



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

February 7, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. P. Opalinski
Director of Environmental Affairs
Seminole Electric Cooperative Incorporated
16313 North Dale Mabry Highway
Tampa, Florida 33688

Re: DRAFT Permit Modification: PSD-FL-018(A), PA 78-10
Seminole Power Plants, Palatka, Units 1 & 2
Petroleum Coke Co-firing

Dear Mr. Opalinski:

Enclosed is one copy of the Draft Permit Modification to the PSD permit for the Seminole Power Plants located in Palatka, Putnam County. The Department's Intent to Issue Permit Modification and the "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Mr. Syed Arif or Mr. Linero at 904/488-1344.

Sincerely,

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

CHF/sa/hh

Enclosures

PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

File No.: PSD-FL-018(A), PA 78-10
Seminole Palatka Power Plant Units 1 & 2
Putnam County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of Permit PSD-FL-018 to Seminole Electric Cooperative, Inc. (SECI) to allow co-firing of petroleum coke (petcoke) with coal and to allow increased use of No. 2 fuel oil at its Palatka Power Plant Units No. 1 & 2 in Putnam County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The modification will not result in a significant increase in sulfur dioxide, particulate matter, carbon monoxide, nitrogen oxides, or any other PSD pollutant from the facility, and will not cause a violation of any state or federal ambient air quality standards or increments. The applicant's name and address are: Seminole Electric Cooperative Incorporated, 16313 N. Dale Mabry Highway, Tampa, Florida 33688.

Units 1 and 2 are 714 megawatt (design) electrical power generating units, equipped with sulfur dioxide scrubbers, mist eliminators, and electrostatic precipitators. In accordance with the PSD permit issued by EPA in August, 1979, coal may be burned continuously while fuel oil may be used for startups and flame stabilization. The modification will permit co-firing of 30 percent, by weight, petcoke with coal. It will also permit use of the existing fuel oil system to generate up to 45 megawatts of electrical power in order to meet required reserve capacity and maintain electrical capacity when coal quality, conditions and/or processing or burner equipment prevents meeting demand with coal only. SECI conducted performance tests of coal/petcoke fuel blends December, 1995, and January, 1996. Based on the performance test results and additional control measures (increased use of underutilized sulfur dioxide scrubbing capability) proposed by SECI, the Department determined that PSD review is not applicable to this permit modification request.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the DRAFT Permit Modification 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 DRAFT Permit Modification issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Any written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit Modification, the Department shall issue a Revised DRAFT Permit Modification and require, if applicable, another Public Notice.

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Permit Modification unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. or a party requests mediation as an alternative remedy under Section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions 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. A petitioner must 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 (or a request for mediation, as discussed below) 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A

statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

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 of intent. 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 person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information: (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any; (b) A statement of the preliminary agency action; (c) A statement of the relief sought; and (d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following: (a) The names, addresses, and telephone numbers of any persons who may attend the mediation; (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time; (c) The agreed allocation of the costs and fees associated with the mediation; (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation; (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen; (f) The name of each party's representative who shall have authority to settle or recommend settlement; and (g) The signatures of all parties or their authorized representatives.

As provided in Section 120.573 F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 F.S. for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 F.S. remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

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: 904/488-1344
Fax: 904/922-6979

Department of Environmental Protection
Site Certification Section
2720 Blair Stone Road, Suite H
Tallahassee, Florida 32301
Telephone: 904/487-0472

Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7577
Telephone: 904/448-4310

The complete project file includes the Draft Permit Modification, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 904/488-1344, for additional information.

In the Matter of an
Application for Permit Modification by:

Mr. M. P. Opalinski
Director of Environmental Affairs
Seminole Electric Cooperative Inc.
16313 North Dale Mabry Highway
Post Office Box 27200
Tampa, Florida 33688

File No.: PSD-FL-018(A), PA 78-10
Seminole Power Plant Units 1 & 2
Putnam County

INTENT TO ISSUE PERMIT MODIFICATION

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

The applicant, Seminole Electric Cooperative Incorporated (SECI), submitted a request on November 12, 1996, to the Department for a modification of the Conditions of Approval contained in the Final Determination (PSD permit) issued August 9, 1979 by EPA for Seminole Power Plant Units 1 and 2, U.S. Highway North, Palatka, Putnam County. The modification is to allow co-firing of petcoke and coal in fuel blends containing up to 30 percent by weight petcoke and to allow increased use of No. 2 fuel oil.

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, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a permit modification is required to commence or continue operations at the described facility.

