

# PALMETTO POWER, L.L.C.

1000 Louisiana, Suite 5800  
Houston, Texas 77002-5050  
(713) 507-6400

RECEIVED

MAY 22 2000

BUREAU OF AIR REGULATION

May 19, 2000

Mr. Jeff Koerner  
New Source Review Section  
Florida Dept. of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

VIA FED EX


Re: Confirmation of Publication of Legal Notice  
Notice of Intent to Issue Air Construction Permit

Dear Mr. Koerner:

Enclosed please find two original 'proof of publication' affidavits for the legal notice pertinent to the Palmetto Power, L.L.C.'s draft air quality permit. The notice was published in two local papers with coverage in both Orange and Osceola counties.

Please do not hesitate to call me if you have any questions at (713) 767-8961. Thank you very much for your assistance.

Sincerely,



Starla Lacy  
Environmental Specialist

Atch.

CC: EPA  
NPS  
CD

# The Orlando Sentinel

Published Daily

State of Florida } S.S.  
COUNTY OF ORANGE

Before the undersigned authority personally appeared Julia Nichols, who on oath says that he/she is the Legal Advertising Representative of The Orlando Sentinel, a daily newspaper published at KISSIMMEE in OSCEOLA County, Florida; that the attached copy of advertisement, being a PUBLIC NOTICE OF I in the matter of Palmetto Power L.L.C. in the OSCEOLA Court, was published in said newspaper in the issue; of 04/30/00

Affiant further says that the said Orlando Sentinel is a newspaper published at KISSIMMEE in said OSCEOLA County, Florida, and that the said newspaper has heretofore been continuously published in said OSCEOLA County, Florida, each Week Day and has been entered as second-class mail matter at the post office in KISSIMMEE in said OSCEOLA County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

The foregoing instrument was acknowledged before me this 1st day of May, 192000, by Julia Nichols who is personally known to me and who has taken an oath.

(SEAL)



BEVERLY C. SIMMONS  
My Comm. Exp. 3/10/2001  
Bonded By Service Ins.  
No. CC619266  
1 Personally Known 11 Other LID

## PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Draft Permit No. 0970073-001-AC(PSD-FL277)  
Palmetto Power L.L.C.  
Osceola County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Palmetto Power L.L.C. to establish a new electrical generating plant located approximately one half mile east of State Road 532 and a quarter mile south of the Orange/Osceola County border in Osceola County, Florida. The Draft Permit authorizes the installation of three simple cycle Siemens/Westinghouse Model 501FD combustion turbines, with electrical generator sets. Each unit will have a nominal generating capacity of 170 MW when firing natural gas as the exclusive fuel. A Best Available Control Technology (BACT) determination was required for carbon monoxide (CO); nitrogen oxides (NOx) and particulate matter (PM/PM10) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD) of Air Quality. This project is not subject to review under Section 403.506, F.S. (Power Plant Siting Act), because there will be no steam generated electricity. The applicant's authorized representative is Mr. Rick A. Bowen, Executive Vice President for Palmetto Power L.L.C. The applicant's mailing address is 1000 Louisiana Street, Suite 5800, Houston, TX 77002.

Emissions of CO, NOx, and PM/PM10 will be controlled with efficient dry low-NOx combustion technology and the exclusive firing of natural gas. In accordance with Rule 62-212.400, F.A.C. the Draft Permit establishes the following limits as Best Available Control Technology (BACT) standards: 15 ppmvd of NOx corrected to 15% oxygen; 15 ppmvd of CO corrected to 15% oxygen; and 5% opacity as a work practice standard for particulate matter. For the first 12 months of operation after initial performance testing, the Draft Permit allows CO emissions up to 2 ppmvd corrected to 15% oxygen to allow for tuning the gas turbines, dry-low NOx combustors and automated control system. The Draft Permit also establishes PSD-synthetic minor limits for sulfuric acid mist, sulfur dioxide, and volatile organic compounds based on clean fuels, restricted operation (3750 hours per year) and efficient combustion.

The following table summarizes the potential emissions in tons per year and shows the corresponding PSD Significant Emissions Rate:

Parameter	Project Potential Emissions (Tons Per Year)	Significant Emissions Rate (Tons Per Year)	Regulation Table 62-212.400, F.A.C.	Subject To BACT
CO	613 / 34P	186	Yes	Yes
NOx	682	48	Yes	Yes
PM10/PM	4646	1525	Yes	Yes
SAM	5	7	No	No
SOx	33	48	No	No
VOC	20	48	No	No

Potential emissions are for the 25 ppmvd and 15 ppmvd cases.

