14.730 psia and 60 degrees F
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Gravity	0.5944	0.5916	0.5897	0.5791	0.5876	Real Relative Density
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Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf

Current H2O	0.0035		0.0000		6.1464	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
9/30/99	6:19 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0453	0.0623	0.0656	0.0502	0.0546	
Propane	0.3230	0.4867	0.5366	0.3958	0.4891	
Iso-Butane	0.0703	0.0988	0.1048	0.0892	0.1033	
N-Butane	0.0688	0.1002	0.1061	0.0870	0.1063	
Iso-Pentane	0.0248	0.0323	0.0370	0.0265	0.0316	
N-Pentane	0.0161	0.0218	0.0251	0.0168	0.0202	
Nitrogen	0.2629	0.5530	0.5011	0.2784	0.5299	
Methane	96.7850	94.6722	94.8201	96.4197	95.0949	
CO2	0.7258	0.6451	0.6423	0.7126	0.7059	
Ethane	1.6779	3.3275	3.1614	1.9239	2.8643	
Totals	100.0000	100.0000	100.0246	100.0000	100.0000	
Btu	1028.3	1043.8	1044.5	1032.4	1039.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5783	0.5899	0.5897	0.5808	0.5881	Real Relative Density
Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf
Current H2O	3.9311		0.6906		2.6934	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
9/13/99	9:38 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0342	0.0505	0.0506	0.0402	0.0433
Propane	0.3268	0.4660	0.4270	0.3656	0.4775
Iso-Butane	0.0758	0.0962	0.0885	0.0845	0.1004
N-Butane	0.0759	0.1078	0.0994	0.0856	0.1162
Iso-Pentane	0.0204	0.0288	0.0254	0.0226	0.0299
N-Pentane	0.0122	0.0204	0.0170	0.0133	0.0210
Nitrogen	0.2509	0.4283	0.4278	0.2315	0.4610
Methane	96.8040	95.4136	95.5509	96.7469	95.4330
CO2	0.7768	0.7050	0.7115	0.7297	0.6731
Ethane	1.6229	2.6835	2.6019	1.6800	2.6446
Totals	100.0000	100.0000	100.0162	100.0000	100.0000

Btu	1027.2	1038.7	1036.9	1029.6	1038.6	Dry Btu/cf @ 14.730 psia and 60 degrees F
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Gravity	0.5782	0.5863	0.5852	0.5788	0.5861	Real Relative Density
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Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf

Current H2O	3.1777		0.9185		0.0000	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
8/24/99	11:51 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0528	0.0612	0.0586	0.0567	0.0650	
Propane	0.4241	0.5438	0.5378	0.5112	0.5810	
Iso-Butane	0.0996	0.1243	0.1164	0.1092	0.1206	
N-Butane	0.0983	0.1489	0.1275	0.1157	0.1285	
Iso-Pentane	0.0322	0.0393	0.0340	0.0344	0.0355	
N-Pentane	0.0203	0.0277	0.0225	0.0230	0.0246	
Nitrogen	0.2609	0.4699	0.4562	0.3861	0.4664	
Methane	96.2941	95.0410	95.2362	95.5085	95.0649	
CO2	0.8763	0.6529	0.6538	0.7490	0.7047	
Ethane	1.8413	2.8909	2.7570	2.5063	2.8087	
Totals	100.0000	100.0000	100.0231	100.0000	100.0000	
Btu	1031.6	1044.1	1042.1	1039.0	1043.0	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5828	0.5894	0.5879	0.5867	0.5894	Real Relative Density
Total Sulfur	1.0090	0.4910	2.8000			PPM
	0.0631	0.0307	0.1750			Grains/hcf
Current H2O	0.5687		1.9406		0.0000	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
8/11/99	8:47 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0439	0.0616	0.0590	0.0467	0.0683	
Propane	0.3392	0.4647	0.4663	0.2709	0.3989	
Iso-Butane	0.0754	0.0857	0.0925	0.0679	0.0843	
N-Butane	0.0681	0.0822	0.0930	0.0603	0.0793	
Iso-Pentane	0.0239	0.0337	0.0319	0.0246	0.0320	
N-Pentane	0.0145	0.0212	0.0219	0.0149	0.0209	
Nitrogen	0.2507	0.4662	0.4186	0.2491	0.4516	
Methane	96.7842	95.1065	95.4107	96.8029	95.3136	
CO2	0.7690	0.6701	0.7057	0.7250	0.7177	
Ethane	1.6311	3.0081	2.7005	1.7377	2.8334	
Totals	100.0000	100.0000	100.0212	100.0000	100.0000	
Btu	1027.9	1041.0	1039.0	1027.9	1038.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5785	0.5875	0.5864	0.5778	0.5865	Real Relative Density
Total Sulfur	0.7570	1.0340	2.8000			PPM
	0.0473	0.0646	0.1750			Grains/hcf
Current H2O	0.5687		2.5276		0.0000	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/23/99	7:54 AM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0567	0.0727	0.0746	0.0483	0.0688	
Propane	0.3312	0.4992	0.4344	0.3423	0.4705	
Iso-Butane	0.0826	0.1096	0.0970	0.0824	0.1044	
N-Butane	0.0729	0.1102	0.0897	0.0788	0.1069	
Iso-Pentane	0.0302	0.0408	0.0388	0.0274	0.0341	
N-Pentane	0.0199	0.0287	0.0279	0.0169	0.0213	
Nitrogen	0.2612	0.4524	0.4262	0.2808	0.4385	
Methane	96.5787	95.1458	95.4690	96.4521	95.2670	
CO2	0.7837	0.5658	0.6383	0.7398	0.6597	
Ethane	1.7828	2.9749	2.7041	1.9311	2.8288	
Totals	100.0000	100.0000	100.0274	100.0000	100.0000	
Btu	1029.8	1044.5	1040.2	1030.8	1041.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5801	0.5880	0.5862	0.5803	0.5874	Real Relative Density
Total Sulfur	N/A	N/A	N/A			PPM
	N/A	N/A	N/A			Grains/hcf
Current H2O	1.0961		1.2776		2.5552	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/12/99	12:18 PM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0570	0.0607	0.0660	0.0550	0.0655	
Propane	0.3973	0.4974	0.5038	0.4407	0.5397	
Iso-Butane	0.0906	0.0979	0.1006	0.0902	0.1040	
N-Butane	0.0919	0.1000	0.1037	0.0943	0.1048	
Iso-Pentane	0.0327	0.0309	0.0321	0.0311	0.0321	
N-Pentane	0.0220	0.0205	0.0202	0.0220	0.0213	
Nitrogen	0.2552	0.5135	0.4684	0.3387	0.4509	
Methane	96.3134	94.8700	94.9456	95.8567	94.9503	
CO2	0.8060	0.6266	0.6598	0.5187	0.6630	
Ethane	1.9338	3.1826	3.1000	2.5525	3.0683	
Totals	100.0000	100.0000	100.0211	100.0000	100.0000	
Btu	1032.6	1043.3	1043.3	1040.0	1043.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5822	0.5888	0.5889	0.5831	0.5891	Real Relative Density
Total Sulfur	0.6920	1.4820	2.8000			PPM
	0.0432	0.0926	0.1750			Grains/hcf
Current H2O	1.6191	2.2928		3.1768	Lbs. Per MMcf	