The Department intends to issue this 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.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION". The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. 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: 904/488-1344; Fax 904/ 922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification pursuant to Rule 62-103.150 (6), F.A.C.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the enclosed DRAFT Permit Modification 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 DRAFT Permit Modification issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION." Any written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in

this DRAFT Permit Modification, the Department shall issue a Revised DRAFT Permit Modification and require, if applicable, another Public Notice.

The Department will issue the permit modification with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., or a party requests mediation as an alternative remedy under Section 120.573 F.S. before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions 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. A petitioner must 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 (or a request for mediation, as discussed below) 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

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 of intent. 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 person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

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The agreement to mediate must include the following: (a) The names, addresses, and telephone numbers of any persons who may attend the mediation; (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time; (c) The agreed allocation of the costs

and fees associated with the mediation; (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation; (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen; (f) The name of each party's representative who shall have authority to settle or recommend settlement; and (g) The signatures of all parties or their authorized representatives.

As provided in Section 120.573 F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 F.S. for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 F.S. remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.


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.

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.


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

DRAFT

March XX, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. P. Opalinski
Director of Environmental Affairs
Seminole Electric Cooperative Incorporated
16313 North Dale Mabry Highway
Tampa, Florida 33688

Re: Seminole Power Plants, Palatka, Units 1 & 2
Modification of Final Determination - PSD-FL-018(A), PA 78-10

Dear Mr. Opalinski:

The Department hereby amends the Conditions of Approval related to emissions, fuel use, recordkeeping and reporting in the subject Final Determination (dated August 13, 1979) pursuant to 40 CFR 52.21 - Prevention of Significant Deterioration (PSD Permit). The PSD permit is amended as follows:

D. FOR THE ELECTRIC UTILITY STEAM GENERATING UNITS WHEN BURNING COAL AND PETROLEUM COKE FUEL BLENDS

Stack emissions from Units 1 and 2 shall comply with the following conditions when burning blends of coal and petroleum coke:

Item 1 - Sulfur Dioxide Emissions

a) Unit 1:

$$E_{SO_2} = [(\%C_{HI} / 100) * (P_S) * (1 - (\%R_O / 100))] \\ + [(1 - (\%C_{HI} / 100)) * (0.74 \text{ lb } SO_2 / \text{MMBtu})] \quad (\text{Eqn. 1})$$

b) Unit 2:

$$E_{SO_2} = [(\%C_{HI} / 100) * (P_S) * (1 - (\%R_O / 100))] \\ + [(1 - (\%C_{HI} / 100)) * (0.72 \text{ lb } SO_2 / \text{MMBtu})] \quad (\text{Eqn. 2})$$

where:

E_{SO_2} = allowable SO_2 emission rate; lb SO_2 /MMBtu, 30-day rolling average

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE PERMIT MODIFICATION (including the PUBLIC NOTICE, and DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 2-10-97 to the person(s) listed:

Mr. M.P. Opalinski, SECI *
Mr. Tom W. Davis, P.E., ECT
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Hamilton Owen, DEP
Mr. Chris Kirts, NED

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Keri Ober 2-10-97
(Clerk) (Date)

DRAFT

- $\%C_{HI}$ = percent of coal used on a heat input basis
- P_S = potential SO_2 combustion concentration (unwashed coal without emission control systems) as defined by NSPS Subpart Da; lb SO_2 /MMBtu, 30-day rolling average
- $\%R_O$ = overall percent SO_2 reduction from Equation 19-21 of EPA Reference Method 19. Per NSPS Subpart Da, $\%R_O$ must not be less than 90%, 30-day rolling average
- 0.74 = historical 2-year annual average SO_2 emission rate for Unit 1; lb/MMBtu
- 0.72 = historical 2-year annual average SO_2 emission rate for Unit 2; lb/MMBtu

Compliance with the lb per million Btu heat input emission limitations and percent reduction requirement shall be determined on a 30-day rolling average basis.

Item 2 - Nitrogen Oxide Emissions

- a) lb. per million Btu heat input, and 35 percent of the potential combustion concentration (65 percent reduction). Compliance with the lb. per million Btu heat input emission limitation and percent reduction requirement shall be determined on a 30-day rolling average basis. Compliance with the 0.60 lb. per million Btu heat input emission limitation shall also constitute compliance with the 65 percent reduction requirement; and
- b) lb. per million Btu heat input determined on an annual average basis, when subject to the 40 CFR §76.8 Early Election Program for Group 1, Phase II Boilers or in any year when petcoke is burned.