An air quality impact analysis was conducted. The ambient impact analysis predicted all pollutant emissions to have an insignificant impact on Class I and Class II Areas. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. 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 and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings 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.

\*Mediation is not available in this proceeding.

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 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 tele-

phone 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:

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-0114  
Fax: 850/922-6979

Department of Environmental Protection  
Central District Office  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767  
Telephone: 407/894-7555  
Fax: 407/897-5963

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Al Linero, Administrator of the New Source Review Section or the Department's reviewing engineer for this project, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

OSC3277021

APR 30 2000

# The Orlando Sentinel

Published Daily

State of Florida } S.S.  
COUNTY OF ORANGE

Before the undersigned authority personally appeared Julia Nichols, who on oath says that he/she is the Legal Advertising Representative of The Orlando Sentinel, a daily newspaper published at ORLANDO in ORANGE County, Florida; that the attached copy of advertisement, being a **PUBLIC NOTICE OF I** in the matter of Palmetto Power L.L.C. in the ORANGE Court, was published in said newspaper in the issue; of 04/30/00

Affiant further says that the said Orlando Sentinel is a newspaper published at ORLANDO in said ORANGE County, Florida, and that the said newspaper has heretofore been continuously published in said ORANGE County, Florida, each Week Day and has been entered as second-class mail matter at the post office in ORLANDO in said ORANGE County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

The foregoing instrument was acknowledged before me this 1st day of May, 192000 by Julia Nichols who is personally known to me and who did take an oath.

(SEAL)



BEVERLY C. SIMMONS  
My Comm Exp. 3/10/2001  
Bonded By Service Ins  
No. CC619266  
[ ] Personally Known [ ] Other I D

## PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Permit No. 0970073-001-AC/PSD-FL2777

Palmetto Power L.L.C.

Osceola County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Palmetto Power L.L.C. to establish a new electrical generating plant located approximately one-half mile east of State Road 532 and a quarter mile south of the Orange/Osceola County border in Osceola County, Florida. The Draft Permit authorizes the installation of three simple cycle Siemens/Westinghouse Model 501FD combustion turbines with electrical generator sets. Each unit will have a nominal generating capacity of 170 MW when firing natural gas as the exclusive fuel. A Best Available Control Technology (BACT) determination was required for carbon monoxide (CO), nitrogen oxides (NOx) and particulate matter (PM/PM10), pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD) of Air Quality. This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because there will be no steam generated electrically. The applicant's authorized representative is Mr. Rick A. Bowen, Executive Vice President for Palmetto Power L.L.C. The applicant's mailing address is 1000 Louisiana Street, Suite 5800, Houston, TX 77002.

Emissions of CO, NOx, and PM/PM10 will be controlled with efficient dry-low-NOx combustion technology and the exclusive firing of natural gas. In accordance with Rule 62-212.400, F.A.C. the Draft Permit establishes the following limits as Best Available Control Technology (BACT) standards: 15 ppmvd of NOx corrected to 15% oxygen; 15 ppmvd of CO corrected to 15% oxygen; and 5% opacity as a work practice standard for particulate matter. For the first 12 months of operation after initial performance testing, the Draft Permit allows CO emissions up to 2 ppmvd corrected to 15% oxygen to allow for tuning the gas turbines, dry-low NOx combustors and automated control system. The Draft Permit also establishes PSD-synthetic minor limits for sulfuric acid mist, sulfur dioxide, and volatile organic compounds based on clean fuels, restricted operation (3750 hours per year) and efficient combustion.

The following table summarizes the potential emissions in tons per year and shows the corresponding PSD Significant Emissions Rate.

Pollutant	Project Potential Emissions (Tons Per Year)	Significant Emissions Rate (Tons Per Year)	Significant Table 62-212.400, F.A.C.	Subject To BACT?
CO	413.145P	180	Yes	Yes
NOx	602	48	Yes	Yes
PM10/PM	46.46	15.73	Yes	Yes
SAM	5	7	No	No
SO2	7.33	7.48	No	No
VOC	29	40	No	No

Potential emissions are for the 25 ppmvd and 15 ppmvd cases.

An air quality impact analysis was conducted. The ambient impact analysis predicted all pollutant emissions to have an insignificant impact on Class I and Class II Areas. Emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. 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 and requests for public meetings concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings 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.

