Florida Department of Environmental Protection

Memorandum

TO:

Trina Vielhauer

THRU:

J. Koerner

FROM:

M. P. Halpin

DATE:

May 27, 2005

SUBJECT:

Calpine Corporation - Osprey Energy Center

PSD Permit Modification, Annual Testing Requirements DEP File No. PSD-FL-287, 1050334-007-AC and PA00-41

Attached is the public notice package for Calpine's Osprey Energy Center. The modification allows for changes to two separate annual testing requirements. The first change allows for annual tests to be conducted at a single set of load conditions rather than two separate sets of conditions, and the second change allows for a different (EPA approved) method for conducting annual ammonia slip tests.

Since there are no increases to emissions as a result if these changes, neither a Determination of Best Available Control Technology (BACT) nor an air quality analysis was required.

I recommend your approval.

mph

Attachments

Trina

By removing the last CO standard, we're removing the regularment to condict on annual test for those conditions. Itowever, the CO standard is still present in the beginning with compliance demonstrated by CFMS.

Calpine expects to conduct festing at the end of June. It would become be appreciated if the got the draft out guickly so it could become fital before this time. It would save them some money for the additional test.

The KSI

WH

P.E. Certification Statement

Calpine Corporation
Osprey Energy Center
Polk County

DEP File No.: PSD-FL-287, PA00-41

Facility ID No.: 1050334

Project: PSD Permit Modification – Testing Changes

I HEREBY CERTIFY that the engineering features described in the above referenced application and related additional information submittals, if any, and subject to the proposed permit conditions, provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

(Seal:

Michael P. Halpin, P.E. Registration Number: 31970

5-27-05

Date

Permitting Authority:

Florida Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation New Source Review Section Mail Station #5505 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Telephone: 850/488-0114

Fax: 850/922-6979



Department of Environmental Protection

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

Colleen M. Castille Secretary

May 27, 2005

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Benjamin B. H. Borsch, P.E. Manager – Safety Health & Environment Calpine Corporation 2701 Rocky Point, Suite 1200 Tampa, Florida 33607

Re: DEP File No. PSD-FL-287, 1050334-007-AC and PA00-41

Osprey Energy Center / Polk County

Dear Mr. Borsch:

Enclosed is one copy of the PSD permit modification, relative to the Osprey Energy Center's request for changes to annual test requirements. The above facility is located near Auburndale, in Polk County.

The <u>Public Notice of Intent to Issue PSD Permit Modification</u> must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to J. Koerner, P.E., Supervisor, North Permitting Section at the above letterhead address. If you have any other questions, please contact Michael P. Halpin, P.E. at 850/921-9519.

Sincerely.

Tim LVilhaun

Trina Vielhauer, Chief

Bureau of Air Regulation

TV/mph

Enclosures

In the Matter of an Application for Permit by:

Benjamin M. H. Borsch, Manager – Safety Health & Environment Calpine Corporation 2701 N. Rocky Point, Suite 1200 Tampa, Florida 33607 DEP File Number 1050334-007-AC PSD-FL-287; PA00-41

INTENT TO ISSUE PSD PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD Permit Modification (copy of Draft permit changes attached) for the proposed project, detailed in the application specified above and for the reasons stated below.

The applicant, Benjamin M. H. Borsch, Manager – Safety Health & Environment, Calpine, applied on May 17, 2005, to the Department for a PSD Permit Modification at its Osprey Energy Center, located near Auburndale, Polk County. The request is to allow for changes to two annual testing requirements. A new BACT Determination is not required since there are no changes to emissions.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212 and 40 CFR 52.21. The above actions are not exempt from permitting procedures. The Department has determined that a PSD Permit Modification is required in order to allow for the requested testing changes.

The Department intends to issue this PSD Permit Modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C. and 40 CFR 52.21.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue PSD Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of <u>Public Notice of Intent to Issue PSD Permit Modification</u>. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain

Calpine Corporation Osprey Energy Center Page 2 of 3 PSD-FL-287 1050334-007-AC PA00-41

Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Calpine Corporation Osprey Energy Center Page 3 of 3 PSD-FL-287 1050334-007-AC PA00-41

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this <u>Intent to Issue PSD Permit Modification</u> (including the <u>Public Notice of Intent to Issue PSD Permit Modification</u> and the <u>Draft PSD Permit Modification</u> was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on to the person(s) listed:

Benjamin M. H. Borsch, P.E. *
Joel Smolen, FDEP SWD
Buck Oven, PPSO
Gregg Worley, EPA
John Bunyak, NPS

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 appropriate of the control of the c

(Clerk)

(Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 1050334-007-AC

Calpine Corporation
Osprey Energy Center
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD Permit Modification for Osprey Energy Center, located near Auburndale, Polk County. The modification allows for changes to two separate annual testing requirements. The first change allows for annual tests to be conducted at a single set of load conditions rather than two separate sets of conditions, and the second change allows for a different (EPA approved) method for conducting annual ammonia slip tests. Since there are no increases to emissions as a result of these changes, neither a Determination of Best Available Control Technology (BACT) nor an air quality analysis was required. The applicant's mailing address is: 2701 N. Rocky Point, Suite 1200, Tampa FL 33607.