FGT SYSTEM CHROMATOGRAMS

Spot Analysis of Natural Gas for Delivery in Florida

	Date	Time				
	7/7/99	8:33 AM				
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0355	0.0556	0.0540	0.0543	0.0597	
Propane	0.3281	0.5068	0.4868	0.5075	0.5072	
Iso-Butane	0.0746	0.1007	0.0948	0.0947	0.0993	
N-Butane	0.0718	0.1049	0.0992	0.0984	0.1046	
Iso-Pentane	0.0207	0.0288	0.0280	0.0282	0.0288	
N-Pentane	0.0125	0.0192	0.0180	0.0187	0.0188	
Nitrogen	0.2524	0.4533	0.4500	0.4286	0.4752	
Methane	96.6698	95.1051	95.1740	95.1923	95.0719	
CO2	0.7814	0.6382	0.6491	0.7077	0.6640	
Ethane	1.7532	2.9874	2.9462	2.8697	2.9705	
Totals	100.0000	100.0000	100.0189	100.0000	100.0000	
Btu	1028.1	1042.3	1041.2	1040.6	1041.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5789	0.5878	0.5872	0.5875	0.5881	Real Relative Density
Total Sulfur	0.6920	1.4820	2.8000	PPM		
	0.0432	0.0926	0.1750	Grains/hcf		
Current H2O	1.2531		1.8646	2.9696	Lbs. Per MMcf	

RECEIVED

FEB 10 2000

BUREAU OF AIR REGULATION

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 29-Feb-2000 10:15am
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 850/921-9523

To: Scott.H.Osbourn (Scott.H.Osbourn@fpc.com)
CC: Russell Wider TAL (WIDER_R)
CC: Scott Sheplak TAL (SHEPLAK_S)

Subject: Re: FPC Hines

Scott. Earlier I advised Mike Kennedy by E-Mail that it might be necessary to request a PSD permit modification to change the date by which the SCR units can be replaced by more advanced DLN technology at Hines. That is to say that it doesn't look like the Title V program can change that date via issuance of the Title V permit.

Nevertheless, I asked the Title V Section to explain the matter in their review of the changes requested on the draft Title V permit. I provided technical input on the subject based on recent permitting experience on Westinghouse 501F combustion turbines. You can then decide whether you want to submit an application to revise the PSD permit based on their response to Item 8 of the February 9 letter.

Thanks. Al Linero.

INTEROFFICE MEMORANDUM

Sensitivity: COMPANY CONFIDENTIAL

Date: 29-Feb-2000 10:01am
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 850/921-9523

To: Russell Wider TAL (WIDER_R)
CC: Scott Sheplak TAL (SHEPLAK_S)

Subject: FPC Hines Draft Title V Permit

Russ. I reviewed item 8 in the letter of February 9, 2000 that provided FPC's comments on the draft Title V permit for the nominal 500 MW FPC Hines Energy Complex.

The facility is presently operating under its revised construction permit as modified in 1998. To act on Item 8 will require that they submit a specific request to modify that permit.

However, you might as well advise them when you address their other requests in Items 1 through 20 that we do not have reasonable assurance that Seimens-Westinghouse will be able to install Dry Low NOx technology capable of achieving 12 ppmvd by November 1, 2000 or even November 1, 2001. Specifically you might state it as follows:

The Department reviewed the request under Item 8 to extend until November 1, 2001 the date by which the selective catalytic reduction systems can be replaced with advanced dry low NOx combustors to achieve the nitrogen oxides emission limits. On the basis of the information provided, the Department does not have reasonable assurance that Seimens-Westinghouse will be able to provide a combustor that will meet the permitted limit using DLN technology by that date.

The Department has reviewed a number of applications based on Seimens-Westinghouse 501F combustion turbines. The lowest recent DLN guarantee for a Seimens-Westinghouse 501F that we are aware of is 15 ppmvd to be achieved in 2002. We have specified single fuel burners (gas-only) on some simple cycle 501F units because of the difficulty foreseen in achieving the 15 ppmvd limits with a duel-fuel combustor.