Item 3 - Particulate Matter Emissions

0.03 lb. per million Btu heat input, and 1 percent of the potential combustion concentration (99 percent reduction). Compliance with the 0.03 lb. per million Btu heat input emission limitation shall also constitute compliance with the 99 percent reduction requirement.

Item 4 - Carbon Monoxide Emissions

The Permittee shall maintain and submit to the Department, on an annual basis for a period of five years from the date the units begin firing petroleum coke, test results demonstrating that the operational changes did not result in a significant emissions increase of the pollutant when compared to the past actual coal levels. The carbon monoxide emissions shall be based on test results using EPA Method 10.

Item 5 - Sulfuric Acid Mist Emissions

The Permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the units begin firing petroleum coke, test results demonstrating that the operational changes did not result in a significant emissions increase of the pollutant when compared to the past actual coal levels. The sulfuric acid mist emissions shall be based on test results using EPA Method 8.

Item 6 - Fuel Specifications

Fuels fired shall consist of coal and petroleum coke blends containing a maximum of 30 percent petroleum coke by weight. The maximum weight of the petroleum coke burned shall not exceed 125,000 pounds per hour (averaged over 24 hours). The petroleum coke sulfur content shall not exceed 7.0 percent by weight, dry basis.

Item 7 - Reporting and Recordkeeping

- a) Documentation verifying that the coal and petroleum coke fuel blends combusted in Units 1 and 2 have not exceeded the 30 percent maximum petroleum coke by weight limit specified by Condition of Approval, Section D., Item 6 shall be maintained and submitted to the Department's Northeast District Office with each annual report; and
- b) The Permittee shall maintain and submit to the Department, on an annual basis for a period of five years from the date the units begin firing petroleum coke, data demonstrating that the operational change associated with the use of petroleum coke did not result in a significant emission increase pursuant to Rule 62-210.200(12)(d), F.A.C.

Item 8 - Handling of Petroleum Coke

All prior conditions of approval that address coal handling shall also apply to the handling of petroleum coke.

E. FOR THE ELECTRIC UTILITY STEAM GENERATING UNITS WHEN BURNING NO 2 FUEL OIL

Use of No. 2 fuel oil is authorized for startups, flame stabilization and required emergency electric reserve capacity. It is also authorized for normal continuous operation when coal quality, process conditions, and/or burner equipment prevent meeting demand with solid fuels only.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sa/hh

Enclosures

**DIVISION OF AIR RESOURCES MANAGEMENT
BUREAU OF AIR REGULATION
NEW SOURCE REVIEW SECTION
Telephone (904) 488-1344
Fax (904) 922-6979**

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

**Seminole Electric Cooperative, Incorporated
Seminole Power Plant
Units 1 & 2
Palatka, Putnam County, Florida**

**Electric Utility Steam Generating Units
Solid and Liquid Fuel-Fired Boilers
714.6 MW/unit**

**Permit No. PSD-FL-018
PA 78-10**

February 7, 1997

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. Applicant

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33618-1342

2. Source Name and Location

Seminole Power Plant
Units 1 & 2
Palatka, Florida 32177

3. Source Description

The Seminole Electric Cooperative, Inc. (Seminole) power plant located in Palatka, Putnam County, Florida, is a baseload coal-fired steam electric utility generating facility. The Seminole Power Plant consists of two steam boilers (Units 1 and 2); two steam turbines; a recirculating cooling water system; coal, limestone, fly ash, and bottom ash handling equipment, a flue gas desulfurization (FGD) sludge stabilization facility; fuel oil storage tanks; water treatment facilities; a railcar maintenance facility; and other ancillary support equipment. Each boiler is equipped with electrostatic precipitators (ESPs), low-nitrogen oxide (NO_x) burners, and a FGD system to control emissions of particulate matter (PM), NO_x, and sulfur dioxide (SO₂), respectively. Units 1 and 2 each have a maximum electrical load rating of 714.6 megawatt (MW). The boilers are presently coal-fired with No. 2 fuel oil used for startups and flame stabilization.

4. Current Permit and Major Regulatory Program Status

Operation of the Seminole Power Plant is currently authorized by United States Environmental Protection Agency (EPA) Prevention of Significant Deterioration (PSD) Permit No. PSD-FL-018 and Florida Power Plant Siting Act (PPSA) Certification No. PA 78-10. In June 1996, Seminole submitted an application for a Title V operation permit; this application is presently undergoing Department review.

The initial construction of Units 1 and 2 was authorized pursuant to the PSD New Source Review (NSR) regulatory permitting program. Units 1 and 2 are subject to New Source Performance Standard (NSPS) Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978. The Seminole Power Plant boilers are also subject to the Federal Acid Rain Program requirements applicable to Phase II units.

