



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30385

4APT-AEB

Clair H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of
Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Approval of NSPS Custom Fuel Monitoring Schedules for:
Mulberry Cogeneration Project, PSD-FL-187 (AC53-211670);
Lake Cogeneration Project, PSD-FL-176 (AC15-196459); and
Pasco Cogeneration Project, PSD-FL-177 (AC51-196460).

Dear Mr. Fancy:

This is to acknowledge letters from KBN Engineering and Applied Sciences, Inc. (KBN) dated March 7, 1994, and March 17, 1994, requesting approval of customized fuel monitoring schedules for the above referenced projects. These requests were jointly transmitted to the U.S. Environmental Protection Agency (EPA), and to you. Since the authority for implementing §60.334(b) of 40 CFR Part 60, Subpart GG has not been delegated to the State of Florida, we have reviewed KBN's custom fuel monitoring schedules.

Based on our review we have determined that the proposed schedules are acceptable, as long as each source also complies with items 2(d), 3, and 4 of the attachment to the custom fuel monitoring guidance memo issued by EPA Headquarters on August 14, 1987. A copy of this memo was included in KBN's request as attachment.

If you have any questions regarding this letter, please contact Mr. Mirza P. Baig of my staff at 404/347-5014.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Jewell A. Harper".

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

cc: Kennard F. Kosky
KBN Engineering

**MULBERRY COGENERATION FACILITY
POLK POWERS PARTNERS, L.P.**
1125 US HIGHWAY 98 SOUTH, SUITE 100
LAKELAND, FLORIDA 33801
Telephone: (813) 682-6338
Fax: (813) 683-8257

RECEIVED

JUL 29 1994

July 20, 1994

Bureau of
Air Regulation
Air Regulation
Air Regulation

Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Attn: Bureau of Air Regulation

Re: Prevention of Significant Deterioration Construction Permit for Mulberry
Cogeneration/CO₂ Facility Letter
Dated: November 20, 1992
DER File No./Permit No.: AC53-211670
Issue Date: November 20, 1992

POLK POWER PARTNERS, L.P. Qualified to do business in Florida as
Polk Power Partners, L.P., Ltd.
NOTICE OF CHANGE OF ADDRESS

Please change the address and telephone number of the above-referenced Notice of Permit letter
as noted below:

NEW ADDRESS

Polk Power Partners, L.P.
(dba Polk Power Partners, L.P., Ltd.)
c/o Polk Power GP, Inc.
1125 US Highway 98 South, Suite 100
Lakeland, FL 33801
Attention: Vice President, General Manager

Telephone: (813) 682-6338
Fax: (813) 683-8257

Please contact us should you have any questions regarding this change. Thank you in advance
for your cooperation.

Vice President,
General Manager

File

POWER OPERATIONS DIVISION



A CENTRAL AND SOUTH WEST COMPANY

Mulberry Cogen
P.O. Box 824 • 3600 Hwy. 555
Bartow, FL 33830
813-533-9073 • Fax 813-533-4092

RECEIVED

JUL 21 1994

Bureau of
Air Regulation

July 18, 1994

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

Re: Mulberry Cogeneration Project, PSD-FL-187 (AC53-211670)
Notification of Combined Cycle Operation

Dear Mr. Fancy:

This correspondence is submitted on behalf of Polk Power Partners to serve as notification that the Mulberry Cogeneration Facility accomplished combined cycle operation, as scheduled, on July 14, 1994. This notification is given as required per 40 Code of Federal Regulations Part 60, Section 60.7(a) regarding New Source Performance Standards.

If you have any questions, please feel free to contact me at (813) 533-9073.