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Mediation is not available in this proceeding.

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 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 par-



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.

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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 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:

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-0114  
Fax: 850/922-6979

Department of Environmental Protection  
Central District Office  
3319 Maquire Boulevard, Suite 232  
Orlando, Florida 32803-3767  
Telephone: 407/894-7555  
Fax: 407/897-5963

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Al Linero, Administrator of the New Source Review Section or the Department's reviewing engineer for this project, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

COR3261259

APR 30, 2000



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

RECEIVED

MAY 08 2000

MAY 11 2000

BUREAU OF AIR REGULATION

4APT-ARB

A. A. Linero, P.E.  
Administrator  
New Source Review Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

SUBJECT: Custom Fuel Monitoring Schedule Proposed for Palmetto Power, L.L.C  
located in Osceola County, Florida

Dear Mr. Linero:

This letter is in response to your March 27, 2000, request for approval of a custom fuel monitoring schedule for Palmetto Power, L.L.C which will operate three natural gas-fired simple cycle combustion turbines subject to 40 C.F.R. Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines. As requested, the natural gas custom fuel monitoring plan and use of acid rain nitrogen oxides (NO<sub>x</sub>) continuous emission monitoring system (CEMS) for demonstrating compliance has been reviewed. Region 4 has concluded that the use of acid rain NO<sub>x</sub> CEMS for demonstrating compliance, as described in Specific Conditions 35 and 37, is acceptable. Region 4 has also concluded that the natural gas custom fuel monitoring schedule proposed in Specific Condition 40 is acceptable.

According to 40 C.F.R. 60.334(b)(2), owners and operators of stationary gas turbines subject to Subpart GG are required to monitor fuel nitrogen and sulfur content on a daily basis if a company does not have intermediate bulk storage for its fuel. 40 C.F.R. 60.334(b)(2) also contains provisions allowing owners and operators of turbines that do not have intermediate bulk storage for their fuel to request approval of custom fuel monitoring schedules that require less frequent monitoring of fuel nitrogen and sulfur content.

Region 4 reviewed Specific Condition 40 which allows SO<sub>2</sub> emissions to be quantified using procedures in 40 C.F.R. 75 Appendix D in lieu of daily sampling as required by 40 C.F.R. 60.334(b). Since the specific limitations listed in the permit condition are consistent with previous determinations, we have concluded that the use of this custom fuel monitoring schedule is acceptable.

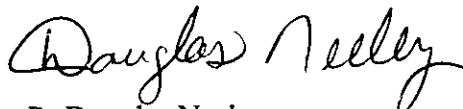
Additionally, Specific Condition 40 also addresses the potential for correcting results to ISO standard day conditions. The basis for this requirement is that, under the provisions of 40 C.F.R. 60.335(c), NO<sub>x</sub> results from performance tests must be converted to ISO standard day

conditions. As an alternative to continuously correcting results to ISO standard day conditions, Palmetto Power plans to keep records of the data needed to make this conversion, so that NO<sub>x</sub> results could be calculated on an ISO standard day condition basis anytime at the request of the Environmental Protection Agency (EPA) or the Florida DEP. This approach is acceptable, since the construction permit contains NO<sub>x</sub> limits that are more stringent than those in Subpart GG, and compliance with Subpart GG for these units would be a concern only in cases when a turbine is in violation of the NO<sub>x</sub> limits in its permit.

Finally, Specific Conditions 37 and 40 involve the method used to monitor NO<sub>x</sub> excess emissions. Under the provisions for 40 C.F.R. 60.334(c)(1), the operating parameters used to identify NO<sub>x</sub> excess emissions for Subpart GG turbines are water-to-fuel injection rates and fuel nitrogen content. As an alternative to monitoring NO<sub>x</sub> excess emissions using these parameters, Palmetto Power is proposing to use a NO<sub>x</sub> CEMS that is certified for measuring NO<sub>x</sub> emissions under 40 C.F.R. Part 75. Based upon the enclosed determination issued by EPA on March 12, 1993, NO<sub>x</sub> CEMS can be used to monitor excess emissions from Subpart GG turbines if a number of conditions specified in the determination are met and included in the permit condition.

If you have any questions about the determination provided in this letter, please contact Katy Forney of the EPA Region 4 staff at 404-562-9130.

