



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

IN RE: FLORIDA POWER & LIGHT COMPANY)  
 MARTIN COAL GASIFICATION/ ) CERTIFICATION NO. PA89-27  
 COMBINED CYCLE PROJECT, )  
 MARTIN COUNTY, FLORIDA ) OGC CASE NO. 91-0581  
 MODIFICATION OF CONDITIONS OF )  
 CERTIFICATION )

## NOTICE OF INTENDED AGENCY ACTION

The Florida Department of Environmental Protection hereby provides notice of an intent to modify the conditions of certification for the Florida Power & Light Company Martin Plant to conform the conditions to the amended Prevention of Significant Deterioration Permit issued on October 14, 1997, in accordance with Condition XXI.B. which allows the Department to modify conditions of certification to conform to amended federally approved permits. A copy of the proposed modification is attached.

Pursuant to 403.516, F.S., a party to the original certification proceeding has 45 days from the date of receipt of this notice in which to respond to the proposed modification. Any objection to the modification shall be in writing and shall be filed with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000. Failure to file a response constitutes a waiver of objection to the modification.

DONE AND ENTERED this 15<sup>th</sup> day of December, 1997, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

*Hamilton S. Oven*

Hamilton S. Oven, P.E.  
Administrator, Siting  
Coordination Office

**RECEIVED**

DEC 16 1997

BUREAU OF  
AIR REGULATION

Martin Power  
Plant

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing and  
attachments have been furnished to the following on this 11th day of ~~September, 1996~~ <sup>December 1997</sup>

Douglas S. Roberts, Esquire  
Hopping Green Sams & Smith  
Post Office Box 6526  
Tallahassee, Florida 32313

Charles T. Collette, Esquire  
Assistant General Counsel  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Kathy C. Carter  
Clerk, Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David Jordan, Senior Attorney  
Florida Department of Community Affairs  
2740 Centerview Drive  
Tallahassee, Florida 32399-2100

William Roberts  
Assistant General Counsel  
Florida Department of Transportation  
Haydon Burns Building  
605 Suwannee Street, M.S. #58  
Tallahassee, Florida 32399

Toni Leidy  
South Florida Water Management District  
3301 Gun Club Road  
West Palm Beach, Florida 33416-4680

Susan M. Coughanour  
South Florida Water Management District  
3301 Gun Club Road  
West Palm Beach, Florida 33416-4680

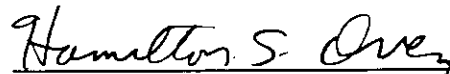
Fred Van Vonno  
Assistant County Attorney  
Martin County  
2401 Southeast Monterey Road  
Stuart, Florida 34996

Michael Palecki  
Division of Legal Services  
Florida Public Service Commission  
101 East Gaines Street  
Fletcher Building, Room 212  
Tallahassee, Florida 32399-0850

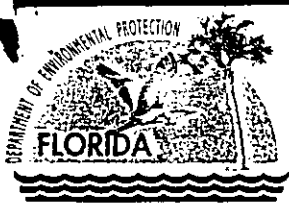
Roger Saberson  
Treasure Coast Regional Planning Council  
110 E. Atlantic Avenue  
Delray Beach, Florida 33444

Peter Merritt  
Treasure Coast Regional Planning Council  
3228 SW Martin Downs Blvd., Suite 205  
Palm City, Florida 33490

Gary Simmons  
Troup-Indiantown Drainage District  
Post Office Box 128  
Indiantown, Florida 34956



Hamilton S. Oven, P.E.  
Administrator, Siting  
Coordination Office



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

October 14, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Richard Piper  
Senior Environmental Specialist  
Florida Power and Light Company  
Post Office Box 14000  
Juno Beach, Florida 33408

DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
OCT 15 1997  
SITING COORDINATION

RE: Amendment to PA 89-27, PSD-FL-146(A) Permit  
NSPS Custom Fuel Monitoring Schedule  
Florida Power & Light Company  
Martin Plant

Dear Mr. Piper:

The Department has reviewed your April 28, 1993 letter with supporting data submitted to EPA and additional data submitted by Fax to the Department on October 1, 1997, requesting an NSPS Custom Fuel Monitoring Schedule. The schedule would only apply to a monitoring schedule for sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) when natural gas is being fired at the subject facility (refer to Attachments No. 1 & 2). The facility is required by the permit to comply with Subpart GG of the New Source Performance Standards (NSPS) 40 CFR 60. For sources utilizing pipeline quality natural gas, 40 CFR 60.334(b) and 60.334(b)(2) state that a custom fuel monitoring schedule, if supported by data which demonstrates compliance with NSPS emission limits, may be approved by the Administrator of EPA. This authority has been delegated to EPA's regional offices and, as stated in the letter from EPA on June 2, 1993, the EPA Region IV will provide their determination of this request to the Department. The Department received a letter, dated June 8, 1993, from EPA on October 1, 1997, stating that a custom fuel monitoring schedule for this facility was acceptable, since it complied with all items of the attachment to the custom fuel monitoring guidance memo issued by EPA Headquarters on August 14, 1987 (Refer to attachment No. 3). The results from a minimum of one sampling event each quarter for six quarters were provided by the permittee, which demonstrated consistent compliance with the allowable SO<sub>2</sub> emissions limits specified under 40 CFR 60.333 and this permit. Therefore, upon issuance of the amended permit, the permittee shall begin monitoring the sulfur content of natural gas as specified in 2.c. of the Custom Fuel Monitoring Schedule for Natural Gas. In accordance with the EPA and Department determination, the permit specific condition will be amended as follows:

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

Mr. Richard Piper  
PA 89-27, PSD-FL-146  
Permit Amendment  
October 14, 1997  
Page 2 of 5

**A. Specific Condition Number;**

**From**

15. This project shall comply with all the applicable requirements of Chapter 17-2, Florida Administrative Code (F.A.C.) and the June 27, 1989 version of 40 CFR Subpart GG, Gas Turbines.

**To**

15. This source shall be in compliance with all requirements of 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) and Rule 62-204.800(7), F.A.C. (Standards of Performance for New Stationary Sources (NSPS)).

**A. Natural Gas**

Pursuant to 40 CFR 60.334(b)(2), a custom fuel monitoring schedule shall be followed for the natural gas fired at this facility and shall be as follows:

**Custom Fuel Monitoring Schedule for Natural Gas (NG)**

1. Monitoring of fuel nitrogen content shall not be required if NG is the only fuel being fired in the gas turbines.
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), or the latest edition(s).
  - b. This custom fuel monitoring schedule shall become effective on the date this permit becomes valid. 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. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein the applicant may begin monitoring as per the requirements of 2(c).

Mr. Richard Piper  
PA 89-27, PSD-FL-146  
Permit Amendment  
October 14, 1997  
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- 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 Department 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 Department 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 five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.**

**B. New No. 2 Fuel Oil**

**The records of new No. 2 fuel oil usage shall be kept by the company for a five year period for regulatory agency inspection purposes. For sulfur dioxide, periods of excess emissions shall be reported if the fuel oil being fired in the gas turbine exceeds 0.5 percent sulfur content and 0.3 percent sulfur content, by weight, for hourly and annual emissions, respectively.**

**B. Attachments to be Incorporated;**

- FPL letter dated April 28, 1993
- EPA letter dated June 2, 1993
- EPA letter dated June 8, 1993
- FPL fax dated October 1, 1997

Mr. Richard Piper  
PA 89-27, PSD-FL-146  
Permit Amendment  
October 14, 1997  
Page 4 of 5

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

Mr. Richard Piper  
PA 89-27, PSD-FL-146  
Permit Amendment  
October 14, 1997  
Page 5 of 5

This letter amendment must be attached to PA 89-27, PSD-FL-146(A) Permit and shall become part of the permit.

Sincerely,



Howard L. Rhodes  
Director  
Division of Air Resources  
Management

HLR/CSL

Attachments

cc: H. Oven, DEP  
I. Goldman, SED  
A. Linero, DEP  
J. Harper, EPA  
J. Lindsay, FPL  
J. Bunyak, NPS  
K. Kosky, KBN

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this AMENDMENT and all copies were sent by certified mail before the close of business on 10/14/97 to the person(s) listed:

Clerk Stamp

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

Barbara J. Pentecost 10/14/97  
(Clerk) (Date)



Attachment No. 1

Amendment to PA 89-27, PSD-FL-146(A) Permit  
NSPS Custom Fuel Monitoring Schedule  
Florida Power & Light Company  
Martin Plant