Sincerely,

John Paul Jones
Manager of Cogeneration

/pcp
xc: Ms. Jewell A. Harper, Chief
Air Enforcement Branch
Ms. Nancy Jones,
Polk Power Partners

DATE	VOUCHER NO.	AMOUNT
06/28/94	Mulberry Cogeneration Project NSPS Custom Fuel Monitoring Permit No. AC53-211670, PSD-FL-187	250.00

PAY *****250*** DOLLARS AND 00 CENTS \$ *****250.00

TO THE ORDER OF
 Florida Department of Environmental Regulation
 Bureau of Air Regulation
 Twin Towers Office Building
 2600 Blair Stone Road
 Tallahassee FL 32399-2400

[Handwritten Signature]
 KBN ENGINEERING AND APPLIED SCIENCES, INC.
 AUTHORIZED SIGNATURE

⑈012830⑈ ⑆06300002⑆ 2131100925716⑈



POLK POWER PARTNERS

1125 US HIGHWAY 98 SOUTH
SUITE 100
LAKELAND, FLORIDA 33801
813-682-6338

RECEIVED

June 23, 1994

JUN 24 1994

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

Bureau of
Air Regulation

RE: Mulberry Cogeneration Project, PSD-FL-187 (AC53-211670)
New Source Performance Standards (NSPS) - Initial Facility Startup

Dear Mr. Fancy:

This correspondence is submitted on behalf of the Polk Power Partners to serve as notification that the Mulberry Cogeneration Facility's initial startup is scheduled to occur on July 14, 1994. This notification is given as required per 40 Code of Federal Regulations Part 60, Section 60.7(a) regarding New Source Performance Standards.

If you have any questions, please feel free to contact me at (813) 682-6338.

Sincerely,

Nancy H. Jones / pw

Nancy H. Jones

cc: Ms. Jewell A. Harper, Chief Air Enforcement Branch
Mr. William Malenius, P.E., Ark Energy

KBN Engineering and Applied Sciences, Inc.
GENERAL DISBURSEMENT ACCOUNT
 PH. 904-331-9000
 1034 N.W. 57TH STREET
 GAINESVILLE, FL 32605

First Union National Bank
 of Florida
 Gainesville, Florida 32605

0004928
 06/28/94
 Branch 311

012830

28 June 1994

PAY *****250*** DOLLARS AND 00 CENTS \$ *****250.00

TO THE
 ORDER
 OF

Florida Department of Environmental Regulation
 Bureau of Air Regulation
 Twin Towers Office Building
 2600 Blair Stone Road
 Tallahassee FL 32399-2400

KBN ENGINEERING AND APPLIED SCIENCES, INC.

AUTHORIZED SIGNATURE

⑈012830⑈ ⑆06300002⑆ ⑆213100925716⑈

KBN ENGINEERING AND APPLIED SCIENCES, INC.
 GAINESVILLE, FL 32605

V-3922 012830

USE DETACH AND RETAIN FOR YOUR RECORDS

INVOICE NUMBER	DATE	VOUCHER NO.	AMOUNT
	06/28/94	Mulberry Cogeneration Project NSPS Custom Fuel Monitoring Permit No. AC53-211670, PSD-FL-187	250.00



Lawton Chiles
Governor

Florida Department of
Environmental Protection

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

Virginia B. Wetherell
Secretary

June 22, 1994

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Kennard F. Kosky, P.E.
President
KBN Engineering and Applied Sciences, Inc.
1034 NW 57th Street
Gainesville, Florida 32605

Dear Mr. Kosky:

RE: Mulberry Cogeneration Project
NSPS Custom Fuel Monitoring Schedule
Permit No. AC53-211670, PSD-FL-187

The Bureau of Air Regulation received your March 7, 1994, request for the above referenced project. The changes requested in your letter will necessitate an amendment to your permit and, pursuant to Rule 17-4.050(4)(o), F.A.C., will require a \$250 fee. As soon as the fee is received we will begin processing your request. If you have any questions, please call Patty Adams at (904) 488-1344.

Sincerely,

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

CHF/pa

RECEIVED
SER-MAIL ROOM
1994 JUN 29 PM 1:49

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- 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.