Sincerely,



R. Douglas Neeley

Chief

Air and Radiation Technology Branch

Air, Pesticides and Toxics

Management Division

Enclosure

cc: J. Kaerner, BPR  
K. Kosky, Golden  
R. Bowen, Palmetto  
CD  
NPS



March 12, 1993

MEMORANDUM

SUBJECT: Approval of the Use of NO<sub>x</sub> CEMS as an Alternative Method to the Water-fuel Ratio Monitoring under NSPS Subpart GG

FROM: John B. Rasnic, Director  
Stationary Source Compliance Division  
Office of Air Quality Planning and Standards

TO: Karl Mangels, Chief  
New York Compliance Section  
Air Compliance Branch, Region II

In response to your January 12, 1993, memorandum to Linda Lay, SSCD investigated the feasibility of our approval of your request. You asked SSCD to approve a request from East Syracuse Generating Company to allow the use of the NO<sub>x</sub> continuous emission monitoring system (CEMS) as an alternative monitoring method to the continuous water-fuel ratio monitoring method.

East Syracuse Generating Company is to commence development of a 100 MW natural gas-fired cogeneration combustion turbine facility in the village of East Syracuse, New York. The facility is allowed to use a limited amount of low sulfur distillate oil as a backup fuel. To control the emissions of NO<sub>x</sub> this turbine will use both water injection and selective catalytic reduction as required by the New York State Department of Environmental Conservation (NYSDEC). Since the NYSDEC permit conditions are more restrictive than the requirements of NSPS Subpart GG, East Syracuse is asking for a waiver from the following monitoring requirements:

1. Fuel sulfur monitoring
2. Fuel nitrogen monitoring
3. Continuous water-fuel ratio monitoring for Nox compliance.

You have already made determinations on the first two issues and asked SSCD to address only the third issue, use of NO<sub>x</sub> CEMS, that is required by the State permit, instead of the water-fuel ratio monitoring method.

SSCD determined that the use of a NO<sub>x</sub> CEMS can be allowed as an alternative monitoring method if the facility meets the following conditions:

1. Each turbine meets the emission limitation (STD) determined according to 40 CFR Part 60.332. The "Y" value for the applicable equation and supporting documentation should

be provided by the applicant and the limitation for NO<sub>x</sub> emissions from pipeline quality natural gas should be fixed by EPA assuming the "F" value equals 0. The emission limitation shall be expressed in ppmv, dry, corrected to 15 percent O<sub>2</sub>.

2. Each NO<sub>x</sub> CEMS meets the applicable requirements of 40 CFR 560.13, Appendix B, and Appendix F for certifying, maintaining, operating and assuring quality of the system.
3. Each NO<sub>x</sub> CEMS must be capable of calculating NO<sub>x</sub> emissions concentrations corrected to 15% O<sub>2</sub> at ISO conditions.
4. Monitor data availability shall be no less than 95 percent on the quarterly basis.
5. NO<sub>x</sub> CEMS should provide 4 data points for each hour and calculate a 1-hour average.
6. Each owner or operator of a NO<sub>x</sub> CEMS shall submit an excess emissions (calculated according to the requirements of paragraph 60.13(h)) and monitoring systems performance report and/or a summary report form to the Administrator on a quarterly basis, if excess emissions are determined, or semiannually. The report shall be postmarked by the 30th day following the end of each reporting period. Written reports shall include information required in paragraphs 60.7 (c) and 60.7 (d). This report shall also contain the content of nitrogen in fuel oil for each reporting period when oil is fired and a clearly calculated corresponding emission limitation (STD).
7. Recordkeeping requirements shall follow the requirements specified in 40 CFR 560.7.

In addition, to upgrade the EPA data, we recommend that the NO<sub>x</sub> CEMS be used to demonstrate compliance with the emission limitation on a continuous basis and that the quarterly report include the NO<sub>x</sub> mass emissions for the reported period as reported to the State.