If FPC still wishes to pursue this request, please submit a brief application to modify the existing PSD permit. Please include a more specific schedule and guarantee from Seimens-Westinghouse to achieve the permitted limits by DLN. We note that as presently configured, carbon monoxide emissions were unexpectedly low (1-3 ppmvd) compared with the BACT-based CO limits. Please advise how the proposed burners might impact CO emissions.

Scot - original 02/09/00



February 9, 2000

RECEIVED

FEB 10 2000

BUREAU OF AIR REGULATION

Mr. Clair Fancy, Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Magnolia Park Courtyard
Tallahassee, FL 32301

Dear Mr. Fancy:

Re: Florida Power Corporation's Hines Energy Complex
Customized Fuel Monitoring Schedule

Florida Power Corporation (FPC) has been permitted for the use of natural gas at the above referenced site. The two combustion turbines (CTs), 1A and 1B, are subject to New Source Performance Standards (NSPS 40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any CT to monitor the sulfur and nitrogen content of the fuel as follows: 1) If the turbine fuel is supplied by a bulk storage tank, then the sulfur and nitrogen content are to be determined whenever new fuel is transferred into the bulk storage tank, and 2) If the turbine fuel is supplied without an intermediate bulk storage tank, then daily monitoring of the sulfur and nitrogen content of the fuel is required.

Since the natural gas used by the CTs does not pass through an intermediate bulk storage tank, FPC is hereby requesting a customized fuel monitoring schedule as allowed by 40 CFR 60.334(b)(2). While firing natural gas, FPC requests the following customized fuel monitoring schedule which was developed based on an EPA guidance memorandum (Attachment A):

1. Monitoring of natural gas nitrogen content shall not be required in accordance with page 2 of the EPA guidance memorandum attached.
2. Sulfur Monitoring
 - a) Analysis for sulfur content of the natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternate method. The reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3245-81; and ASTM D4048-82 as referenced in 40 CFR 60.335(b)(2).
 - b) Effective on the approval date of the customized fuel monitoring schedule, sulfur monitoring shall be conducted twice a month for six months. If this monitoring shows little variability in the 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 the monitoring, required by 2(b) above, of the sulfur content of the natural gas shows little variability and the calculated sulfur dioxide emissions represent consistent compliance with the sulfur dioxide emission limits, specified under 40 CFR 60.333, sample analysis shall be conducted twice per year. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - d) Should any sulfur analysis, as required by items 2(b) or 2(c) above, indicate noncompliance with 40 CFR 60.333, FPC will notify the Department of Environmental Protection (DEP) of such excess emission and the customized fuel monitoring schedule shall be re-examined. The sulfur content of the natural gas shall be monitored weekly during the interim period while this schedule is being re-examined.
3. FPC will notify the DEP of any change in natural gas supply for re-examination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content varying by more than 10 grains/1000 of gas) shall be considered as a change in natural gas supply. Sulfur content of the natural gas will be monitored weekly during the interim period when this monitoring schedule is being re-examined.
 4. Records of sample analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPC for a period of three years, and be available for inspection by appropriate regulatory personnel.
 5. FPC will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Perry Stream 1 Lab.

Data from natural gas at the Perry Stream 1 site is considered representative of the sulfur content of the natural gas at the Hines Energy Complex site, since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas.

If you or your staff have any questions about this request, please do not hesitate to contact me at (727) 826-4258.

Sincerely,



Scott H. Osbourn
Senior Environmental Engineer

Attachments

cc/attach: Mike Harley, DEP
David McNeal, EPC Region IV

APPENDIX A

05 07-92 11:45AM FROM EPA FPS/SSCD



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

AUG 14 1997

OFFICE OF
AIR AND WASTEWATERMEMORANDUM

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

FROM: John B. Rasmie, Chief *John B. Rasmie*
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 schedules Regional Offices issue for natural gas be no less stringent than the following: sulfur monitoring should

SEP-28-1992 13:40 FROM OAGPS,ESD,CPB/ISB RTP NC TO

05 07-92 11:45AM FROM EPA PFS/SSCD

TO 29195413470

P036/007

2

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 SSCD for approval.

If you have any questions, please contact Sally M. Farrell at FTS 382-2675.

Attachment

cc: John Cranshaw
George Walsh
Robert Ajax
Earl Salo

05-07-92 11:45AM FROM EPA FPS/SSCD

TO 89195413470

P007/007

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.

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
2/4/00	10:13 AM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0399	0.0618	0.0584	0.0780	0.0647	
Propane	0.3042	0.5191	0.4072	0.4065	0.4696	
Iso-Butane	0.0634	0.0996	0.0845	0.0849	0.1002	
N-Butane	0.0637	0.0999	0.0867	0.0856	0.1015	
Iso-Pentane	0.0210	0.0335	0.0295	0.0319	0.0349	
N-Pentane	0.0136	0.0228	0.0197	0.0223	0.0231	
Nitrogen	0.3152	0.5219	0.4157	0.4338	0.4240	
Methane	96.8441	94.9065	95.8467	95.6607	95.3330	
C02	0.7471	0.8188	0.7725	0.8190	0.7900	
Ethane	1.5878	2.9161	2.2790	2.3772	2.6591	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
Btu	1025.9	1039.8	1033.7	1034.8	1038.6	Dry Btu/cf @ 14.
Gravity	0.5776	0.5898	0.5841	0.5857	0.5875	Real Relative De
Total Sulfur	2.1598	1.9099	0.0109			PPM
	0.1350	0.1194	0.0007			Grains/hcf
Current H2O	1.0546		1.3329		2.4171	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/27/00	9:36 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0379	0.0569	0.0490	0.0610	0.0610	
Propane	0.3228	0.5049	0.4430	0.3910	0.4468	
Iso-Butane	0.0696	0.1037	0.0929	0.0863	0.0961	
N-Butane	0.0693	0.1045	0.0960	0.0885	0.0937	
Iso-Pentane	0.0182	0.0278	0.0304	0.0307	0.0302	
N-Pentane	0.0106	0.0160	0.0190	0.0209	0.0189	
Nitrogen	0.2799	0.4551	0.3635	0.3492	0.4096	
Methane	96.7553	94.9585	95.5421	95.8182	95.3860	
CO2	0.7517	0.7362	0.7637	0.8119	0.7501	
Ethane	1.6846	3.0365	2.6004	2.3423	2.7076	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>η_D</i>	73.98		74.20			
Btu	1027.3	1041.6	1037.4	1034.5	1038.4	Dry Btu/cf @ 14.
Gravity	0.5782	0.5889	0.5857	0.5845	0.5866	Real Relative De
Total Sulfur	2.4506	1.4602	0.0185			PPM
	0.1532	0.0913	0.0012			Grains/hcf
Current H2O	0.4220		0.9945		3.1768	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/19/00	8:36 AM