RECEIVED

JUN 28 1994

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: **Bureau of Air Regulation**
 Mr. Kennard F. Kosky, P.E.
 President
 KBN ENgineering and Applied
 Sciences, Inc.
 1034 NW 57th Street
 Gainesville, Florida 32605

4a. Article Number
 P 872 562 716

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

7. Date of Delivery

6/27/94

5. Signature (Addressee)

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

6. Signature (Agent)

K. Kosky

PS Form 3811, December 1991

★U.S. GPO: 1992-323-402

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

P 872 562 716



Receipt for Certified Mail

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

Sent to Mr. Kennard F. Kosky, P.E.	
Street and No. 1034 NW 57th Street	
City, State and ZIP Code Gainesville, FL 32605	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 6/23/94 AC 53-211670, PSD-FL-187	

PS Form 3800, JUNE 1991



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

June 22, 1994

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Kennard F. Kosky, P.E.
President
KBN Engineering and Applied Sciences, Inc.
1034 NW 57th Street
Gainesville, Florida 32605

Dear Mr. Kosky:

RE: Mulberry Cogeneration Project
NSPS Custom Fuel Monitoring Schedule
Permit No. AC53-211670, PSD-FL-187

The Bureau of Air Regulation received your March 7, 1994, request for the above referenced project. The changes requested in your letter will necessitate an amendment to your permit and, pursuant to Rule 17-4.050(4)(o), F.A.C., will require a \$250 fee. As soon as the fee is received we will begin processing your request. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

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

CHF/pa



RECEIVED

MAR 9 1994

Bureau of
Air Regulation

March 7, 1994

Ms. Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides, and Toxics Management Division
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta GA 30365

RECEIVED

JUN 17 1994

Emissions Monitoring

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

Re: Mulberry Cogeneration Project
FDEP File No. AC53-211670; PSD-FL-187
NSPS Custom Fuel Monitoring Schedule

Dear Ms. Harper and Mr. Fancy:

This correspondence is submitted on behalf of Polk Power Partners, L.P. to request approval of a custom fuel monitoring schedule for the determination of sulfur content required under the New Source Performance Standards (NSPS) for Stationary Gas Turbines [40 Code of Federal Regulations (CFR) Part 60, Subpart GG). This request is made necessary by Section 60.334(b) and (b)(2) of Subpart GG, which states:

(b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

It is my understanding that the U.S. Environmental Protection Agency (EPA) has not delegated the authority to implement Section 60.334(4) to the Florida Department of Environmental Protection (FDEP). Therefore, a copy of this request has been transmitted jointly to EPA Region IV and FDEP.

91193A3/4

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street
Gainesville, Florida 32605
904-331-9000
FAX 904-332-4189

5405 West Cypress Street,
Suite 215
Tampa, Florida 33607
813-287-1717 FAX 813-287-1716

1801 Clint Moore Road, Suite 105
Boca Raton, Florida 33487
407-994-9910
FAX 407-994-9393

6821 Southpoint Drive North,
Suite 216
Jacksonville, Florida 32216
904-296-9663 FAX 904-296-0146

One Church Street, Suite 801
Rockville, Maryland 20850
301-738-1100
FAX 301-738-1105



As indicated by Section 60.344(b)(2), the NSPS imply that daily sampling be performed when there is not an intermediate bulk storage tank, even if the fuel is pipeline natural gas. Discussions with EPA's Office of Air Quality Planning and Standards (OAQPS) confirm this interpretation of the rule and offer the attached memorandum as guidance. Specifically, a custom fuel monitoring schedule must be developed and approved for pipeline natural gas. The schedule should address the sulfur content of the fuel; the nitrogen content in natural gas is not required.

