Memorandum

TO:

Trina Vielhauer

THRU:

J. K. Pennington

FROM:

M. P. Halpin

DATE:

December 8, 2004

SUBJECT:

Calpine Corporation – Osprey Energy Center Air Construction Permit – Low Load Testing

DEP File No. PSD-FL-287

Attached is the public notice package for Calpine's Osprey Energy Center Low Load Testing. After discussing the submittal with the applicant (Ben Borsch, P.E.) I believe that the simplest and most expeditious way to accommodate Calpine's request is to provide them with alternative, temporary emission limits for CO and NO_X . Such a permit requires a public notice, but due to the short test period (30 days) the annual emission increases are insufficient to trigger a PSD review. For comparison, the Department reviewed and approved a test protocol for a similar (low load testing) authorization at JEA Brandy Branch, but since no emissions increases were sought by the applicant (or expected by FDEP) we did not require a public notice.

I recommend your approval.

JKP/mph

Attachments



Department of **Environmental Protection**

leb Bush Governor

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

Colleen M. Castille Secretary

December 9, 2004

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

Osprey Energy Center / Polk County

Dear Mr. Borsch:

Enclosed is one copy of the Draft Air Construction Permit relative to the Osprey Energy Center's request to permit low load testing on Units 1 and 2. The above facility is located near Auburndale, in Polk County.

The <u>Public Notice of Intent to Issue Air Construction Permit must be published one time only</u>, 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. K. Pennington, P.E., Administrator, 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,

Trina Vielhauer, Chief

Bureau of Air Regulation

Zun L Vielhaun

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 PSD-FL-287

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit (copy of Draft permit 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 December 3, 2004, to the Department for an Air Construction Permit at its Osprey Energy Center, located near Auburndale, Polk County. The request is to perform low load testing on Units 1 and 2 for a period of one month. The testing will be done at loads near 30% output (approximately 50 megawatts gross) in order to evaluate each units ability to meet current emission limits while operating at loads below 60% output, which is the current low load limit.

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 an Air Construction Permit is required in order to conduct such testing.

The Department intends to issue this Air Construction Permit 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 Air Construction Permit. 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 Air Construction Permit</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.

PSD-FL-287 Calpine Corporation Osprey Energy Center Page 2 of 3

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'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.

PSD-FL-287 Calpine Corporation Osprey Energy Center Page 3 of 3

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.

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 Air Construction Permit</u> (including the <u>Public Notice of Intent to Issue Air Construction Permit</u> and the Draft Air Construction Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on <u>Ia 10 64</u> to the person(s) listed:

Benjamin M. H. Borsch, P.E. * Robert Soich, FDEP SWD 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

-acknowledged.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PSD-FL-287

Calpine Corporation
Osprey Energy Center
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit for Osprey Energy Center, located near Aubumdale, Polk County. The permit allows for low load testing on Units 1 and 2 for a period of one month. The testing will be done at loads near 30% output (approximately 50 megawatts gross) in order to evaluate each units ability to meet current emission limits while operating at loads below 60% output, which is the existing low load limit. A Determination of Best Available Control Technology (BACT) was not required. The applicant's mailing address is: 2701 N. Rocky Point, Suite 1200, Tampa FL 33607.

Based upon applicant submittals, the Department estimates that the regulated air emission impact from the subject testing will be as follows:

Pollutant	PSD Threshold	CT Emission Rate (ppmvd)		Maximum Change in Potential CT	Monthly Tons for 2	TPY Total	PSD Applies
	(TPY)	PERMIT LIMIT	TESTING LIMIT	Emissions (lb/hour)	CT's		?
NO _V	40	3.50	5.0	11.8	8.8	8.8	No
CO	100	17.0	37.0	81.8	60.9	60.9	No

An air quality impact analysis was not required nor conducted.

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 this Public Notice of Intent to Issue Air Construction Permit. 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 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 the information submitted by the Responsible Official, 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.



December 9, 2004

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

Re: Low load testing, PSD-FL-287 DEP File Number 1050334-005-AC Osprey Energy Center / Polk County

The applicant, Calpine Corporation, applied on December 3, 2004, to the Department for authorization to perform low load testing at its Osprey Energy Center located in Polk County. The request entails providing for the potential of temporary emission increases above the existing emission limits for CO, NO_X and ammonia slip. Such a request necessitates temporary modifications to PSD permit number PSD-FL-287, allowing for Units 1 and 2 to operate down to loads of at least 30% output (approximately 50 gross megawatts) along with the granting of temporary emission allowances for the purposes of testing and control tuning. In support of the request, Calpine has reviewed test results, for nearly identical Calpine units, and estimates that the following temporary permit changes will be required.