	Perry	Perry	Brooker	Gainesville	West Palm
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
	Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0379	0.0617	0.0535	0.0475	0.0647	
Propane	0.3841	0.5713	0.4875	0.3996	0.4669	
Iso-Butane	0.0885	0.1267	0.1048	0.0871	0.0987	
N-Butane	0.0852	0.1310	0.1045	0.0862	0.0972	
Iso-Pentane	0.0238	0.0359	0.0276	0.0274	0.0319	
N-Pentane	0.0141	0.0231	0.0173	0.0175	0.0202	
Nitrogen	0.2813	0.5276	0.4871	0.4780	0.4518	
Methane	96.4578	94.6409	95.2774	96.1293	95.3840	
CO2	0.8008	0.7079	0.7198	0.6508	0.7524	
Ethane	1.8265	3.1739	2.7207	2.0767	2.6322	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>η_c</i>	<i>73.95</i>		<i>73.93</i>			
Btu	1029.8	1045.0	1038.3	1032.1	1038.1	Dry Btu/cf @ 14.
Gravity	0.5806	0.5914	0.5867	0.5817	0.5869	Real Relative De
Total Sulfur	2.1425	2.0357	2.4638			PPM
	0.1339	0.1272	0.1540			Grains/hcf
Current H2O	1.0115		2.0580		2.6243	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/14/00	1:01 PM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0276	0.0519	0.0395	0.0394	0.0485	
Propane	0.3077	0.4878	0.4875	0.3827	0.4361	
Iso-Butane	0.0651	0.1069	0.1025	0.0783	0.0870	
N-Butane	0.0717	0.1129	0.1129	0.0842	0.0893	
Iso-Pentane	0.0154	0.0293	0.0253	0.0194	0.0240	
N-Pentane	0.0097	0.0193	0.0166	0.0122	0.0147	
Nitrogen	0.2885	0.4895	0.4602	0.3406	0.4157	
Methane	96.9612	95.0759	95.3038	96.3866	95.3884	
CO2	0.7231	0.6884	0.6688	0.6345	0.7606	
Ethane	1.5300	2.9381	2.7829	2.0221	2.7355	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>°C</i>	73.97		74.02			
Btu	1025.5	1040.9	1039.4	1032.0	1037.2	Dry Btu/cf @ 14.
Gravity	0.5766	0.5881	0.5865	0.5799	0.5861	Real Relative De
Total Sulfur	3.0228	2.1775	1.8278			PPM
	0.1889	0.1361	0.1142			Grains/hcf
Current H2O	0.6559		2.1064		2.2099	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
1/10/00	8:17 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0371	0.0582	0.0459	0.0437	0.0544	
Propane	0.3131	0.5072	0.4489	0.3632	0.4509	
Iso-Butane	0.0670	0.0985	0.0931	0.0745	0.0896	
N-Butane	0.0656	0.0995	0.0942	0.0740	0.0889	
Iso-Pentane	0.0198	0.0307	0.0283	0.0234	0.0269	
N-Pentane	0.0116	0.0197	0.0175	0.0147	0.0167	
Nitrogen	0.2643	0.5007	0.3737	0.3059	0.4017	
Methane	96.8488	94.7209	95.5171	96.2065	95.3893	
CO2	0.7341	0.7196	0.7447	0.7325	0.7243	
Ethane	1.6387	3.2451	2.6366	2.1616	2.7574	
Totals	100.0000	100.0000	100.0000	100.0000	100.0000	
<i>% C</i>	<i>74.01</i>		<i>74.01</i>			
Btu	1027.0	1043.0	1037.7	1032.2	1038.5	Dry Btu/cf @ 14.
Gravity	0.5775	0.5900	0.5857	0.5813	0.5862	Real Relative De
Total Sulfur	0.0000	0.0000	2.1007			PPM
	0.0000	0.0000	0.1313			Grains/hcf
Current H2O	0.8492		0.0000		2.5552	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/22/99	1:32 PM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0412	0.0578	0.1010	0.0486	0.0569	
Propane	0.3546	0.4996	0.5018	0.4398	0.4036	
Iso-Butane	0.0712	0.0945	0.1502	0.0836	0.0820	
N-Butane	0.0652	0.0889	0.1499	0.0819	0.0777	
Iso-Pentane	0.0203	0.0299	0.1003	0.0291	0.0268	
N-Pentane	0.0117	0.0197	0.0999	0.0194	0.0171	
Nitrogen	0.3252	0.5014	0.4963	0.3883	0.4648	
Methane	96.4145	94.7714	95.1485	95.7549	95.4581	
C02	0.7715	0.7759	0.9989	0.7679	0.7675	
Ethane	1.9245	3.1609	2.2531	2.3865	2.6455	
Totals	100.0000	100.0000	100.0162	100.0000	100.0000	
<i>°C</i>	<i>73.93</i>		<i>73.64</i>			
Btu	1029.1	1041.3	1041.1	1034.8	1035.6	Dry Btu/cf @ 14.
Gravity	0.5801	0.5898	0.5934	0.5844	0.5857	Real Relative De
Total Sulfur	0.0000	0.0000	2.3329			PPM
	0.0000	0.0000	0.1458			Grains/hcf
Current H2O	1.0503		1.8785		1.7265	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/16/99	8:11 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components