The sulfur content for natural gas submitted in the application was developed from data supplied by the natural gas pipeline company in Florida, i.e., Florida Gas Transmission Company (FGT). The data are summarized in Table 1. The emission limit proposed in the application was based on 1 grain sulfur per 100 cubic feet of gas (1 grain/100 cf) which is equivalent to about 0.003 percent sulfur by weight. This sulfur concentration was based on the highest recorded value over the 8-month study period (see Table 1) with a margin of 25 percent (i.e., 0.8 grains/100 cf times 1.25). The pipeline company (i.e., FGT) regularly samples for total sulfur in the natural gas to assure that the hydrogen sulfide content is low and that the concentrations of mercaptan are sufficient for safety reasons. Mercaptan is added to natural gas to assure that the gas has an odor that can be perceived if mistakenly released; otherwise natural gas would have no odor. Please note that the NSPS require that the sulfur content of the fuel be no more than 0.8 percent by weight; a difference of over two orders of magnitude from the basis of the emission limit. Thus, there is significant margin in complying with the NSPS limit.

The EPA guidance memorandum suggests that sampling be conducted twice monthly over the first six months, quarterly over the next six quarters and then during the first and third quarters of each calendar year. The 8 months of data listed in Table 1 (3 to 4 samples per month) demonstrate that the sulfur content meets the NSPS and is less than the basis of the emission limit for natural gas, i.e., 1 grain per 100 cf. FGT was recently contacted and supplied the following data from random analyses:

<u>Analyses Date</u>	<u>Sulfur Content (grains/100cf)</u>
03/10/92	0.50
06/30/92	0.40
09/29/92	0.26
01/05/93	0.31
03/02/93	0.27
06/01/93	0.16
09/28/93	0.12
12/14/93	0.42
02/09/94	0.04

Clearly, the data over that last several years have demonstrated that the NSPS limit is easily met. Thus, it is requested that EPA approve a custom fuel monitoring schedule that requires the facility to submit representative sulfur analyses supplied by the pipeline company each quarter over the first six quarters of turbine operation with the excess emissions report required under Section 60.7(c) of the CFR. After this

Ms. Jewell Harper and Mr. Clair Fancy
March 7, 1994
Page 3



time period, sulfur analyses would be supplied during the first and third quarters of each calendar year. This would provide assurance to EPA and FDEP that the NSPS was being achieved.

Please call if you have any questions.

Sincerely,

Handwritten signature of Kennard F. Kosky

Kennard F. Kosky, P.E.
President

KFK/lcb

cc: Ward Marshall, C&SW
William Malenius, Ark Energy
FDEP Southwest District
File (2)

Table 1. Sulfur Content, Heat Content, and SO₂ Emission Factors for Natural Gas

Date	Sulfur Content (gr/100 cf)	Heat Content (Btu)	SO ₂ Emission Factor (lb/10 ⁶ Btu)	SO ₂ Emission Factor (lb/10 ⁶ cf)
2/6/90	0.30	1,031	0.00083	0.857
2/13/90	0.05	1,028	0.00014	0.143
2/20/90	0.35	1,025	0.00098	1.000
2/27/90	0.45	1,024	0.00126	1.286
3/6/90	0.45	1,025	0.00125	1.286
3/13/90	0.30	1,026	0.00084	0.857
3/20/90	0.35	1,026	0.00097	1.000
3/27/90	0.35	1,025	0.00098	1.000
4/3/90	0.60	1,026	0.00167	1.714
4/10/90	0.25	1,022	0.00070	0.714
4/17/90	0.40	1,026	0.00111	1.143
4/24/90	0.30	1,022	0.00084	0.857
5/1/90	0.40	1,020	0.00112	1.143
5/8/90	0.25	1,034	0.00069	0.714
5/15/90	0.20	1,023	0.00056	0.571
6/5/90	0.45	1,020	0.00126	1.286
6/12/90	0.40	1,018	0.00112	1.143
6/19/90	0.70	1,017	0.00197	2.000
6/26/90	0.45	1,019	0.00126	1.286
7/3/90	0.55	1,022	0.00154	1.571
7/10/90	0.35	1,022	0.00098	1.000
7/17/90	0.45	1,021	0.00126	1.286
7/30/90	0.30	1,021	0.00084	0.857
8/7/90	0.50	1,024	0.00140	1.429
8/14/90	0.45	1,022	0.00126	1.286
8/21/90	0.40	1,022	0.00112	1.143
8/28/90	0.70	1,022	0.00196	2.000
9/4/90	0.55	1,029	0.00153	1.571
9/11/90	0.40	1,025	0.00111	1.143
9/18/90	0.45	1,026	0.00125	1.286
9/25/90	0.40	1,026	0.00111	1.143
10/2/90	0.45	1,029	0.00125	1.286
10/9/90	0.45	1,025	0.00125	1.286
10/16/90	0.70	1,028	0.00195	2.000
10/28/90	0.80	1,024	0.00223	2.286
Average:	0.43	1,024	0.00119	1.216
Maximum:	0.80	1,034	0.00223	2.286
Minimum:	0.05	1,017	0.00014	0.143
Std. Dev.	0.15	4	0.00042	0.427