An amendment to Permit PSD-FL-018 (Attachment 1) was issued on December 11, 1995 following publication of the Department's Notice of Intent. This permit amendment authorized Seminole to conduct performance tests on Unit 1 while firing various blends of coal and petroleum coke (petcoke). The petcoke test burns were conducted during December 1995 and January 1996.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Seminole submitted a comprehensive report of the petcoke test burn results to the Department in February 1996.

5. Permit Amendment Request

On November 12, 1996, Seminole Electric Cooperative, Inc. (Seminole) submitted a request (Attachment 2) for an amendment to Permit PSD-FL-018 originally issued by EPA on August 13, 1979. The requested amendments are as follows:

- i. Allow co-firing of petcoke and coal in fuel blends containing up to 30 percent by weight petcoke as an alternate method of operation; and
- ii. Allow use of No. 2 fuel oil to generate electric power during statewide emergency energy shortages to meet Florida Public Service Commission (FPSC) reserve and maximum continuous electric load requirements if coal quality, process conditions, and/or burner equipment prevents meeting demand with solid fuels only.

Following an initial review of the submitted material, the Department requested additional information in a letter to Seminole dated November 25, 1996. A meeting attended by Department staff and Seminole representatives to discuss the request was held on December 19, 1996. A response to the information requested in the Department's November 25th letter and other issues raised during the December 19th meeting was provided to the Department by Seminole in correspondence dated January 7, 1997.

6. Potentially Applicable Major Rules

Major rules that could potentially apply to this permit amendment request include the following:

- i. Florida Electrical Power Plant Siting, Chapter 62-217, F.A.C. and Sections 403.501-519, Florida Statutes (F.S.);
- ii. 40 CFR 60 - Standards of Performance for New Stationary Sources. Subpart Da - "Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978" (NSPS Subpart Da) adopted by reference in Chapter 62-204, Florida Administrative Code (F.A.C.);
- iii. Section 62-212.400, F.A.C. - "Prevention of Significant Deterioration of Air Quality", (PSD Rules); and
- iv. Chapter 62-297, F.A.C., related to emission monitoring at stationary sources.

Seminole has requested amendments to its existing PSD permit and Site Certification. Matters related to Site Certification amendments will be handled separately by the Department's Office of

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Siting Coordination in accordance with Florida Power Plant Siting Act (PPSA) specified modification procedures.

As noted in Section 4 above, Units 1 and 2 are presently subject to the requirements of NSPS Subpart Da. They will continue to be operated in a manner at least as stringent as the requirements of Subpart Da.

The primary regulatory issue pertinent to Seminole's permit amendment request is that of PSD permitting applicability. Modifications which result in a *significant net emission rate increase* are classified as major modifications and therefore subject to PSD review. The procedures for determining whether a significant net emission rate increase will occur were changed by EPA in July 1992 as a result of the Wisconsin Electric Power Company (WEPCO) litigation. Prior to the WEPCO decision, the calculation of a net emission increase was based on comparing actual annual emissions for the two year period prior to the change (before case) with potential emissions following the change (after case). Another two year period (within a five year period prior to the change) could be used if it was demonstrated to be more representative of normal source operation. Unless constrained by a Federally enforceable permit condition, potential emissions would be calculated assuming continuous operation at rated capacity. This procedure is referred to as the *actual-to-potential* method.

As a result of the WEPCO litigation, the net emission increase for electric utility generating units is now determined by comparing actual emissions preceding the change with estimated future actual emissions or an *actual-to-actual* procedure. Any consecutive two year period within the preceding five years is used as the "before case". The "after case" is developed based on the projected future actual emission rates. The time period for the "after case" is the two years following the change or any other consecutive two year period within ten years after the change if that period would be more representative of normal source operations. Sources must monitor emissions for five years (or longer if the first five years are not representative of normal source operations) to document future actual emissions and to confirm that a significant net emission increase has not occurred. Increases in utilization that are unrelated to the physical change, such as demand growth, are not considered in calculating emission increases. The rationale for this exclusion is that these emission increases would have occurred in the absence of the physical change (assuming the unit was capable of increasing its capacity factor without the physical change).

Based on the petcoke test burn results, fuel analyses, historical emissions data, EPA emission factors, and evaluation of the Seminole Units 1 and 2 pollution control system capabilities, the Department has determined that Seminole's permit amendment request is not subject to PSD review, subject to certain Federally enforceable permit conditions. A detailed evaluation of PSD applicability is provided in Section G below.