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30355

JUN -2 1993

4APT-AEB

Mr. Wayne C. Ondler  
Environmental Licensing Project Manager  
Florida Power & Light Company  
P.O. Box 088801  
North Palm Beach, Florida 33408-8801

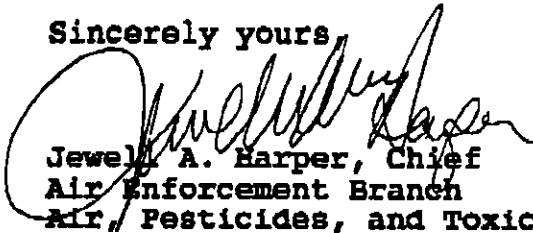
RE: FPL Martin Customized Fuel Monitoring Schedule

Dear Mr. Ondler:

This letter is in response to your request for approval of a customized fuel monitoring schedule at the Florida Power & Light-Martin site, as outlined to EPA Region IV in your correspondence dated April 28, 1993. We are presently reviewing the schedule for adherence to the requirements of 40 CFR Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). Our comments regarding the proposal will be forwarded to the Florida Department of Environmental Regulation (DER). Since the Florida DER has been granted authority to implement 40 CFR Part 60, a final decision regarding the proposal will be provided to you by the DER.

If you have any questions or comments, please contact Mr. Scott Davis of my staff at (404) 347-5014.

Sincerely yours,



Jewell A. Harper, Chief  
Air Enforcement Branch  
Air, Pesticides, and Toxics  
Management Division

RECEIVED

JUN 04 1993

ENVIRONMENTAL AFFAIRS



April 28, 1993

FPL-JEN-EPA-170-93-18

Ms. Jewell A. Harper, Chief  
Air Enforcement Branch, Region IV  
Environmental Protection Agency  
345 Courtland Street, N.E.  
Atlanta, GA 30365

**RE: FPL Martin CG/CC Project  
PA89-27, PSD-FL-146  
Customized Fuel Monitoring Schedule**

Dear Ms. Harper:

The Martin CG/CC Project at the FPL Martin site has been permitted under the Power Plant Siting Act (Chp 403 Part II F.S.) and a corresponding PSD permit. These Units consist of 4 dual fuel fired "advanced" combustion turbines, with heat recovery steam generators (HRSG). The combustion turbines are subject to New Source Performance Standards (NSPS- 40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any combustion turbine 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. FPL has an intermediate bulk storage tank(s) for the light distillate oil and will test the sulfur and nitrogen content of the fuel oil as required by 40 CFR 60.334(b)(2).

Since the natural gas used by the combustion turbines does not pass through an intermediate bulk storage tank, FPL is hereby requesting a customized fuel monitoring schedule as allowed by 40 CFR 60.334(b)(2) for the Martin CG/CC Project. While firing natural gas, FPL 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 and the attached enclosure.

2. Sulfur Monitoring

SEP 17 97 09:51AM FPL ENV SERVICES 361 B91 rere P.4

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 D4084-82 as referenced in 40 CFR 60.335(b)(2).

b. Effective on the commercial operation date of the CTs or the approval date of the customized fuel monitoring schedule which ever is later, 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, represents 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 quarter 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, FPL will notify the Department of Environmental Regulation of such excess emission and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while this monitoring schedule is being reexamined.

3. FPL will notify the Department of Environmental Regulation of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e. sulfur content varying greater than 10 grains/1000 cf 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 reexamined.

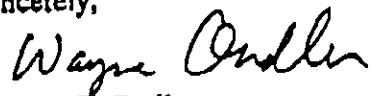
4. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPL for a period of three years, and be available for inspection by appropriate regulatory personnel.

5. FPL will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Brooker Lab.

Data from natural gas at the Brooker Lab site is considered representative of the sulfur content of the natural gas at the Martin site since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas. The data presented in Attachment B is based upon representative samples of natural gas taken by Florida Gas Transmission.

If you or your staff have any question about this request please call Dan MacDougall at (407) 625-7661.