Source: Florida Gas Transmission Company, 1990.

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



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

AUG 14 1987

OFFICE OF
AIR AND CLIMATE

MEMORANDUM

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 FFS/SSCD

TO 09195413470

PG06/007

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
- George Walsh
- Robert Ajax
- Earl Sale

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

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.

AIR RES



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

MAR - 7 1994

4APT-AEB

DEPARTMENT OF
ENVIRONMENTAL PROTECTION

MAR 10 1994

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

OFFICE OF THE SECRETARY

SUBJ: Polk Power Partners,
Mulberry Cogeneration Project (PSD-FL-187)

Dear Mr. Fancy:

This is to acknowledge receipt of the final determination and Prevention of Significant Deterioration (PSD) permit for the above referenced facility, by your correspondence dated February 21, 1994. The project will be a 126 megawatt combined cycle cogeneration unit, consisting of a combustion turbine exhausting through a primary heat recovery steam generator, which will produce steam for the steam-electric cycle, and a secondary heat recovery steam generator.

Your determination proposes to limit NO_x emissions from the combustion turbine through water injection and dry low-NO_x combustion technology (through 12/31/97) and through advanced dry low-NO_x combustion technology or selective catalytic reduction (after 12/31/97), to limit SO₂ and H₂SO₄ mist emissions from the combustion turbine through limiting the sulfur content of the No. 2 distillate fuel oil, to limit CO and VOC emissions from the combustion turbine through efficient combustion, and to limit PM/PM₁₀, Be, and As emissions from the combustion turbine through combustion control and the use of clean fuel.

We have reviewed the package as submitted and have no adverse comments. Thank you for the opportunity to review and comment on this package. 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

cc: J. Reynolds
B. Thomas, SW Dist
D. Martin, Polk Co.
Q. Bunnick, NPS
K. Hasky, RBN
D. Pollato, HBB/S

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- 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):

- Addressee's Address
 - Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to:
 Mr. Farzie Shelton
 McIntosh Power Plant
 3030 E. Lake Parker Drive
 Lakeland, Florida 33805

4a. Article Number
 Z 751 860 000

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

7. Date of Delivery
 11-23-94

A. Signature (Addressee)
Farzie Shelton

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

B. Signature (Agent)

Thank you for using Return Receipt Service.

Z 751 860 000



Receipt for Certified Mail

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

PS Form 3800, March 1993

Sent to Mr. Farzie Shelton	
Street and No. 3030 E. Lake Parker Drive	
P.O., State and ZIP Code Lakeland, FL 33805	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 11/21/94	

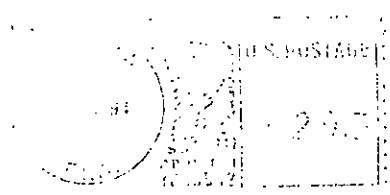
POWER OPERATIONS DIVISION



A CENTRAL AND SOUTH WEST COMPANY

Mulberry Cogen
P.O. Box 824
Bartow, FL 33830

*Bureau
of
HW* *MS#
5305*



State of Florida
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

This does not belong to

000





A CENTRAL AND SOUTH WEST COMPANY

Mulberry Cogen
P.O. Box 824 • 3600 Hwy. 555
Bartow, FL 33830
813-533-9073 • Fax 813-533-4092

RECEIVED

NOV 18 1994

Bureau of
Air Regulation

October 28, 1994

State of Florida
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Polk Power Partners, L.P.
Permit Number: AC 53-211670
PSD-FL-187

Dear Sir or Madam:

In compliance with Paragraph 5 of the above-referenced permit, please consider this our 30 days notification of compliance testing at the Mulberry Cogeneration Facility. If you require additional information, please feel free to contact me at (813) 533-9073.