With respect to emissions monitoring, Units 1 and 2 are currently equipped with continuous emissions monitoring systems (CEMS) to monitor and record SO₂ and NO_x emission rates and continuous opacity monitoring systems (COMS) to monitor and record visible emissions. The units are also presently equipped to continuously monitor exhaust flow rates and carbon dioxide (CO₂)

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concentrations. On an annual basis, Units 1 and 2 are tested to determine PM emission rates. The current emissions monitoring program is conducted pursuant to NSPS Subpart Da and Acid Rain Program requirements.

7. Evaluation of PSD Applicability

The main issue regarding Seminole's permit amendment request is that of PSD review applicability. The Department's detailed assessment of this regulatory issue is provided in this section.

A brief description of the PSD review procedures resulting from the WEPCO litigation was provided above in Section F. Both EPA and the Department have revised their NSR permitting rules to implement the WEPCO PSD review procedures. The Department's revised definition of "actual emissions" [Chapter 62-204 (12), F.A.C.] follows:

(12) "Actual Emissions" The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

(12)(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the emissions unit.

The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(12)(b) The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that, for any regulated air pollutant, such unit-specific allowable emissions limits are federally enforceable.

(12)(c) For any emissions unit (other than an electric utility steam generating unit specified in subparagraph (d) of this definition) which has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.

(12)(d) For an electric utility steam generating unit (other than a new unit or the replacement of an existing unit) actual emissions of the unit following a physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the owner or operator maintains and submits to the Department on an annual basis, for a period of 5 years representative of normal post-change operations of the unit, within the period not longer than 10 years following the change, information demonstrating that the physical or operational change did not result in an emissions increase. The definition of "representative actual annual emissions" found in 40 CFR 52.21(b) (33) is adopted and incorporated by reference in Rule 62-204.800, F.A.C.

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The Federal definition of "representative actual annual emissions", which the Department has incorporated by reference, follows:

(33) Representative actual annual emissions means the average rate, in tons per year, at which the source is projected to emit a pollutant for the two-year period after a physical change or change in the method of operation of a unit, (or a different consecutive two-year period within 10 years after that change, where the Administrator determines that such period is more representative of normal source operations), considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization.

In projecting future emissions the Administrator shall:

(i) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the State or Federal regulatory authorities, and compliance plans under title IV of the Clean Air Act; and

(ii) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

Seminole has submitted information which demonstrates that the planned combustion of coal and petcoke fuel blends will not increase actual emissions in accordance with the applicable regulations. Seminole believes the use of No. 2 fuel oil for electrical generation will not result in emissions increases. This is correct on the basis of emissions per unit of heat input. However, the Department believes, oil use will marginally increase unit availability, resulting in emission increases which are not significant with respect to PSD. Seminole's analysis of PSD applicability is included in the submitted application as Appendix E and as Attachment 3 to this Preliminary Determination. Seminole's discussion of potential emission rate changes resulting from the use of No. 2 fuel oil to generate electric capacity is included in the submitted application as Appendix F.

Petcoke is a by-product of the petroleum refining process. Petcoke is a high carbon, relatively low ash content solid material that historically has been used in the manufacture of anodes and electrodes for aluminum reduction processes. Because of its favorable heating value and cost, petcoke is presently being considered by a number of electric utilities as a supplemental fuel source for coal-fired boilers.

The sulfur content of petcoke varies with the sulfur content of the refinery coker feedstock. Petcoke has a relatively low ash content; i.e., typically less than 1.0 weight percent. The lower heat content of petcoke, on a dry basis, is approximately 13,500 to 14,000 British thermal units (Btu) per pound. Moisture content of petcoke is in the range of 7 to 10 weight percent. The nitrogen content of

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petcoke is comparable to that of coal; i.e., approximately 1.3 weight percent on a dry basis. As with coal, petcoke also contains a variety of trace metals. These general characteristics of petcoke indicate that the primary concern, from an emissions viewpoint, is potential increases in SO₂ emissions.