If you have any questions, please call Zofia Kosim at 703-308-8733.

cc: Air, Pesticides, and Toxics Management Division Directors  
Regions I and IV  
Air and Waste Management Division Director  
Region II  
Air, Radiation, and Toxics Division Director  
Region III  
Air and Radiation Division Director  
Region V  
Air, Pesticides, and Toxics Division Director  
Region VI  
Air and Toxics Division Directors  
Regions VII, VIII, IX, and X



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

APR 27 2000

RECEIVED

MAY 01 2000

4APT-ARB

Mr. A. A. Linero, P.E.  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

SUBJ: Preliminary Determination and Draft PSD Permit for Palmetto Power, LLC  
located in Osceola County, FL

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for the Palmetto Power facility dated March 27, 2000. The preliminary determination and draft PSD permit is for the proposed construction of an electric generating facility consisting of three simple cycle combustion turbines (CTs) with a nominal generating capacity of 170 megawatts (MW) each. Additional equipment will include the following: an evaporative inlet cooling system, a diesel fire-water pump and associated diesel storage tank, an emergency generator and a gas pre-heater. The combustion turbines proposed for the facility are Siemens Westinghouse 501FD units. The CTs will combust pipeline quality natural gas only and the fire-water pump will combust only diesel fuel. Total emissions from the proposed project are above the thresholds requiring PSD review for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and particulate matter (PM/PM<sub>10</sub>).

Based on our review of the preliminary determination and draft PSD permit, we have the following comments:

1. We suggest you verify the emission rate used by Golder Associates to estimate potential formaldehyde emissions. The emission factor cited by Golder is two orders of magnitude lower than the 1998 draft AP-42 emission factor for formaldehyde from natural gas turbines and lower yet than the current official AP-42 factor that will eventually be replaced. If a higher emission rate is more appropriate than the emission rate in the application, the facility could be subject to 112(g) case-by-case MACT requirements.
2. As indicated in section III, condition 7 of the draft PSD permit, FDEP is proposing to allow excess emissions due to startup, shutdown or malfunction for up to 2 hours in any 24-hour period. It is the Environmental Protection Agency's policy that BACT applies during all normal operations and that automatic exemptions should not be granted for excess emissions. Startup and shutdown of process equipment are part of the normal operation of a source and should be accounted for in the planning, design, and implementation of operating procedures for the process and control equipment.

Accordingly, it is reasonable to expect that careful and prudent planning and design will eliminate violations of emission limitations during such periods.

3. We are pleased to see that FDEP re-performed the cost analysis for the SCR and CO oxidation add-on control systems. FDEP concluded the cost effectiveness for the add-on controls were approximately \$10,000/ton removed of NO<sub>x</sub> and \$3,100/ton removed of CO. The original application's cost analysis calculated the cost effectiveness of SCR as \$11,850/ton removed of NO<sub>x</sub> and \$3,666/ton removed of CO and contained several items which should not have been included in the cost analysis or needed further clarification. For instance, three different 10% contingency fees were included (in the indirect capital costs, the direct annual costs and the annual energy costs); a fuel escalation factor was included; and a Capacity Loss for 3 days every 3 years was included for operational outages even though the owner could easily schedule any maintenance or catalyst replacement during the 5,010 hours per year when the facility is not operating.

FDEP's cost estimate for SCR NO<sub>x</sub> control places this control alternative very close to the cost effectiveness range that has led to the acceptance of SCR for combined cycle combustion turbine projects. Therefore, we agree with FDEP's comments on page BD-12 of the BACT Determination to the effect that deviations from the basis of the applicant's BACT evaluation might impose the need for SCR control. These deviations include operation more than 3,750 hours during any consecutive 12 months and use of a fuel other than natural gas.

4. The proposed BACT limit for particulate matter (PM<sub>10</sub>), found in section III, condition 4 of the draft PSD permit, is 5% opacity for visible emissions. This visible emissions opacity limit is proposed as a surrogate for a BACT particulate matter emissions rate limit. It is acceptable to use the 5% opacity limit as a surrogate for monitoring and recordkeeping; however, the permit conditions also should list the corresponding emission rate for particulate matter (i.e., 8.6 lb/hr, which is used in the PTE calculations)

Thank you for the opportunity to comment on the preliminary determination and draft PSD permit for the Palmetto Power facility in Osceola County, FL. If you have any questions regarding these comments, please direct them to either Katy Forney at 404-562-9130 or Jim Little at 404-562-9118.