Sincerely,

John Paul Jones
Manager of Cogeneration

/pcp

xc: Nancy Jones, Polk Power Partners

Handwritten notes:
D. Reynolds
M. Harley
B. Stone
[unclear]

POWER OPERATIONS DIVISION

C · S · W

ENERGY

A CENTRAL AND SOUTH WEST COMPANY

Mulberry Cogen

P.O. Box 824 • 3600 Hwy. 555

Bartow, FL 33830

813-533-9073 • Fax 813-533-4092

RECEIVED

NOV 18 1994

October 28, 1994

Bureau of
Air Regulation

State of Florida
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Polk Power Partners, L.P.
Permit Number: AC 53-211670
PSD-FL-187

Dear Sir or Madam:

In compliance with Paragraph 5 of the above-referenced permit, please consider this our 30 days notification of compliance testing at the Mulberry Cogeneration Facility. If you require additional information, please feel free to contact me at (813) 533-9073.

Sincerely,



John Paul Jones
Manager of Cogeneration


/pcp

xc: Nancy Jones, Polk Power Partners

J. Reynolds
M. Harley
B. Thomas SW Dist
C. Taylor EPA

Memorandum

Florida Department of
Environmental Protection

TO: Virginia Wetherell
FROM: Howard L. Rhodes 
DATE: February 15, 1994
SUBJECT: Approval of Construction Permit AC53-211670 (PSD-FL-187)
Polk Power Partners

Attached for your approval and signature is a reissued permit prepared by the Bureau of Air Regulation for the above mentioned company to construct a cogeneration facility near Bartow.

The Department issued the permit initially on November 24, 1992. Since that time, the permittee submitted new information justifying revised gas turbine emission limits for carbon monoxide and a deletion of the carbon dioxide recovery facility that had been included in the original permit. Since the changes resulting from the revised objectives were substantial, the permit was rewritten to reflect the removal of the carbon dioxide facility and the revised turbine limits. The Notice of Intent to Issue was published in the Polk County Democrat on January 5, 1994.

I recommend your approval and signature.

HLR/JR/bjb

Attachments



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

FEB - 4 1994

RECEIVED
FEB 10 1994

Bureau of
Air Regulation
DEPARTMENT OF
ENVIRONMENTAL PROTECTION

FEB 11 1994

OFFICE OF THE SECRETARY

4APT-AEB

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

SUBJ: Polk Power Partners,
Mulberry Cogeneration Project (PSD-FL-187)

Dear Mr. Fancy:

This is to acknowledge receipt of the revised preliminary determination and draft Prevention of Significant Deterioration (PSD) permit for the above referenced facility, by your letter dated December 29, 1993. The revised project will be a 126 megawatt combined cycle cogeneration unit, consisting of a combustion turbine exhausting through a primary heat recovery steam generator, which will produce steam for the steam-electric cycle, and a secondary heat recovery steam generator. The revised preliminary determination and draft PSD permit includes new emission limits for CO and deletion of the earlier proposed CO₂ recovery facility. The only increase in allowable emissions for the revised permit is 47.4 tons of CO per year. The CO₂ plant has been deleted and replaced by an ethanol plant to be constructed by different owners under a separate permit.

Your determination proposes to limit NO_x emissions from the combustion turbine through water injection and dry low-NO_x combustion technology (through 12/31/97) and through advanced dry low-NO_x combustion technology or selective catalytic reduction (after 12/31/97), to limit SO₂ and H₂SO₄ mist emissions from the combustion turbine through limiting the sulfur content of the No. 2 distillate fuel oil, to limit CO and VOC emissions from the combustion turbine through efficient combustion, and to limit PM/PM₁₀, Be, and As emissions from the combustion turbine through combustion control and the use of clean fuel.