Seminole Units 1 and 2 presently meet an overall 90 percent reduction in potential SO₂ emissions from coal as required by NSPS Subpart Da using a combination of pre-combustion fuel treatment (e.g., coal washing) and post-combustion FGD sulfur removal technologies. The current average FGD SO₂ removal efficiency for Units No. 1 and 2 is approximately 84.5% which, together with a typical coal washing credit of 6.0 percent, is sufficient to meet the NSPS Subpart Da 90.0 percent SO₂ removal requirement. To ensure that no increases in actual SO₂ emissions above the historical two year averages occur due to the use of petcoke, Seminole proposes to increase the SO₂ removal efficiency of the current FGD systems. Seminole has submitted information demonstrating that under worst-case conditions (i.e., combustion of coal and petcoke fuel blends containing the maximum requested amount of petcoke and maximum requested coal and petcoke sulfur contents), a FGD SO₂ removal efficiency of 88 percent will be required. This removal efficiency represents an approximate four percent increase over that currently required of Units 1 and 2 FGD systems by NSPS Subpart Da. Seminole also submitted information demonstrating that the existing FGD systems have been able to successfully achieve a SO₂ removal efficiency in excess of 90 percent, excluding the coal washing credit. Units 1 and 2 are each equipped with five FGD scrubber modules and include provisions for the addition of adipic acid additive to increase SO₂ removal efficiencies. Presently, the 5th FGD scrubber module for each unit serves as a spare. The demonstration of FGD SO₂ removal efficiencies in excess of 90 percent was conducted with only four FGD scrubber modules in use. Due to the proven successful operation of the existing FGD system and the demonstrated ability of the current FGD system to achieve SO₂ removal efficiencies in excess of 90 percent (or two percent above the projected maximum FGD removal efficiency required during combustion of coal and petcoke blends), the Department concludes that there is reasonable assurance that the use of petcoke will not result in an actual increase in SO₂ emissions. In addition, Seminole's optional use of the 5th FGD scrubber module and/or increased use of adipic acid additive provides further assurance that an actual increase in SO₂ emissions will not occur.

The information submitted by Seminole with respect to the remaining PSD regulated pollutants indicates that there will also be no actual emission increases for any of these pollutants including NO_x, CO, PM, and sulfuric acid mist (H₂SO₄). Information provided by Seminole to support this conclusion include the petcoke test burn results, typical coal and petcoke compositions, and EPA emission factors. For NO_x, CO, PM, and H₂SO₄, the petcoke test burn results provide reasonable assurance that actual emission increases will not occur for these pollutants due to the use of petcoke. Regarding future actual NO_x emissions, Seminole has elected to be subject to the Federal Acid Rain Program NO_x emission limits contained in 40 CFR §76.5 under the Acid Rain NO_x Early Election Program for Group 1, Phase II boilers. Under the NO_x Early Election Program, Seminole is required to meet an annual average NO_x emission limit of 0.50 lb/MMBtu effective January 1, 1997. Seminole's participation in the Acid Rain NO_x Early Election Program provides further reasonable assurance that a significant net increase in NO_x emissions will not occur due to the use of petcoke. With respect to future actual PM emission rates, the lower ash content of petcoke compared to coal provides further assurance that an actual increase in emissions will not occur. The ash content of

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petcoke (approximately 0.5 percent by weight) is only 5.5% of the ash content of coal (approximately 9 percent by weight). Accordingly, petcoke combustion will generate significantly less fly ash (i.e., PM emissions) than the combustion of coal.

The Seminole Power Plant is a baseload facility currently operating at an approximate 80 percent capacity factor. This relatively high capacity factor (a typical industry average for baseload units is 70 percent) will not increase due to the use of petcoke. Accordingly, an increase in actual emissions because of increased utilization is not expected.

Based on the performance test results, fuel analyses, historical emissions data, EPA emission factors, and evaluation of pollution control system capabilities, the Department concludes that the use of petcoke as described in Seminole's permit application will not result in a significant net increase in any PSD regulated pollutant and therefore the permit amendment request regarding the use of petcoke in Units 1 and 2 is not subject to PSD review. As discussed below in Section I, the Department plans to include appropriate permit conditions to ensure that no significant increases in PSD regulated pollutants occur due to the use of petcoke at the Seminole Power Plant.

The use of No. 2 fuel oil to generate electric capacity will not result in significant emissions increase of PSD regulated pollutants. Seminole projects limited usage of No. 2 fuel oil because of economic considerations; i.e., No. 2 fuel oil is a considerably more expensive source of fuel to generate electricity in comparison to coal. In a worst-case scenario, Seminole projects that fuel oil would constitute only 6.3 percent of the instantaneous hourly heat and 0.14 percent of the annual heat input to Units 1 and 2. The Department concludes that the use of No. 2 fuel to generate electric capacity as described in Appendix F of Seminole's permit application will not result in a significant net actual increase in any PSD regulated pollutant and therefore the permit amendment request regarding the use of No. 2 fuel oil to generate electric capacity is not subject to PSD review.