The Department will issue the Final Permit with the attached modified conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the conditions modified as indicated unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the 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 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or

modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Florida Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: (850) 488-1344

Fax: (850) 922-6979

Florida Department of Environmental Protection Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619 Telephone: (813) 744-6100

The complete project file includes the application, draft permit and additional information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may review specific details of this project by contacting the Administrator, North Permitting Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.



June xx, 2005

Mr. Benjamin M. H. Borsch, P.E. Manager, Safety Health & Environment Calpine Corporation 2701 N. Rocky Point, Suite 1200 Tampa, Florida 33607

Re: PSD-FL-287 Permit Modification, Annual Testing Requirements DEP File Number 1050334-007-AC and PA00-41 Osprey Energy Center / Polk County

The applicant, Calpine Corporation, applied on May 17, 2005, to the Department for two changes to the annual testing requirements. The requests were for a single annual stack test (rather than two), as well as an alternative (EPA approved) method for testing ammonia slip annually.

The Department has reviewed the modification request. The referenced PSD permit is hereby modified as follows:

- III. Emissions Unit(s) Specific Conditions Applicable Standards And Regulations:
 - 21. Carbon Monoxide (CO) Emissions: Emissions of CO in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on gas shall exceed neither 10 ppmvd @15% O₂ on a 24-hr block average to be demonstrated by CEMS for those days when no valid hour includes the use of duct burner firing, power augmentation or operation below 30% excluding periods of start-up and shut-down, nor (otherwise, the limit is 17 ppmvd @15% O₂ on a 24-hr block average for those days when at least one valid hour includes the use of duct burner firing, power augmentation or operation below 30% excluding periods of start-up and shut-down to be demonstrated by CEMS); and neither 10 ppmvd @15% O₂ nor 45 lb/hr per unit at 100% output with the duct burner off and no power augmentation to be demonstrated by annual stack test using EPA Method 10 or through annual RATA testing. [BACT, Rule 62-212.400, F.A.C.]
 - 29. Initial (1) performance tests shall be performed by the deadlines in Specific Condition 28. Initial tests shall also be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or change of combustors, if specifically requested by the DEP on a case-by-case basis. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 September 30) pursuant to Rule 62-297.310(7), F.A.C., on these units as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. Where initial tests only are indicated, these tests shall be repeated prior to renewal of each operation permit.
 - EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - · EPA reference Method 5, "Determination of Particulate Emissions from Stationary Sources." Initial test only.
 - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines" (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirement); Initial test for compliance with 40CFR60 Subpart GG; Initial (only) NO_X compliance test for the duct burners (Subpart Da) shall be accomplished via testing with duct burners "on" as compared to "off" and computing the difference.



- EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.
- EPA Method 320, "Measurement of vapor phase organic and inorganic emissions by extractive Fourier Transform Infrared (FTIR) Spectroscopy" (I, A); or the following 2 methods:
- EPA Method 26A (modified) for ammonia sample collection (I, A).
- EPA Draft Method 206 for ion chromatographic analysis for ammonia (I, A).

The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O_2) at the measured lb/hr NO_X emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the Department's request, according to Specific Condition 46.

All other terms and conditions of this permit remain unchanged. 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.

Michael G. Cooke, Director Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PSD Permit Modifie	ation was
sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on	to
the person(s) listed:	

Benjamin M. H. Borsch, P.E. *
Joel Smolen, FDEP SWD
Buck Oven, PPSO
Gregg Worley, EPA
John Bunyak, NPS

Clerk Stamp	
FILING AND ACKNOWL date, pursuant to §120.52, FI designated Department Clerk acknowledged.	
(Clerk)	(Date)

OMPLETE THIS SECTION ON DELIVERY Signature Agent Addressee	
Agent	
i. Received by (Printed Name) C. Date of Pellvery O. Is delivery address different from item 1?	
If YES, enter delivery address below:	
Service Type Certified Mail Express Mail Registered Return Receipt for Merchandise C.O.D.	
I. Restricted Delivery? (Extra Fee)	
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	Mr. Benjamin B. H. Borsch, P.E., Manager Safety Health & Environment				
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