-2-

We have reviewed the package as submitted and have no adverse comments. Thank you for the opportunity to review and comment on this package. 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

cc: J. Reynolds
B. Thomas, SW Dist
G. Benyak, NPS
K. Kosky, KBN



January 28, 1994

RECEIVED

FEB 07 1994

Bureau of
Air Regulation

Mr. C. H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Mulberry Cogeneration Project
DER File No. AC53-211670, PSD-FL-187
Comments on Revised Technical Evaluation and Preliminary Determination and Revised Permit

Dear Clair:

Enclosed are our comments concerning the revised technical evaluation and preliminary determination and revised permit for the Polk Power Partners to construct a cogeneration facility in Polk County.

1. Specific Condition No. 2

As identified in footnote (1), the nitrogen oxides (NO_x) emission rate for the combustion turbine is limited to 15 parts per million corrected to dry conditions (ppmvd) and 15 percent oxygen after December 31, 1997 but may be achievable by April 30, 1997. This NO_x emission rate is coincident with the emission limit for carbon monoxide (CO) of 25 ppmvd (as identified in footnote(2)). Similarly, through December 31, 1997, the NO_x emissions are limited to 25 ppmvd with a coincident CO emission limit of 20. Although the potential NO_x emission rate of 15 ppmvd may be achievable when the turbine is initially operated (prior to December 31, 1997), the CO emission limit of 25 ppmvd that is coincident with the lower NO_x emission limit of 15 ppmvd is not allowed through December 31, 1997. As a result, it is recommended that the following footnote be inserted in the table for the emission limits through December 31, 1997:

Addendum to Footnote (1)

Should the NO_x emission limit for the turbine based on 15 ppmvd (gas firing) be achieved prior to 12/31/97, the CO emission limit prior to 12/31/97 will be based on 25 ppmvd.

2. Best Available Control Technology/ Nitrogen Oxides

On page 5, the last sentence regarding the BACT for NO_x emissions states that the lower NO_x limit will be achieved by application of low-NO_x burners or SCR. This is a change from the project's final determination, dated November 19, 1992, which stated (page 5, last sentence of the NO_x BACT):

91193A3/3

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street
Gainesville, Florida 32605
904-331-9000
FAX 904-332-4189

5405 West Cypress Street,
Suite 215
Tampa, Florida 33607
813-287-1717 FAX 813-287-1716

1801 Clint Moore Road, Suite 105
Boca Raton, Florida 33487
407-994-9910
FAX 407-994-9393

6821 Southpoint Drive North,
Suite 215
Jacksonville, Florida 32216
904-296-9663 FAX 904-296-0146

One Church Street, Suite 801
Rockville, Maryland 20850
301-738-1100
FAX 301-738-1105



If the 15(gas)/42(oil) ppmvd emission rates cannot be met, SCR or another technology will be required no later than December 31, 1997.

We request that this language be retained in the revised permit.

On behalf of Polk Power Partners, L.P. and KBN, we appreciate you and your staff's review of this requested changes to the revised permit.

Sincerely,

Kennard F. Kosky, P.E.
President
Registration No. 14996

cc: Mr. William R. Malenius, Ark Energy, Inc.
Mr. Ward C. Marshall, Central and South West Services, Inc.
John Reynolds, FDEP



RECEIVED

JAN 07 1994

January 6, 1994

Bureau of
Air Regulation

Ms. Patty Adams
Air Permitting and Standards
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Polk Power Partners
PSD-FL-187 (AC53-211670)

Dear Ms. Adams:

Enclosed is the affidavit of publication for the Notice of Intent to Reissue for the above referenced permit application. Please call Bob McCann at our Gainesville office with any questions or comments.