Sincerely,



Wayne C. Ondler  
Environmental Licensing Project Manager  
Florida Power & Light Company

cc: Doug Neeley-EPA/Atlanta  
Clair Fancy-DER/TAL  
H. S. Owen-DER/TAL  
Tom Title-DER/WPB



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

AUG 14 1987

OFFICE OF  
AIR AND SOLID WASTE

MEMORANDUM

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

**FROM:** John E. Rasnic, Chief *John E. Rasnic*  
Compliance Monitoring Section

**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

be bi-monthly, followed by quarterly, then semiannual, given at least six months of data demonstrating little variability in sulfur content and compliance with (60.33) 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<sub>x</sub> 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 CC 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, it will be SSCD for approval.

If you have any questions, please contact Sally N. Furell at FTS 382-2873.

#### Attachment

cc: John Cronshaw  
George Walsh  
Robert Ajax  
Earl Sale

## 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.



## ATTACHMENT B

## Sulfur Content of Natural Gas

Date	Sulfur Content (gr/1000 cf)
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02/06/90	3.0
02/13/90	0.5
02/20/90	3.5
02/27/90	4.5
03/06/90	4.5
03/13/90	3.0
03/20/90	3.5
03/27/90	3.5
04/03/90	6.0
04/10/90	2.5
04/17/90	4.0
04/24/90	3.0
05/01/90	4.0
05/08/90	2.5
05/15/90	2.0
06/05/90	4.5
06/12/90	4.0
06/19/90	7.0
06/26/90	4.5
07/03/90	5.5
07/10/90	3.5
07/17/90	4.5
07/30/90	3.0
08/07/90	5.0
08/14/90	4.5
08/21/90	4.0
08/28/90	7.0
09/04/90	5.5
09/11/90	4.0
09/18/90	4.5
09/25/90	4.0
10/02/90	4.5
10/09/90	4.5
10/16/90	7.0
10/28/90	8.0

Average	4.3
Maximum	8.0
Minimum	0.5

Source: Florida Gas Transmission Company, 1990

Attachment No. 2

Amendment to PA 89-27, PSD-FL-146(A) Permit  
NSPS Custom Fuel Monitoring Schedule  
Florida Power & Light Company  
Martin Plant

**Customized Fuel Monitoring Schedule - FPL Martin Plant****Sulfur in Natural Gas****1994**

1/5/94	0.3 gr/ccf	
1/31/94	0.18 gr/ccf	
2/14/94	0.09 gr/ccf	
2/21/94	0.07 gr/ccf	
3/23/94	0.08 gr/ccf	Twice Per Month for First six months
3/15/94	0.05 gr/ccf	
4/6/94	0.06 gr/ccf	
4/26/94	0.07 gr/ccf	
5/11/94	0.05 gr/ccf	
5/31/94	0.07 gr/ccf	
6/14/94	0.09 gr/ccf	
6/29/94	0.08 gr/ccf	
		"Data shows little variability in sulfur content"
7/6/94	0.07 gr/ccf	
7/19/94	0.06 gr/ccf	
8/9/94	0.08 gr/ccf	Once per Quarter for six quarters
8/23/94	0.09 gr/ccf	
9/13/94	0.07 gr/ccf	
8/7/94	0.08 gr/ccf	
11/28/94	0.06 gr/ccf	
12/27/94	0.05 gr/ccf	

**1995**

1/24/95	0.04 gr/ccf	
2/28/95	0.04 gr/ccf	
3/7/95	0.09 gr/ccf	
4/18/95	0.17 gr/ccf	
4/25/95	0.16 gr/ccf	
5/2/95	0.14 gr/ccf	
5/30/95	0.14 gr/ccf	
6/14/95	0.15 gr/ccf	
6/28/95	0.17 gr/ccf	
7/25/95	0.17 gr/ccf	"Data shows little variability in sulfur content"
11/10/95		11 ppm

Florida Gas Changed report from GR/CCF to PPM.