Sincerely,

cc: J. Koerner, BAR  
NPS  
Central Dist.  
K. Koskey  
R. Bowen, Palmetto Power

*Douglas Neeley*

R. Douglas Neeley  
Chief

Air and Radiation Technology Branch  
Air, Pesticides and Toxics  
Management Division



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

March 27, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. Douglas Neeley, Chief  
Air, Radiation Technology Branch  
US EPA Region 4  
61 Forsyth Street  
Atlanta, GA 30303

Re: PSD Review and Custom Fuel Monitoring Schedule  
Palmetto Power L.L.C. in Osceola County, Florida  
PSD Permit No. PSD-FL-277

Dear Mr. Neeley:

Enclosed is a copy of the Department's Draft Permit authorizing the installation of three nominal 170 MW simple cycle, Siemens/Westinghouse Model W501FD combustion turbines with electrical generator sets. The new 510 MW electric power generating plant will be located near State Road 532 in Osceola County approximately 30 miles southeast of Orlando. The Department's Intent to Issue package was also mailed to Mr. Gregg Worley, EPA Region 4, for comment on the determination of Best Available Control Technology.

Each unit will be limited to no more than 3750 hours of operation during any consecutive 12-month period. For emissions of CO, NO<sub>x</sub>, and PM/PM<sub>10</sub>, BACT was determined to efficient dry low-NO<sub>x</sub> combustion technology and the exclusive firing of natural gas. The firing of natural gas and efficient combustion will also minimize emissions of SAM, SO<sub>2</sub>, and VOC.

**Please send your written comments on or approval of the applicant's proposed custom fuel monitoring schedule.** The plan is based on the letter dated January 16, 1996 from Region V to Dayton Power and Light. The Subpart GG limit on SO<sub>2</sub> emissions is 150 ppmvd @ 15% oxygen or a fuel sulfur limit of 0.8% sulfur by weight. Neither of these limits could conceivably be violated by the use of pipeline quality natural gas, which has a maximum SO<sub>2</sub> emission rate of 0.0006 lb/mmBTU (40 CFR 75 Appendix D Section 2.3.1.4). The sulfur content of pipeline quality natural gas in Florida has been estimated at a maximum of 1 grain per 100 standard cubic feet (0.003 % sulfur by weight). The requirements have been incorporated into the enclosed draft permit and read as follows:

Fuel Records: The permittee shall demonstrate compliance with the fuel sulfur limit for natural gas specified in this permit by maintaining records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule (see Alternate Monitoring Plan) or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. The analysis may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used to determine the fuel sulfur content for compliance with the 40 CFR 60.333 SO<sub>2</sub> standard. [Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

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Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.

- (a) When requested by the Department, the CEMS emission rates for NO<sub>x</sub> on this unit shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>x</sub> standard established in 40 CFR 60.332.
- (b) Data collected from the NO<sub>x</sub> CEM shall be used to report excess emissions in accordance with 40 CFR 60.334(c)(1) of NSPS, Subpart GG.
- (c) A *custom fuel monitoring schedule* pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following conditions are met.
  - (1) Each combustion turbine shall fire only pipeline-quality natural gas. No other fuels are permitted.
  - (2) The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
  - (3) The permittee shall submit a monitoring plan, certified by the Authorized Representative, that commits to using a primary fuel of pipeline-supplied natural gas containing no more than 1 grain of sulfur per 100 SCF of gas (monthly average) pursuant to 40 CFR 75.11(d)(2).
  - (4) Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

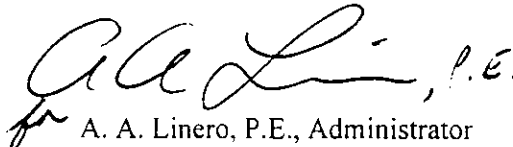
This custom fuel-monitoring schedule will only be valid with the use of pipeline natural gas as the exclusive fuel. Changing to a higher sulfur fuel or adding an alternate fuel would require a modification of this permit with SO<sub>2</sub> emissions accounted for as required pursuant to 40 CFR 75.11(d).

[40 CFR 60, Subpart GG and Applicant Request]

Also, please comment on these conditions with respect to the use of the acid rain NO<sub>x</sub> CEMS for demonstrating compliance as well as reporting excess emissions. NO<sub>x</sub> emissions are expected to be less than 15 ppmvd @ 15% oxygen for gas firing which is much less than the applicable Subpart GG limit based on the efficiency of the unit. A CEMS requirement is stricter and more accurate than any Subpart GG requirement for determining excess emissions.

The Department recommends your approval of the custom fuel monitoring schedules and these NO<sub>x</sub> monitoring provisions. We also request your comments on the Intent to Issue. If you have any questions on these matters please contact Jeff Koerner at 850/414-7268.

Sincerely,

  
A. A. Linero, P.E., Administrator  
New Source Review Section

AAL/jfk

Enclosures

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