8. Proposed Addition of New Conditions of Approval to Permit PSD-FL-018

Following review of the test burn report, permit amendment request application, and the additional information submitted by Seminole, the Department proposes adding the following new conditions of approval to permit PSD-FL-018:

Section D (new)

D. FOR THE ELECTRIC UTILITY STEAM GENERATING UNITS WHEN BURNING COAL AND PETROLEUM COKE FUEL BLENDS

Stack emissions from Units 1 and 2 shall comply with the following conditions when burning blends of coal and petroleum coke:

Item 1 - Sulfur Dioxide Emissions

(a) Unit 1:

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$$E_{SO_2} = [(\%C_{HI} / 100) * (P_S) * (1 - (\% R_O / 100))] \\ + [(1 - (\%C_{HI} / 100)) * (0.74 \text{ lb } SO_2 / \text{MMBtu})] \text{ (Eqn. 1)}$$

(b) Unit 2:

$$E_{SO_2} = [(\%C_{HI} / 100) * (P_S) * (1 - (\% R_O / 100))] \\ + [(1 - (\%C_{HI} / 100)) * (0.72 \text{ lb } SO_2 / \text{MMBtu})] \text{ (Eqn. 2)}$$

where:

E_{SO_2}	=	allowable SO_2 emission rate; lb SO_2 /MMBtu, 30-day rolling average
$\%C_{HI}$	=	percent of coal used on a heat input basis
P_S	=	potential SO_2 combustion concentration (unwashed coal without emission control systems) as defined by NSPS Subpart Da; lb SO_2 /MMBtu, 30-day rolling average
$\% R_O$	=	overall percent SO_2 reduction from Equation 19-21 of EPA Reference Method 19. Per NSPS Subpart Da, $\% R_O$ must not be less than 90%, 30-day rolling average
0.74	=	historical 2-year annual average SO_2 emission rate for Unit 1; lb/MMBtu
0.72	=	historical 2-year annual average SO_2 emission rate for Unit 2; lb/MMBtu

Compliance with the lb per million Btu heat input emission limitations and percent reduction requirement shall be determined on a 30-day rolling average basis.

Item 2 - Nitrogen Oxide Emissions

(a) 0.60 lb. per million Btu heat input, and 35 percent of the potential combustion concentration (65 percent reduction). Compliance with the lb. per million Btu heat input emission limitation and percent reduction requirement shall be determined on a 30-day rolling average basis. Compliance with the 0.60 lb. per million Btu heat input emission limitation shall also constitute compliance with the 65 percent reduction requirement; and

(b) 0.50 lb. per million Btu heat input determined on an annual average basis, when subject to the 40 CFR §76.8 Early Election Program for Group 1, Phase II Boilers or in any year when petcoke is burned.

Item 3 - Particulate Matter Emissions

0.03 lb. per million Btu heat input, and 1 percent of the potential combustion concentration (99 percent reduction). Compliance with the 0.03 lb. per million Btu heat input emission limitation shall also constitute compliance with the 99 percent reduction requirement.

Item 4 - Carbon Monoxide Emissions

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The Permittee shall maintain and submit to the Department, on an annual basis for a period of five years from the date the units begin firing petroleum coke, test results demonstrating that the operational changes did not result in a significant emissions increase of the pollutant when compared to the past actual coal levels. The carbon monoxide emissions shall be based on test results using EPA Method 10.

Item 5 - Sulfuric Acid Mist Emissions

The Permittee shall maintain and submit to the Department on an annual basis for a period of five years from the date the units begin firing petroleum coke, test results demonstrating that the operational changes did not result in a significant emissions increase of the pollutant when compared to the past actual coal levels. The sulfuric acid mist emissions shall be based on test results using EPA Method 8.

Item 6 - Fuel Specifications

Fuels fired shall consist of coal and petroleum coke blends containing a maximum of 30 percent petroleum coke by weight. The maximum weight of the petroleum coke burned shall not exceed 125,000 pounds per hour (averaged over 24 hours). The petroleum coke sulfur content shall not exceed 7.0 percent by weight, dry basis.

Item 7 - Reporting and Recordkeeping

(a) Documentation verifying that the coal and petroleum coke fuel blends combusted in Units 1 and 2 have not exceeded the 30 percent maximum petroleum coke by weight limit specified by Condition of Approval, Section D., Item 6 shall be maintained and submitted to the Department's Northeast District Office with each annual report; and

(b) The Permittee shall maintain and submit to the Department, on an annual basis for a period of five years from the date the units begin firing petroleum coke, data demonstrating that the operational change associated with the use of petroleum coke did not result in a significant emission increase pursuant to Rule 62-210.200(12)(d), F.A.C.

Item 8 - Handling of Petroleum Coke

All prior conditions of approval that address coal handling shall also apply to the handling of petroleum coke.