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

- III. Emissions Unit(s) Specific Conditions
 Applicable Standards And Regulations:
 - 20. Nitrogen Oxides (NO_X) Emissions:
 - The concentration of NO_N in the stack exhaust gas, with the combustion turbine operating, the duct burner on or off, shall not exceed 3.5 5.0 ppmvd @15% O₂ on a 24-hr block average. This limit shall apply whether or not the unit is operating with duct burner on and/or in power augmentation mode. Compliance shall be determined by the continuous emission monitor (CEMS). [BACT Determination]
 - The emissions of NO_X shall not exceed 27.5 lb/hr (at 95°F ambient temperature) while operating in the power augmentation mode with the duct burner on, to be demonstrated by annual stack test. [BACT Determination]
 - Emissions of NO_X from the duct burner shall not exceed 0.1 lb/MMBtu, which is more stringent than the NSPS (see Specific Condition 29). [Applicant Request, Rule 62-4.070 and 62-204.800(7), F.A.C.]
 - The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 9.0 15.0 ppmvd @15% O₂. The compliance procedures are described in Specific Conditions 29 and 46. [BACT, Rules 62-212.400 and 62-4.070, F.A.C.]
 - When NO_X monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
 - 21. <u>Carbon Monoxide (CO) Emissions</u>: 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 60- less than 70% operation (otherwise, the limit is 17 37 ppmvd @15% O₂ on a 24-hr block average 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.]

- 25. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except during both "cold start-up" to and shutdowns from combined cycle plant operation. During cold start-up to combined cycle operation, up to four hours of excess emissions are allowed. During shutdowns from combined cycle operation, up to three hours of excess emissions are allowed. Cold start-up is defined as a startup to combined cycle operation following a complete shutdown lasting at least 48 hours. Operation below 60% 30% output per turbine shall otherwise be limited to 2 hours in any 24-hour period. [Rule 62-210.700, F.A.C.].
- 35. <u>Test Notification</u>: The DEP's Southwest District office shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests. <u>During the "special testing"</u> which is requested herein by Calpine, the DEP's Southwest District Office shall be notified, in writing, at least 72 hours prior to commencement of such testing.
- 47. The above permit modifications will expire 30 days following the issuance date below. A test report shall be filed with the Department, within 45 days of the expiration of this permit, including reports of all tests conducted as well as Calpine's analysis thereof. Additionally, Calpine shall submit an electronic version of all NO_y and CO CEMS data as well as a written summary of the data.

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 Calpine Corporation Page 3 of 3



DEP File Number 1050334-005-AC

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	to the
person(s) listed:	

Benjamin M. H. Borsch, P.E. * Robert Soich, FDEP SWD Gregg Worley, EPA John Bunyak, NPS

Clerk Stamp	
FILING AND ACKNOWLEDG date, pursuant to §120.52, Florida designated Department Clerk, receacknowledged.	Statutes, with the
(Clerk)	(Date)



Department of **Environmental Protection**

leb Bush Governor

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

Colleen M. Castille Secretary

December 9, 2004

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

Osprey Energy Center / Polk County

Dear Mr. Borsch:

Enclosed is one copy of the Draft Air Construction Permit relative to the Osprey Energy Center's request to permit low load testing on Units 1 and 2. The above facility is located near Auburndale, in Polk County.

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Please submit any written comments you wish to have considered concerning the Department's proposed action to J. K. Pennington, P.E., Administrator, 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,

Trina Vielhauer, Chief

Bureau of Air Regulation

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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 PSD-FL-287

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

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The Department intends to issue this Air Construction Permit 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.

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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.

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PSD-FL-287 Calpine Corporation Osprey Energy Center Page 2 of 3

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'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 petitioner 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.

PSD-FL-287 Calpine Corporation Osprey Energy Center Page 3 of 3

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.

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 Air Construction Permit</u> (including the <u>Public Notice of Intent to Issue Air Construction Permit</u> and the Draft Air Construction Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12/10/54 to the person(s) listed:

Benjamin M. H. Borsch, P.E. * Robert Soich, FDEP SWD 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

acknowledged.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PSD-FL-287

Calpine Corporation
Osprey Energy Center
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an Air Construction Permit for Osprey Energy Center, located near Auburndale, Polk County. The permit allows for low load testing on Units 1 and 2 for a period of one month. The testing will be done at loads near 30% output (approximately 50 megawatts gross) in order to evaluate each units ability to meet current emission limits while operating at loads below 60% output, which is the existing low load limit. A Determination of Best Available Control Technology (BACT) was not required. The applicant's mailing address is: 2701 N. Rocky Point, Suite 1200, Tampa FL 33607.