Hexane	0.0372	0.0484	0.0403	0.0338	0.0461
Propane	0.2710	0.3993	0.3504	0.2783	0.3291
Iso-Butane	0.0580	0.0726	0.0705	0.0581	0.0676
N-Butane	0.0521	0.0677	0.0645	0.0526	0.0635
Iso-Pentane	0.0201	0.0265	0.0256	0.0204	0.0232
N-Pentane	0.0121	0.0168	0.0159	0.0130	0.0144
Nitrogen	0.3348	0.5269	0.4476	0.3405	0.4012
Methane	96.5959	95.1176	95.5687	96.6597	95.7989
CO2	0.7823	0.7238	0.7745	0.5732	0.7301
Ethane	1.8366	3.0004	2.6419	1.9705	2.5257
Totals	100.0000	100.0000	100.0161	100.0000	100.0000

% Carbon

73.87

73.84

Btu	1026.2	1037.2	1033.5	1029.3	1033.2	Dry Btu/cf @ 14.7
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Gravity	0.5785	0.5867	0.5843	0.5772	0.5829	Real Relative De
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Total Sulfur	0.0000	0.0000	2.2571
	0.0000	0.0000	0.1411

PPM
Grains/hcf

Current H2O	1.0564	1.9475	2.0028	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
12/3/99	11:17 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components

Hexane	0.0352	0.0504	0.0533	0.0710	0.0568
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Propane	0.2610	0.3680	0.3575	0.2720	0.4164	
Iso-Butane	0.0611	0.0820	0.0797	0.0643	0.0868	
N-Butane	0.0557	0.0778	0.0788	0.0631	0.0869	
Iso-Pentane	0.0216	0.0324	0.0271	0.0197	0.0305	
N-Pentane	0.0139	0.0210	0.0168	0.0112	0.0205	
Nitrogen	0.2779	0.5326	0.3790	0.2624	0.4601	
Methane	96.9383	95.2920	96.1373	96.7178	95.6113	
CO2	0.7552	0.6190	0.7031	0.9584	0.6921	
Ethane	1.5801	2.9247	2.1674	1.5601	2.5385	
Totals	100.0000	100.0000	100.0184	100.0000	100.0000	
<i>% Carbon</i>	73.95		73.99			
Btu	1025.1	1038.0	1032.5	1024.8	1036.3	Dry Btu/cf @ 14.7
Gravity	0.5768	0.5855	0.5818	0.5798	0.5849	Real Relative De
Total Sulfur	0.0000	0.0000	1.8959			PPM
	0.0000	0.0000	0.1185			Grains/hcf
Current H2O	1.2687		0.5732		2.1064	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/23/99	11:45 AM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0548	0.0552	0.0542	0.0401	0.0538	
Propane	0.3744	0.3617	0.3764	0.2823	0.4391	
Iso-Butane	0.0839	0.0796	0.0772	0.0625	0.0869	
N-Butane	0.0882	0.0789	0.0777	0.0632	0.0919	
Iso-Pentane	0.0325	0.0289	0.0288	0.0188	0.0271	
N-Pentane	0.0219	0.0194	0.0192	0.0111	0.0175	
Nitrogen	0.2725	0.5357	0.5040	0.2897	0.5056	
Methane	95.9240	95.3899	95.3164	96.8965	95.1365	
CO2	0.9590	0.7432	0.7590	0.7927	0.7130	
Ethane	2.1889	2.7075	2.7871	1.5431	2.9286	
Totals	100.0000	100.0000	100.0182	100.0000	100.0000	
<i>γ_{oC}</i>	73.82		73.83			
Btu	1032.1	1035.0	1035.8	1024.9	1038.7	Dry Btu/cf @ F
Gravity	0.5845	0.5856	0.5861	0.5774	0.5872	Real Relativ
Total Sulfur	0.0000	0.0000	4.0891			PPM
	0.0000	0.0000	0.2556			Grains/hcf
Current H2O	0.6361		0.9461		2.8660	Lbs. Per