Section E (new)

E. FOR THE ELECTRIC UTILITY STEAM GENERATING UNITS WHEN BURNING NO 2 FUEL OIL

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Use of No. 2 fuel oil is authorized for startups, flame stabilization, to generate emergency electric reserve capacity requirements, and to meet normal continuous operating electric load ratings when coal quality, process conditions, and/or burner equipment prevents meeting demand with solid fuels only.

I. Discussion of Proposed New Conditions of Approval to Permit PSD-FL-018

The proposed new conditions contained in Section 8 above address allowable emissions of SO₂, NO_x, PM, CO and H₂SO₄ in addition to including provisions pertaining to fuel blend characteristics, reporting and recordkeeping, and petcoke handling.

The emission limits for SO₂ (Item 1) contain two algorithms (one for each unit) to ensure that actual increases in SO₂ emissions will not occur due to the use of petcoke. These algorithms contain two basic components which are enclosed in brackets. The first term in brackets addresses the coal portion of the coal and petcoke fuel blend and implements the current requirements of NSPS Subpart Da. The second term in brackets addresses the petcoke portion of the coal and petcoke fuel blend and represents the historical two year average SO₂ emission rate for each unit. Accordingly, NSPS Subpart Da SO₂ emission requirements will continue to apply to the coal portion of the fuel blends while petcoke SO₂ emissions will be held to each unit's historical two year annual average SO₂ emission rate.

The emission limits for NO_x (Item 2) implement current NSPS Subpart Da requirements as well as the new annual average limit that Seminole has elected to meet under the Acid Rain NO_x Early Election Program for Group 1, Phase II boilers. The emission limit for PM (Item 3) implements current NSPS Subpart Da requirements.

Item 6 of the proposed permit conditions contain constraints on the maximum amount of petcoke which may be blended and maximum petcoke sulfur content. These constraints are consistent with Seminole's permit amendment request and are included to provide assurance that an actual increase in SO₂ emissions will not occur.

Item 7 of the proposed permit conditions requires Seminole to demonstrate annually, for a period of five years, that an actual emission increase has not occurred due to the burning of petcoke. Seminole has indicated that it intends to make this demonstration using data obtained from the existing CEMS, fuel composition and usage rates, and results of periodic stack sampling.

9. Conclusions

The changes in operation authorized by these permit amendments are not expected to cause a net significant increase in actual emissions of any PSD regulated air pollutant. The changes will not result in any increases in ambient concentrations of any regulated air pollutants or cause or contribute to a violation of any ambient air quality standard or PSD increment.

Memorandum

Florida Department of Environmental Protection

TO: Clair Fancy

THRU: Al Linero *AA Linero*

FROM: Syed Arif *SA*

DATE: February 7, 1997

SUBJECT: Seminole Power Plant Units 1 & 2, PA 78-10; PSD-FL-018(A)

Attached is a draft modification of the PSD permit for Seminole Electric Cooperative Incorporated Seminole Power Plant Units 1 & 2 at Palatka, Putnam County. The modification allows co-firing of petcoke and coal in fuel blends containing up to 30 percent by weight petcoke, and to allow the use of No. 2 fuel oil to generate electric power during statewide emergency energy shortage in lieu of coal as a fuel source.

Emissions control consist of an electrostatic precipitator for particulate matter and flue gas desulfurization scrubber for sulfur dioxide. The planned combustion of coal and petcoke fuel blends and use of No. 2 fuel oil for electrical generation capacity will not cause a significant increase in actual emissions of any PSD regulated air pollutant. Because the plant employs coal washing, the scrubbers are underutilized and have the excess capability necessary to handle the additional sulfur dioxide generated by petcoke burning.

I recommend your approval and signature.

Attachments

CHF/sa/hh

Certification

Application No. PSD-FL-018(A)

SEMINOLE ELECTRIC / PALATKA PETCOKE PROJECT

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code 62-209 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).

AA Lin P.E.

(signed)

2/5/97

(date)

(seal)

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SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a, & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

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- ☐ Addressee's Address
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Consult postmaster for fee.

3. Article Addressed to:
 M P Opalinski
 Director of Enw. Affairs
 Seminole Electric Corp
 16313 N. Dale Mabry Hwy
 Tampa, FL 33688

4a. Article Number
 P. 265 659 163

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

7. Date of Delivery
 2/12/97

5. Signature (Addressee)
 Doris M. Anelwa

6. Signature (Agent)
 J. N. Koulis

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

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 Seminole Electric

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Return Receipt Showing to Whom & Date Delivered

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PSD-FI-018(A)
 Palatka Units 1+2

PS Form 3800, April 1995