

Florida Department of
Environmental Protection

Memorandum

TO: ~~Howard L. Rhodes~~ *by bag 10/28*
THRU: Scott Sheplak *sm8*
FROM: Edward Svec *Esvec*
DATE: October 28, 2002
SUBJECT: Polk Power Partners, L.P., Inc.
Modify Test Requirements
DEP File No: 1050217-003-AC, PSD-FL-187A
Modification of Permit No. AC 53-211670, PSD-FL-187

Attached for approval and signature is a final air construction permit modification for the Mulberry Cogeneration Facility. The modification removes the annual VOC test requirement and allows the use of required 40 CFR Part 75 NO_x CEMS as the test method for the gas turbine.

The applicant did seek a revision to a visible emissions limit set by a determination of BACT and the elimination of the annual testing requirement, which were relaxations in currently enforceable conditions. This request was not allowed.

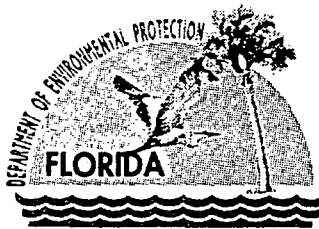
This project is not subject to PSD because there are no emissions changes associated with the modification.

No comments were received during the public comment period.

I recommend your approval and signature.

December 13, 2002 is day 90.

SMS/es
Attachments



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

October 28, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Allan Wade Smith
General Manager
Polk Power Partners, L.P., Inc.
1125 US 98, South, Suite 100
Lakeland, Florida 33801

Re: DEP File No. 1050217-003-AC, PSD-FL-187A
Modification of Permit No. AC 53-211670, PSD-FL-187
Mulberry Cogeneration Facility

The applicant, Allan Wade Smith, General Manager, Polk Power Partners, L.P., Inc., applied on July 3, 2002, to the Department for a modification to air construction permit number AC 53-211670, PSD-FL-187 for its Mulberry Cogeneration Facility located at 3600 County Road 555, Bartow, Polk County. The modification request is to remove the annual VOC test requirement; revise the visible emissions limit set by a determination of BACT and eliminate the annual testing requirement; and, allow the use of required 40 CFR Part 75 NO_x CEMS as the test method for the gas turbine. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Request: It is requested that the PSD permit be revised to remove the annual VOC test requirements (Specific Condition 4). Specific Condition 4 of the PSD permit appears to have caused some confusion in the drafting of the Initial Title V Operating Permit. As noted in Specific Condition 2 of the PSD permit there is no applicable VOC emissions limitation.

Response: The Department agrees that, after December 31, 1997, the VOC standard is removed from Specific Condition 2. As a result, Specific Condition 4 is changes as follows:

From: 4. Before this construction permit expires, the cogeneration facility stack and secondary HRSG stack shall be sampled or tested as applicable according to the emissions limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 95% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

NO_x: EPA Method 20
SO₂: Fuel supplier's sulfur analysis
VE: EPA Method 9
CO: EPA Method 10
VOC: EPA Method 25A

The permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with rule 17-297, F.A.C. Detailed drawings of the stacks showing testing facilities and sampling port locations as required by Rule 17-297.345 shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the duct or stack.

To: 4. Before this construction permit expires, the cogeneration facility stack and secondary HRSG stack shall be sampled or tested as applicable according to the emissions limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 95% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

"More Protection, Less Process"

Printed on recycled paper.

NO_x: EPA Method 20
SO₂: Fuel supplier's sulfur analysis
VE: EPA Method 9
CO: EPA Method 10
VOC: EPA Method 25A (prior to December 31, 1997, only)

The permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with rule 17-297, F.A.C. Detailed drawings of the stacks showing testing facilities and sampling port locations as required by Rule 17-297.345 shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the duct or stack.

Request: It is requested that the visible emissions limitation be removed from the BACT Determination and the PSD Permit (Specific Condition 2). Upon removal the General 20% opacity standard of Rule 62-296.320, F.A.C. would apply. The basis of the request seeks relief from conducting an annual EPA Method 9 on a natural gas fired combustion turbine.