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/11/99	6:20 AM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
Components	Mole%	Mole%	Mole%	Mole%	Mole%	
Hexane	0.0373	0.0587	0.0527	0.0444	0.0618	
Propane	0.2098	0.3702	0.3487	0.2592	0.4669	
Iso-Butane	0.0493	0.0781	0.0733	0.0600	0.0960	
N-Butane	0.0447	0.0732	0.0696	0.0546	0.1053	
Iso-Pentane	0.0197	0.0304	0.0301	0.0236	0.0367	
N-Pentane	0.0129	0.0204	0.0199	0.0151	0.0273	
Nitrogen	0.2740	0.5533	0.5314	0.3408	0.5119	
Methane	97.2083	95.1355	95.4265	96.7409	95.5093	
CO2	0.8160	0.7168	0.7364	0.7742	0.8058	
Ethane	1.3278	2.9634	2.7114	1.6871	2.3790	
Totals	100.0000	100.0000	100.0205	100.0000	100.0000	
<i>γ_c</i>	73.83		73.8			
Btu	1021.3	1037.2	1034.5	1025.5	1035.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5753	0.5868	0.5852	0.5780	0.5867	Real Relative Density
Total Sulfur	0.0000	0.0000	4.6816			PPM
	0.0000	0.0000	0.2926			Grains/hcf
Current H2O	0.1864		1.3605		1.8992	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
11/3/99	11:39 AM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0282	0.0409	0.0473	0.0409	0.0457	
Propane	0.2682	0.3392	0.3766	0.3728	0.3245	
Iso-Butane	0.0574	0.0707	0.0723	0.0756	0.0670	
N-Butane	0.0576	0.0734	0.0766	0.0771	0.0639	
Iso-Pentane	0.0169	0.0270	0.0260	0.0267	0.0254	
N-Pentane	0.0103	0.0182	0.0172	0.0174	0.0165	
Nitrogen	0.2563	0.5170	0.4325	0.3953	0.4169	
Methane	97.1756	95.6385	95.7480	96.0127	95.7778	
C02	0.7271	0.6821	0.7464	0.6468	0.7780	
Ethane	1.4023	2.5931	2.4570	2.3348	2.4842	
Totals	100.0000	100.0000	100.0186	100.0000	100.0000	
% C	73.98		73.89			
Btu	1023.8	1033.5	1033.6	1033.8	1032.3	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5753	0.5835	0.5837	0.5819	0.5833	Real Relative Density
Total Sulfur	1.0270	3.1360	2.0091			PPM
	0.0642	0.1960	0.1256			Grains/hcf
Current H2O	0.3702		3.1354		3.4530	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
10/6/99	1:21 PM

	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0770	0.0644	0.0634	0.0506	0.0570	
Propane	0.7735	0.5079	0.5021	0.3434	0.4663	
Iso-Butane	0.1812	0.1132	0.1054	0.0768	0.0976	
N-Butane	0.1814	0.1188	0.1145	0.0836	0.1094	
Iso-Pentane	0.0557	0.0374	0.0350	0.0265	0.0348	
N-Pentane	0.0351	0.0248	0.0236	0.0169	0.0236	
Nitrogen	0.2505	0.5217	0.4711	0.2462	0.4804	
Methane	94.8370	94.5372	94.9015	96.7198	95.2449	
CO2	0.9096	0.7324	0.7472	0.7445	0.7505	
Ethane	2.6989	3.3422	3.0361	1.6917	2.7354	
Totals	100.0000	100.0000	100.0250	100.0000	100.0000	
Btu	1049.2	1044.8	1042.3	1029.5	1038.7	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5944	0.5916	0.5897	0.5791	0.5876	Real Relative Density
Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf
Current H2O	0.0035		0.0000		6.1464	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
9/30/99	6:19 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components

Hexane	0.0453	0.0623	0.0656	0.0502	0.0546
Propane	0.3230	0.4867	0.5366	0.3958	0.4891
Iso-Butane	0.0703	0.0988	0.1048	0.0892	0.1033
N-Butane	0.0688	0.1002	0.1061	0.0870	0.1063
Iso-Pentane	0.0248	0.0323	0.0370	0.0265	0.0316
N-Pentane	0.0161	0.0218	0.0251	0.0168	0.0202
Nitrogen	0.2629	0.5530	0.5011	0.2784	0.5299
Methane	96.7850	94.6722	94.8201	96.4197	95.0949
C02	0.7258	0.6451	0.6423	0.7126	0.7059
Ethane	1.6779	3.3275	3.1614	1.9239	2.8643
Totals	100.0000	100.0000	100.0246	100.0000	100.0000

Btu	1028.3	1043.8	1044.5	1032.4	1039.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
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Gravity	0.5783	0.5899	0.5897	0.5808	0.5881	Real Relative Density
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Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf

Current H2O	3.9311		0.6906		2.6934	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
9/13/99	9:38 AM

	Perry 36" Stream #1	Perry 30" Stream #2	Brooker 24" Stream	Gainsville 8" Stream	West Palm 24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0342	0.0505	0.0506	0.0402	0.0433	
Propane	0.3268	0.4660	0.4270	0.3656	0.4775	
Iso-Butane	0.0758	0.0962	0.0885	0.0845	0.1004	
N-Butane	0.0759	0.1078	0.0994	0.0856	0.1162	
Iso-Pentane	0.0204	0.0288	0.0254	0.0226	0.0299	
N-Pentane	0.0122	0.0204	0.0170	0.0133	0.0210	
Nitrogen	0.2509	0.4283	0.4278	0.2315	0.4610	
Methane	96.8040	95.4136	95.5509	96.7469	95.4330	
CO2	0.7768	0.7050	0.7115	0.7297	0.6731	
Ethane	1.6229	2.6835	2.6019	1.6800	2.6446	
Totals	100.0000	100.0000	100.0162	100.0000	100.0000	
Btu	1027.2	1038.7	1036.9	1029.6	1038.6	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5782	0.5863	0.5852	0.5788	0.5861	Real Relative Density
Total Sulfur	1.0270	3.1360	2.8000			PPM
	0.0642	0.1960	0.1750			Grains/hcf
Current H2O	3.1777		0.9185		0.0000	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS
Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
8/24/99	11:51 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components					
Hexane	0.0528	0.0612	0.0586	0.0567	0.0650
Propane	0.4241	0.5438	0.5378	0.5112	0.5810
Iso-Butane	0.0996	0.1243	0.1164	0.1092	0.1206
N-Butane	0.0983	0.1489	0.1275	0.1157	0.1285
Iso-Pentane	0.0322	0.0393	0.0340	0.0344	0.0355
N-Pentane	0.0203	0.0277	0.0225	0.0230	0.0246
Nitrogen	0.2609	0.4699	0.4562	0.3861	0.4664
Methane	96.2941	95.0410	95.2362	95.5085	95.0649
CO2	0.8763	0.6529	0.6538	0.7490	0.7047
Ethane	1.8413	2.8909	2.7570	2.5063	2.8087
Totals	100.0000	100.0000	100.0231	100.0000	100.0000