**1996**

1/2/96	5.5 ppm
1/30/96	6.2 ppm
4/14/96	3.3 ppm
7/2/96	6.8 ppm
10/1/96	3 ppm

"Data shows little variability in sulfur content"

**1997**

2/6/97	6.48 ppm
7/7/97	6.55 ppm

Twice per year

Attachment No. 3

Amendment to PA 89-27, PSD-FL-146(A) Permit  
NSPS Custom Fuel Monitoring Schedule  
Florida Power & Light Company  
Martin Plant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

JUN - 8 1993

4APT-AEB

Mr. Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
Florida Department of Environmental  
Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

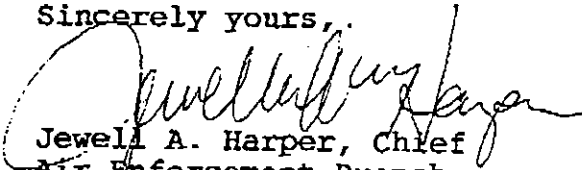
RE: Florida Power & Light Company - Martin (PSD-FL-146)  
Customized Fuel Monitoring Schedule

Dear Mr. Fancy:

This is in response to correspondence received from the Florida Power and Light Company (FPL), dated April 28, 1993, concerning the enclosed proposed fuel monitoring schedule at their Martin Cogeneration facility. The proposed schedule from FPL fulfills the requirements for monitoring as promulgated in 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines. The proposal is submitted under the provisions of §60.334(b)(2). The FPL proposal satisfies the conditions required for a custom fuel sampling schedule for stationary gas turbines, including fuel nitrogen content monitoring, fuel sulfur content monitoring, notification of changes in the fuel supply, and recordkeeping.

We have reviewed the proposed fuel monitoring schedule in accordance with EPA guidance for the approval of custom fuel monitoring schedules and have no adverse comments on the FPL proposal. If you have any questions or comments, please contact Mr. Scott Davis of my staff at (404) 347-5014.

Sincerely yours,

  
Jewell A. Harper, Chief  
Air Enforcement Branch  
Air, Pesticides, and Toxics  
Management Division

Enclosure



Florida Power &amp; Light Company, P.O. Box 083801, North Palm Beach, FL 33408-8801

April 28, 1993

FPL-JEN-EPA-170-93-18

Ms. Jewell A. Harper, Chief  
Air Enforcement Branch, Region IV  
Environmental Protection Agency  
345 Courtland Street, N.E.  
Atlanta, GA 30365

**RE: FPL Martin CG/CC Project  
PA89-27, PSD-FL-146  
Customized Fuel Monitoring Schedule**

Dear Ms. Harper:

The Martin CG/CC Project at the FPL Martin site has been permitted under the Power Plant Siting Act (Chp 403 Part II F.S.) and a corresponding PSD permit. These Units consist of 4 dual fuel fired "advanced" combustion turbines, with heat recovery steam generators (HRSG). The combustion turbines are subject to New Source Performance Standards (NSPS- 40 CFR 60, Subpart GG). 40 CFR 60.334(b) requires the owner/operator of any combustion turbine 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. FPL has an intermediate bulk storage tank(s) for the light distillate oil and will test the sulfur and nitrogen content of the fuel oil as required by 40 CFR 60.334(b)(2).

Since the natural gas used by the combustion turbines does not pass through an intermediate bulk storage tank, FPL is hereby requesting a customized fuel monitoring schedule as allowed by 40 CFR 60.334(b)(2) for the Martin CG/CC Project. While firing natural gas, FPL 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 and the attached enclosure.
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 D4084-82 as referenced in 40 CFR 60.335(b)(2).

b. Effective on the commercial operation date of the CTs or the approval date of the customized fuel monitoring schedule which ever is later, 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, represents 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 quarter 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, FPL will notify the Department of Environmental Regulation of such excess emission and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while this monitoring schedule is being reexamined.

3. FPL will notify the Department of Environmental Regulation of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e. sulfur content varying greater than 10 grains/1000 cf 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 reexamined.

4. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by FPL for a period of three years, and be available for inspection by appropriate regulatory personnel.

5. FPL will obtain the sulfur content of the natural gas from Florida Gas Transmission Company at its Brooker Lab.

Data from natural gas at the Brooker Lab site is considered representative of the sulfur content of the natural gas at the Martin site since there is no additional entry point for sulfur or other elements/compounds which may affect the quality of the natural gas. The data presented in Attachment B is based upon representative samples of natural gas taken by Florida Gas Transmission.

If you or your staff have any question about this request please call Dan MacDougall at (407) 625-7661.

Sincerely,



Wayne C. Ondler  
Environmental Licensing Project Manager  
Florida Power & Light Company

cc: Doug Neeley-EPA/Atlanta  
Clair Fancy-DER/TAL  
H. S. Oven-DER/TAL  
Tom Title-DER/WPB