Response: The Department has reviewed the request and cannot agree with it, at this time. BACT for PM/PM₁₀ was determined to be good combustion. It further states that 10% opacity is the indication of good combustion. For this reason, no PM/PM₁₀ standard was established. Irregardless, if the purpose of this request was to eliminate annual visible emissions testing, the fact that a visible emissions standard is established by permit mandates annual testing. No change will be made to Specific Condition 2.

Request: It is requested that the PSD permit be revised to include a condition that specifies compliance with the Acid Rain Monitoring requirements of 40 CFR Part 75 for the NO_x and oxygen monitors. It is also requested that the NO_x CEMS be specified as the reference method for NO_x and that the annual testing (EPA Method 20) requirement (Specific Condition 4) be removed. This is consistent with current FDEP Guidance (DARM-OGG-08, Guidance Document).

Response: The Department does not agree that this guidance document applies in this case because the guidance document states that testing is to be imposed when there is a specific rule requirement, as the EPA Method 20 requirement of 40 CFR 60, Subpart GG. However, the Environmental Protection Agency Region IV has routinely received and approved numerous requests for alternative testing and monitoring procedures under Subpart GG. These routine alternatives were recently described in a May 26, 2000 letter from Douglas Neeley to the Region IV State and Local Air Directors. The letter delegates authority to the Florida Department of Environmental Protection for approval of these alternatives. The request from Polk Power Partners falls within the scope of issues addressed in EPA's letter. As a result, Specific Condition 4 is changes as follows:

From: 4. Before this construction permit expires, the cogeneration facility stack and secondary HRSG stack shall be sampled or tested as applicable according to the emissions limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 95% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

NO_x: EPA Method 20
SO₂: Fuel supplier's sulfur analysis
VE: EPA Method 9
CO: EPA Method 10
VOC: EPA Method 25A (prior to December 31, 1997, only)

The permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with rule 17-297, F.A.C. Detailed drawings of the stacks showing testing facilities and sampling port locations as required by Rule 17-297.345 shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the duct or stack.

To: 4. Before this construction permit expires, the cogeneration facility stack and secondary HRSG stack shall be sampled or tested as applicable according to the emissions limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 95% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

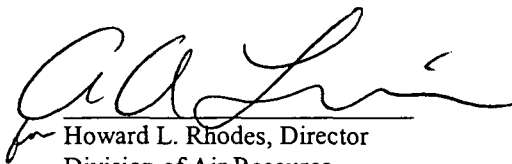
- NO_x: EPA Method 20
- SO₂: Fuel supplier's sulfur analysis
- VE: EPA Method 9
- CO: EPA Method 10
- VOC: EPA Method 25A (prior to December 31, 1997, only)

The permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with rule 17-297, F.A.C. Detailed drawings of the stacks showing testing facilities and sampling port locations as required by Rule 17-297.345 shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the duct or stack. **The owner or operator is allowed to make compliance demonstrations for NO_x emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NO_x monitor. The applicable span value specified in 40 CFR Part 75 shall be used instead of that specified 40 CFR 60.335(c). The owner or operator is allowed to make compliance demonstrations for NO_x emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NO_x monitor. The applicable span value specified in 40 CFR Part 75 shall be used instead of that specified 40 CFR 60.335(c).**

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resource
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10/28/02 to the person(s) listed:

Mr. Allan Wade Smith, Polk Power Partners, LLC*
Mr. Darrel Graziani, PE, Foster Wheeler Environmental Corporation
Mr. Gerald Kissel, PE, FDEP SWD
Mr. John Bunyak, NPS
Ms. Jeaneanne Gettle, EPA

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Barbara J. Sunday 10/28/02
(Clerk) (Date)

1 APPLICANT NAME AND ADDRESS

Polk Power Partners, L.P., Inc.
1125 US 98, South, Suite 100
Lakeland, Florida 33801

Authorized Representative: Allan Wade Smith, General Manager

2 FACILITY DESCRIPTION, PROJECT DETAILS AND RULE APPLICABILITY

This facility has a 126 MW combined cycle cogeneration unit which consists of 1 combustion turbine (CT), 1 Heat Recovery Steam Generator (HRSG) and 1 Secondary Boiler. The facility is fired with natural gas and new No. 2 fuel oil, with natural gas being the primary fuel and new No. 2 fuel oil as backup fuel. The project is a request to (1) remove the annual VOC test requirements in Specific Condition 4; (2) remove the visible emissions requirements established by a determination of Best Available Control Technology (BACT), substitute the general visible emissions standard for the BACT standard and not require annual testing when firing natural gas; and, (3) allow the use of NO_x CEMS to demonstrate compliance with the NO_x standard for the turbine. The applicant did seek any relaxation in currently enforceable conditions in its existing emissions units. The request does not effect emissions.