Btu	1031.6	1044.1	1042.1	1039.0	1043.0	Dry Btu/cf @ 14.730 psia and 60 degrees F
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Gravity	0.5828	0.5894	0.5879	0.5867	0.5894	Real Relative Density
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Total Sulfur	1.0090	0.4910	2.8000			PPM
	0.0631	0.0307	0.1750			Grains/hcf

Current H2O	0.5687		1.9406		0.0000	Lbs. Per MMcf
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FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

Date	Time
8/11/99	8:47 AM

Perry	Perry	Brooker	Gainsville	West Palm
36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream
Mole%	Mole%	Mole%	Mole%	Mole%

Components						
Hexane	0.0439	0.0616	0.0590	0.0467	0.0683	
Propane	0.3392	0.4647	0.4663	0.2709	0.3989	
Iso-Butane	0.0754	0.0857	0.0925	0.0679	0.0843	
N-Butane	0.0681	0.0822	0.0930	0.0603	0.0793	
Iso-Pentane	0.0239	0.0337	0.0319	0.0246	0.0320	
N-Pentane	0.0145	0.0212	0.0219	0.0149	0.0209	
Nitrogen	0.2507	0.4662	0.4186	0.2491	0.4516	
Methane	96.7842	95.1065	95.4107	96.8029	95.3136	
C02	0.7690	0.6701	0.7057	0.7250	0.7177	
Ethane	1.6311	3.0081	2.7005	1.7377	2.8334	
Totals	100.0000	100.0000	100.0212	100.0000	100.0000	
Btu	1027.9	1041.0	1039.0	1027.9	1038.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5785	0.5875	0.5864	0.5778	0.5865	Real Relative Density
Total Sulfur	0.7570	1.0340	2.8000			PPM
	0.0473	0.0646	0.1750			Grains/hcf
Current H2O	0.5687		2.5276		0.0000	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/23/99	7:54 AM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0567	0.0727	0.0746	0.0483	0.0688	
Propane	0.3312	0.4992	0.4344	0.3423	0.4705	
Iso-Butane	0.0826	0.1096	0.0970	0.0824	0.1044	
N-Butane	0.0729	0.1102	0.0897	0.0788	0.1069	
Iso-Pentane	0.0302	0.0408	0.0388	0.0274	0.0341	
N-Pentane	0.0199	0.0287	0.0279	0.0169	0.0213	
Nitrogen	0.2612	0.4524	0.4262	0.2808	0.4385	
Methane	96.5787	95.1458	95.4690	96.4521	95.2670	
C02	0.7837	0.5658	0.6383	0.7398	0.6597	
Ethane	1.7828	2.9749	2.7041	1.9311	2.8288	
Totals	100.0000	100.0000	100.0274	100.0000	100.0000	
Btu	1029.8	1044.5	1040.2	1030.8	1041.4	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5801	0.5880	0.5862	0.5803	0.5874	Real Relative Density
Total Sulfur	N/A	N/A	N/A			PPM
	N/A	N/A	N/A			Grains/hcf
Current H2O	1.0961		1.2776		2.5552	Lbs. Per MMcf

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/12/99	12:18 PM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0570	0.0607	0.0660	0.0550	0.0655	
Propane	0.3973	0.4974	0.5038	0.4407	0.5397	
Iso-Butane	0.0906	0.0979	0.1006	0.0902	0.1040	
N-Butane	0.0919	0.1000	0.1037	0.0943	0.1048	
Iso-Pentane	0.0327	0.0309	0.0321	0.0311	0.0321	
N-Pentane	0.0220	0.0205	0.0202	0.0220	0.0213	
Nitrogen	0.2552	0.5135	0.4684	0.3387	0.4509	
Methane	96.3134	94.8700	94.9456	95.8567	94.9503	
CO2	0.8060	0.6266	0.6598	0.5187	0.6630	
Ethane	1.9338	3.1826	3.1000	2.5525	3.0683	
Totals	100.0000	100.0000	100.0211	100.0000	100.0000	
Btu	1032.6	1043.3	1043.3	1040.0	1043.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5822	0.5888	0.5889	0.5831	0.5891	Real Relative Density
Total Sulfur	0.6920	1.4820	2.8000			PPM
	0.0432	0.0926	0.1750			Grains/hcf
Current H2O	1.6191	2.2928		3.1768	Lbs. Per MMcf	

FGT SYSTEM CHROMATOGRAPHS

Spot Analysis of Natural Gas for Delivery in Florida

		Date	Time			
		7/7/99	8:33 AM			
	Perry	Perry	Brooker	Gainsville	West Palm	
	36" Stream #1	30" Stream #2	24" Stream	8" Stream	24" Stream	
	Mole%	Mole%	Mole%	Mole%	Mole%	
Components						
Hexane	0.0355	0.0556	0.0540	0.0543	0.0597	
Propane	0.3281	0.5068	0.4868	0.5075	0.5072	
Iso-Butane	0.0746	0.1007	0.0948	0.0947	0.0993	
N-Butane	0.0718	0.1049	0.0992	0.0984	0.1046	
Iso-Pentane	0.0207	0.0288	0.0280	0.0282	0.0288	
N-Pentane	0.0125	0.0192	0.0180	0.0187	0.0188	
Nitrogen	0.2524	0.4533	0.4500	0.4286	0.4752	
Methane	96.6698	95.1051	95.1740	95.1923	95.0719	
CO2	0.7814	0.6382	0.6491	0.7077	0.6640	
Ethane	1.7532	2.9874	2.9462	2.8697	2.9705	
Totals	100.0000	100.0000	100.0189	100.0000	100.0000	
Btu	1028.1	1042.3	1041.2	1040.6	1041.8	Dry Btu/cf @ 14.730 psia and 60 degrees F
Gravity	0.5789	0.5878	0.5872	0.5875	0.5881	Real Relative Density
Total Sulfur	0.6920	1.4820	2.8000	PPM		
	0.0432	0.0926	0.1750	Grains/hcf		
Current H2O	1.2531		1.8646		2.9696	Lbs. Per MMcf