Based upon applicant submittals, the Department estimates that the regulated air emission impact from the subject testing will be as follows:

	Pollutant	PSD	CT Emission Rate		Maximum Change in	Monthly	TPY	PSD
ı		Threshold	(ppmvd)		Potential CT	Tons for 2	Total	Applies
1		(TPY)	PERMIT	TESTING	Emissions (lb/hour)	CT's		?
l			LIMIT	LIMIT				
	NO_X	40	3.50	5.0	11.8	8.8	8.8	No
	CO	100	17.0	37.0	8.18	60.9	60.9	No

An air quality impact analysis was not required nor conducted.

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 this Public Notice of Intent to Issue Air Construction Permit. 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 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'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 the information submitted by the Responsible Official, 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 \$50/488-0114, for additional information.



December 9, 2004

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

Re: Low load testing, PSD-FL-287 DEP File Number 1050334-005-AC Osprey Energy Center / Polk County

The applicant, Calpine Corporation, applied on December 3, 2004, to the Department for authorization to perform low load testing at its Osprey Energy Center located in Polk County. The request entails providing for the potential of temporary emission increases above the existing emission limits for CO, NO_X and ammonia slip. Such a request necessitates temporary modifications to PSD permit number PSD-FL-287, allowing for Units 1 and 2 to operate down to loads of at least 30% output (approximately 50 gross megawatts) along with the granting of temporary emission allowances for the purposes of testing and control tuning. In support of the request, Calpine has reviewed test results, for nearly identical Calpine units, and estimates that the following temporary permit changes will be required.

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

- III. Emissions Unit(s) Specific Conditions Applicable Standards And Regulations:
 - 20. <u>Nitrogen Oxides (NO_X) Emissions:</u>
 - The concentration of NO_N in the stack exhaust gas, with the combustion turbine operating, the duct burner on or off, shall not exceed 3.5 5.0 ppmvd @15% O₂ on a 24-hr block average. This limit shall apply whether or not the unit is operating with duct burner on and/or in power augmentation mode. Compliance shall be determined by the continuous emission monitor (CEMS). [BACT Determination]
 - The emissions of NO_X shall not exceed 27.5 lb/hr (at 95°F ambient temperature) while operating in the power augmentation mode with the duct burner on, to be demonstrated by annual stack test. [BACT Determination]
 - Emissions of NO_X from the duct burner shall not exceed 0.1 lb/MMBtu, which is more stringent than the NSPS (see Specific Condition 29). [Applicant Request, Rule 62-4.070 and 62-204.800(7), F.A.C.]
 - The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 9.0 15.0 ppmvd @15% O₂. The compliance procedures are described in Specific Conditions 29 and 46. [BACT, Rules 62-212.400 and 62-4.070, F.A.C.]
 - When NO_X monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time.
- 21. <u>Carbon Monoxide (CO) Emissions</u>: 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 60- less than 70% operation (otherwise, the limit is 47 37 ppmvd @15% O₂ on a 24-hr block average 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.]

- 25. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except during both "cold start-up" to and shutdowns from combined cycle plant operation. During cold start-up to combined cycle operation, up to four hours of excess emissions are allowed. During shutdowns from combined cycle operation, up to three hours of excess emissions are allowed. Cold start-up is defined as a startup to combined cycle operation following a complete shutdown lasting at least 48 hours. Operation below 60% 30% output per turbine shall otherwise be limited to 2 hours in any 24-hour period. [Rule 62-210.700, F.A.C.].
- 35. <u>Test Notification</u>: The DEP's Southwest District office shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests. <u>During the "special testing" which is requested herein by Calpine, the DEP's Southwest District Office shall be notified, in writing, at least 72 hours prior to commencement of such testing.</u>
- 47. The above permit modifications will expire 30 days following the issuance date below. A test report shall be filed with the Department, within 45 days of the expiration of this permit, including reports of all tests conducted as well as Calpine's analysis thereof. Additionally, Calpine shall submit an electronic version of all NO_N and CO CEMS data as well as a written summary of the data.

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 Calpine Corporation Page 3 of 3



DEP File Number 1050334-005-AC

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 ______ to the person(s) listed:

Benjamin M. H. Borsch, P.E. * Robert Soich, FDEP SWD Gregg Worley, EPA John Bunyak, NPS

Clerk Stamp	
FILING AND ACKNOWLEDGE date, pursuant to §120.52, Florida designated Department Clerk, rece acknowledged.	Statutes, with the
(Clerk)	(Date)

	U.S. Postal Service CERTIFIED MAIL RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)					
2022						
_ □	Postage	S				
H H	Certified Fee	,	Postmark			
E100	Return Receipt Fee (Endorsement Required)		Here			
	Restricted Delivery Fee (Endorsement Required)					
20	Total Postage & Fees	\$				
1670	Mento Benjamin B.H. Borsch, P.E., Manager					
	Safety Health & Environment					
	Calpine Corporation					
7000	27,01 Rocky Point. Suite 1200					
~	Tampa Florida 33607					
	PS Form 3800; May 2000.		See Reverse for Instructions			