Seminole Electric
COOPERATIVE, INC.
IN PARTNERSHIP WITH THOSE WE SERVE

# COVER SHEET FAX

**To:** Ed Svec
**Company:** FDEP
**Fax #:** (850) 922-6979
**Subject:** Payne Creek Title V
**Date:** April 15, 2002
**Pages:** 5, including this cover sheet.
**From:** Mike Roddy

**If you do not receive all of the pages, please call the Copy Room x1282.**

**COMMENTS:**

**Seminole Electric Cooperative, Inc.**
P.O. BOX 272000 ❖ Tampa, Florida 33688-2000 ❖ (813) 963-0994
❖ Fax (813) 264-7906 ❖

Seminole Electric
COOPERATIVE, INC.
IN PARTNERSHIP WITH THOSE WE SERVE

0490340-NA-AC
PSD-FL-214A
ALSO
0490340-002-AV

July 10, 2001

Mr. Syed Arif
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Payne Creek Generating Station
Permit No. PSD-FL-214A

Dear Syed:

As we previously discussed, the Payne Creek Generating station combustion turbines are subject to 40 CFR 60 Subpart GG and as such, must comply with the applicable emission limits and monitoring requirements of this Subpart. Subpart GG is an older regulation, having been promulgated over 20 years ago. The $NO_x$ control technology on modern gas turbines and the almost exclusive use of pipeline natural gas and low sulfur No. 2 fuel oil have essentially made the regulation obsolete. At the time Subpart GG was promulgated, $NO_x$ emissions from gas turbines were controlled by steam or water injection into the combustion zone. Typical emissions were 75-150 ppm $NO_x$. Modern gas turbines that burn pipeline natural gas do not typically use water or steam injection but use variations of "lean burn" technology for $NO_x$ control. Emissions from these units range from 9 to 25 ppm $NO_x$ when burning gaseous fuels. When firing No. 2 fuel oil, many turbines still use water injection; however, due to improvements in combustion control and water injection, emissions are significantly below "old" Subpart GG levels – typically ranging from 35 to 45 ppm. Consequently, the monitoring and reporting sections of Subpart GG have been made superfluous, especially in light of the 40 CFR Part 75 monitoring and reporting requirements.

Based on the above situation, the Environmental Protection Agency (EPA) Region IV has routinely received and approved numerous requests for alternative testing and monitoring procedures under Subpart GG. These routine alternatives were recently described in a May 26, 2000 letter from Douglass Neeley to the Region IV State and Local Air Directors. This letter delegates authority to the Florida Department of Environmental Protection(FDEP) for approval of these alternatives.

Since BACT requirements for $NO_x$ emissions from Payne Creek are far below those specified by NSPS and Part 75 requires the use of CEMS, Seminole is requesting relief, through the modification of our PSD Permit, from the requirements specified under 40 CFR Part 60, Subpart GG and Method 20 $NO_x$ and $O_2$ measurement testing requirements.

16313 North Dale Mabry Highway P.O. Box 272000 Tampa, Florida 33688-2000
Telephone 813.963.0994 Fax 813.264.7906 www.seminole-electric.com

In addition to the above requests concerning Subpart GG, we are also requesting the removal of the monitoring requirement C.1.g , from the performance testing section of the permit. This requirement for initial beryllium and arsenic testing on oil is no longer applicable as these pollutants were removed from the list of PSD parameters.

Attached please find a detailed description of the requested approvals following the EPA Policy, and a check for the $ 250.00 modification fee. If you have any questions or require any additional information, please contact me at (813) 963-0994, ext 1224 or email me at wmroddy@seminole-electric.com.

Sincerely,

Mike Roddy
Senior Environmental Engineer

cc : Hamilton S. Oven – Power Plant Siting

# Payne Creek Generating Station
# Alternative Testing and Monitoring Procedures
# PSD-FL-214A

**Request 1: Nitrogen Content Monitoring**
Seminole requests to be relieved of the requirements, under 40 CFR 60.334(b) and 40 CFR 60.335(a), to monitor, determine, compute and record the nitrogen content of the fuel combusted in the turbines. Each turbine will be fueled exclusively with pipeline natural gas and premium distillate No. 2 fuel oil (which contain no fuel bound nitrogen) and the allowed emission limits specified in the permit are well below NSPS requirements. Instead $NO_x$ emissions will be monitored by the CEMS which is required by 40 CFR 75.12(c).

**Request 2: Sulfur Content Monitoring**
In the case of Payne Creek, the gas burned conforms to the regulatory requirements for pipeline natural gas (a maximum $H_2S$ content of 0.3 gr./100 cf.). This has been confirmed by the gas pipeline tariffs as specified in 40 CFR Part 75. The sulfur content will still be approximately 500 times less than that allowed by 40 CFR Part 60, Subpart GG. Subpart GG allows for a fuel sulfur content of 0.8% by weight and this is equivalent to an $H_2S$ content of approximately 300 gr/100 scf. It is suggested that this huge sulfur content compliance margin eliminates the need for sulfur content sampling and analysis based on the characteristics of the fuel. $SO_2$ emissions will be reported based on the 40 CFR Part 75, Appendix D default factor of 0.0006 lb. $SO_2/10^6$ Btu.