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JAN 31 2000

BUREAU OF AIR REGULATION

January 27, 2000

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Hines Energy Complex
REQUEST FOR EXTENSION OF TIME on the Intent to Issue Initial Title V Air Permit
Draft Permit No. 1050234-001-AV

On December 8, 1999, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Initial Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Accordingly, FPC requests an extension of time, pursuant to Florida Administrative Code Rule 62-110.106(4), to and including February 29, 2000, in which to file a Petition for Administrative Proceedings in the above-styled matter. Granting of this request will not prejudice either party, but will further both parties' mutual interest by hopefully avoiding the need to actually file a Petition for Administrative Proceeding in this matter. If the Department denies this request, FPC requests the opportunity to file a Petition for Administrative Proceeding within 10 days of such denial.

If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

[Handwritten signature of W. Jeffrey Pardue]

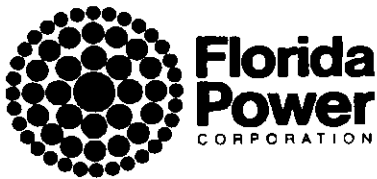
W. Jeffrey Pardue, C.E.P.
Director, Environmental Services Department
Title V Responsible Official

[Handwritten signature of Robert A. Manning]

Robert A. Manning, Esq.
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP
Doug Beason, DEP OGC

2/1/00 cc = Scott Sheplak
Russell White



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JAN 03 2000

BUREAU OF AIR REGULATION

December 29, 1999

Mr. Scott M. Sheplak, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, Florida 32399-2400

Dear Mr. Sheplak:

Re: FPC Hines Energy Complex, *Notice of Intent to Issue Title V Air Operation Permit*
Title V Draft Permit No. 105234-001-AV

Enclosed please find the notarized proof of publication received from the Lakeland Ledger for the Florida Department of Environmental Protection *Notice of Intent to Issue Title V Air Operation Permit* referenced to the above request. The notice was published on December 15, 1999.

If you should have any questions concerning this correspondence, please do not hesitate to contact me at (727) 826-4258.

Sincerely,

A handwritten signature in black ink, appearing to read "Scott H. Osbourn".

Scott H. Osbourn
Senior Environmental Engineer

cc: William Thomas, DEP SW District (w/attach)
Robert Manning, HGS&S

Attachment

1/5/00 cc: Russell Wilder

AFFIDAVIT OF PUBLICATION

THE LEDGER

Lakeland, Polk County, Florida

Case No

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Nelson Kirkland, who on oath says that he is Classified Advertising Manager of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

Public Notice of Intent to Issue Title V Air Operation Permit

in the matter of.....

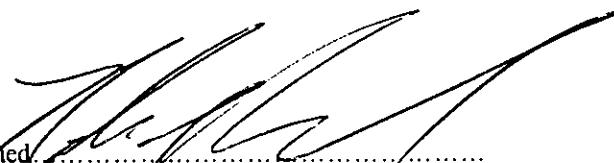
Title V Draft Permit No: 105234-001-AV

in the.....

Court, was published in said newspaper in the issues of.....

12-15;1999

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed 

Nelson Kirkland
Classified Advertising Manager
Who is personally known to me.

Sworn to and subscribed before me this

15 TH

Attach Notice Here

PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Title V DRAFT Permit No: 105234-001-AV
Hines Energy Complex
Polk County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue a Title V air operation permit to Florida Power Corporation for the Hines Energy Complex located at County Road 256, Bartow, Polk County. The applicant's name and address are: Florida Power Corporation, 263 13th Avenue South, St. Petersburg, Florida 33701-5511.

The permitting authority will issue the Title V PROPOSED Permit, and subsequent Title V FINAL Permit, in accordance with the conditions of the Title V DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed Title V DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the permitting authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, (Mail Station) #35, Tallahassee, Florida 32399-3000 (Telephone: 850/488-9730; Fax: 850/487-4938). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen 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 applicable 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 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the permitting authority'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; 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 petitioner's substantial rights will be affected by the agency determination;

(c) A statement of how and when the 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 state;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle petitioner to relief;

(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 permitting authority'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 permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding. In accordance with the requirements set forth above, mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661a(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

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:

Permitting Authority: Department of Environmental
Affected District/Local Program: Department of Environmental

Permitting Authority: Department of Environmental
Affected District/Local Program: Department of Environmental



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DEC 15 1999

BUREAU OF AIR REGULATION

December 10, 1999

Ms. Kathy Carter, Clerk
Office of General Counsel
Florida Department of Environmental Protection
Room 638
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

Dear Ms. Carter:

RE: Florida Power Corporation, Hines Energy Complex
REQUEST FOR EXTENSION OF TIME on the *Intent to Issue Initial Title V Air Permit*
Draft Permit No. 1050234-001-AV

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If you should have any questions, please contact Mr. Scott Osbourn of FPC at (727) 826-4258.

Sincerely,

Handwritten signature of W. Jeffrey Pardue in black ink.

W. Jeffrey Pardue, C.E.P.
Director, Environmental Services Department
Title V Responsible Official

Handwritten signature of Robert A. Manning in black ink.

Robert A. Manning, Esq.
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP
Doug Beason, Esq., DEP, OGC

h/p/99cc: Russell Wicker