Sincerely,

A. C. Kimball
Staff Environmental Planner

ACK/abb.1

Enclosure

xc: W. Malenius
J. Reese
W. Marshall
R. McCann
R. Anderson
91193-1600(2.4)(DD)

1-10-94 BB {
G. Reynolds
C. Holladay
G. Harper, EPA
G. Bunyat, WPS
J. Novak, Polk Co.

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street
Gainesville, Florida 32605
904-331-9000
FAX 904-332-4189

5405 West Cypress Street,
Suite 215
Tampa, Florida 33607
813-287-1717 FAX 813-287-1716

1801 Clint Moore Road, Suite 105
Boca Raton, Florida 33487
407-994-9910
FAX 407-994-9393

6821 Southpoint Drive North,
Suite 216
Jacksonville, Florida 32216
904-296-9663 FAX 904-296-0146

One Church Street, Suite 801
Rockville, Maryland 20850
301-738-1100
FAX 301-738-1105

STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
NOTICE OF
INTENT TO
REISSUE PERMIT

The Department of Environmental Protection gives notice of its intent to reissue a permit to Polk Power Partners, 23293 South Pointe Drive, Laguna Hills, California 92653, to construct a cogeneration facility 3.7 miles southwest of Bartow, Polk County, Florida. A determination of Best Available Control Technology is required. The proposed project is subject to Prevention of Significant Deterioration (PSD) regulations and federal new source performance standards. Modeling results show that increases in ground-level concentrations are less than PSD significant impact levels. The Department is issuing this Intent to Reissue for the reasons stated in the Technical Evaluation and Preliminary Determination.

The Department issued the permit initially on November 24, 1992. Since that time, the permittee submitted new information justifying revised gas turbine emission limits for carbon monoxide (CO) and a deletion of the carbon dioxide (CO2) recovery facility. Therefore, the Department is reissuing the permit to include these changes and provide additional time to accomplish the revised objectives.

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. 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, within fourteen (14) days of publication of this notice. 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, Florida Statutes.

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; and (g) A statement of the relief sought by petitioner, stating precisely the action 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 diffe-

AFFIDAVIT OF PUBLICATION

The Polk County Democrat

Published Semi-Weekly
Bartow, Polk County, Florida

Case No. _____

STATE OF FLORIDA
COUNTY OF POLK

Before the undersigned authority personally appeared _____
Mary G. Frisbie, who on oath says that (s)he is
Treasurer of The Polk County Democrat, a newspaper
published at Bartow, Polk County, Florida; that the attached copy of advertisement,
being a Notice of Intent to Reissue Permit in the
matter of The Department of Environmental Protection permit
to Polk Power Partners, (PSD)
in the _____ Court, was published in said newspaper in the issues
of Dec. 30, 1993

Affiant further says that The Polk County Democrat is a newspaper published at Bartow, in said Polk County, Florida, and that said newspaper has heretofore been continuously published in said Polk County, Florida, each Monday and Thursday, and has been entered as second class matter at the post office in Bartow, 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 said newspaper.

Signed Mary G. Frisbie

Sworn to and subscribed before me this 5th day of Jan., 1994,

by Mary G. Frisbie,

who is personally known to me.

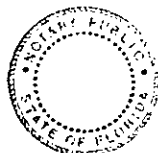
Teresa M. Pacetti

(Signature of Notary Public)

Teresa M. Pacetti
(Printed or typed name of Notary Public)

Notary Public

My Commission Expires:



Notary Public, State of Florida
TERESA M. PACETTI
My Comm. Exp. Dec. 19, 1995
Comm. No. CC 169508

rent from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the 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 fourteen (14) days of publication of this notice 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, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a. m. to 5:00 p. m., Monday through Friday, except legal holidays, at: Department of Environmental Protection, Bureau of Air Regulation, 111 S. Magnolia Park Courtyard, Tallahassee, Florida 32301, Department of Environmental Protection, Southwest District, 3804 Coconut Palm Drive, Tampa, Florida 33619-8218.

Any person may send written comments on the proposed action to Mr. Preston Lewis at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person(s). Such requests must be submitted within 30 days of this notice.

Dec. 30, 1993—3293