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The existing facility is located in an area designated, in accordance with Rule 62-204.340, F.A.C., as attainment or unclassifiable for the criteria pollutants ozone, PM₁₀, carbon monoxide, SO₂, nitrogen dioxide and lead. This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant exceed 100 tons per year (TPY).

This facility is on the list of the 28 Major Facility Categories, Table 62-212.400-1, F.A.C. Because emissions are greater than 100 tons per year for at least one criteria pollutant, the facility is also a major facility with respect to Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD).

The facility was issued a PSD permit, including a determination of Best Available Control Technology (BACT), on November 24, 1992.

The applicant stated that this facility is not a major source of hazardous air pollutants (HAPs). This project is not subject to a case-by-case MACT determination per Rule 62-204.800(10)(d)2, F.A.C., because it does not result in the construction or reconstruction of a major source of HAP emissions. This project is not subject to any requirements under the National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61 or 63.

3 SOURCE IMPACT ANALYSIS

An impact analysis was not required for this project because it is not subject to the requirements of PSD NSR.

4 EXCESS EMISSIONS

This permitting action does not change any authorization for excess emissions provided by other Department permits for other emissions units. The excess emissions provisions of state rule cannot be used to vary any NSPS requirements applicable to this emissions unit.

5 LIMITS AND COMPLIANCE REQUIREMENTS

The permit maintains the previously established limits on the operation of the turbine, HRSG, and boiler.

6 PRELIMINARY DETERMINATION

The Department's preliminary determination is to issue the draft permit which identifies that the EPA Method 25A for VOC, identified in Specific Condition 4 is applicable prior to December 31, 1997, only and allow the use of the NO_x CEMS to demonstrate compliance with the NO_x standard for the turbine, in accordance with a May 26, 2000 letter from Douglas Neeley to the Region IV State and Local Air Directors. The visible emissions standards and testing requirements, established by a determination of BACT, will remain unchanged. Based on the foregoing technical evaluation of the application and other available information, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations.

7 FINAL DETERMINATION

An "INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT RENEWAL" to Polk Power Partners L.P., Inc. for the Mulberry Cogeneration Facility located at 3600 County Road 555, Bartow, Polk County was clerked on September 20, 2002. The "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT RENEWAL" was published in The Polk County Democrat on September 26, 2002. The Draft Air Construction Permit was available for public inspection at the Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE A COMBINED AIR CONSTRUCTION PERMIT/TITLE V OPERATION PERMIT RENEWAL" was received on October 21, 2002.

No comments were received during the thirty (30) day public comment period. As a result, the permit will be issued, as noticed.

DETAILS OF THIS ANALYSIS MAY BE OBTAINED BY CONTACTING:

Edward J. Svec, Engineer IV
Department of Environmental Protection
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Allan Wade Smith
 General Manager
 Polk Power Partners, L.P., Inc.
 1125 US 98 South, Suite 100
 Lakeland, Florida 33801

2. Article Number (Copy from service label)
 7000 0600 0021 6524 2762

PS Form 3811, July 1999

Domestic Return Receipt

102595-00-M-0952

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A. Received by (Please Print Clearly)

B. Date of Delivery

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C. Signature

X *Arnold W. ...*
 Agent
 Addressee

D. Is delivery address different from item 1?

 Yes

If YES, enter delivery address below:

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3. Service Type

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Mr. Allan Wade Smith

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Certified Fee

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Total Postage & Fees \$

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Mr. Allan Wade Smith

Street, Apt. No.; or PO Box No.

1125 US 98 South, Suite 100

City, State, ZIP+4

Lakeland, Florida 33801

PS Form 3800, July 1999

See Reverse for Instructions

7000 0600 0021 6524 2762