As outlined in the EPA Policy letter, Seminole will initially supply the Department with six months of fuel sulfur analyses acquired from Florida Gas Transmission(FGT) and semiannually obtain and file additional analyses from FGT.

**Request 3: Water to Fuel Ratio Monitoring**
The two Westinghouse Model 501(F) turbines will employ "dry low-$NO_x$" technology when burning gas and water injection technology when burning oil. Each HRSG is equipped with a SCR catalyst bed to reduce the formation of nitrogen oxides. Seminole requests to be relieved of the requirements, under 40 CFR 60.334(a) and 40 CFR 60.335(c)(2) -- to install, monitor and record the turbines' fuel consumption and the ratio of water to fuel. Instead Seminole proposes to determine $NO_x$ concentrations and emission rates using the data collected for compliance with 40 CFR 75.12(c). A CEMS is required by 40 CFR 75.12.

**Request 4: International Standard Organization Corrections**
Seminole requests relief from the 40 CFR 60, Subpart GG 60.335(c)(1), requirement to continuously correct CEMS results to International Standard Organization (ISO) standard day conditions. Since each unit is subject to $NO_x$ limits that are substantially more stringent than those in Subpart GG, Seminole asks that the requirement to correct CEMS results to ISO standard day conditions be waived. Likewise, Payne Creek will maintain on-site, in a format suitable for Agency inspection, sufficient records of the data that would allow them to make this correction at the request of EPA or the appropriate state or local pollution control Agency.

**Request 5: Performance Testing (Load Levels)**
Seminole requests a waiver of the four-load test requirement specified in 40 CFR Part 60.335(c)(2). In accordance with Subpart GG requirements, the $NO_x$ performance test for each turbine is supposed to be conducted at 30, 50, 75 and 100 percent of peak load, or at four points in the normal operating range of the gas turbine. The purpose of this Subpart GG testing requirement is to establish water-to-fuel ratio limits that can be applied over the units' operating range. Since water-to-fuel ratios will not be used to determine compliance, it is not necessary to conduct the performance tests at multiple loads.

With one exception, Seminole proposes to perform all CEMS and compliance testing at a normal, high load. For Part 75, the $NO_x$ CEMS RATA must be performed at normal load. As specified in Specific Condition (C)(1) of permit PSD-FL-214A/PS-89-25SA, "Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature for the CT during the test." In addition to the high load tests, testing will be conducted at the lowest sustainable level to determine CO emissions.

**Request 6: Performance Testing (RATA)**
Seminole requests a waiver of the performance testing requirements under 40 CFR 60.335(b) and (c)(3). Seminole proposes to use the provisions of 40 CFR Part 75, which include an initial CEMS certification per the testing requirement methods of Appendix A, to demonstrate compliance with the standard for nitrogen oxides. A relative accuracy test audit (RATA) is required by 40 CFR Part 75, Appendix A §6.5. Also, to ensure that conservative quality assurance checks specified under Method 20 are met while performing the CEMS RATA, Seminole acknowledges that pre- and post-run calibration checks as specified under Method 20 must be performed during the RATA. Seminole proposes using the initial certification RATA, utilizing reference methods 3A and 7E, in conjunction with the Method 20 calibration checks to meet the requirements specified in Subpart GG, 60.335(c)(3). Since each of the nine (9) or more RATA runs will be conducted for a minimum of twenty one (21) minutes, the total time of the performance test will be a minimum of three (3) hours. A separate RATA will be conducted when burning pipeline natural gas and No. 2 fuel oil.

**Request 7: Beryllium and Arsenic**
Seminole requests the removal of the permit condition C.1.g which requires an initial test for beryllium and arsenic on oil . This condition is no longer applicable since these parameters were removed from the PSD list.

# AFFIDAVIT OF PUBLICATION

## *The Herald-Advocate*

Published Weekly at Wauchula, Florida

STATE OF FLORIDA,
COUNTY OF HARDEE

Before the undersigned authority personally appeared

who on oath says he is the of The Herald-Advocate, a news paper published at Wauchula, in Hardee County, Florida; that the attached copy of advertisement, being a Public Notice

in the matter of #1050340-001-AC PSD-FL-214B

in the Court, was published in said newspaper in the issues of 8:23, 2001

Affiant further says that the said Herald-Advocate is a newspaper published at Wauchula, in said Hardee County, Florida, and that the said newspaper has heretofore been continuously published in said Hardee County, Florida, each week and has been entered as second class mail matter at the post office in Wauchula, in said Hardee County, Florida, for a period of one year next preceding the publication of the attached copy of advertisement; and affiant further says that he 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.

AMY FAYE BROWN
Notary Public - State of Florida
My Commission Expires June 22, 2004
Commission # CC977849

Sworn to and subscribed before me this 23 day of August A. D. 2001

Amy Faye Brown
Notary Public

My Commission Expires June 22, 2004

**PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION**

**STATE OF FLORIDA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**DEP File No. 1050340-001-AC;**
**PSD-FL-214B**

**Payne Creek Generating Station**
**Bowling Green, Hardee County**

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification to Seminole Electric Cooperative, Inc., for the Payne Creek Generating Station located near Bowling Green, Hardee County. The permit modification provides relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic. 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 applicant's mailing address is: Seminole Electric Cooperative, Inc., Post Office Box 272000, Tampa, Florida 33688-2000.

An air quality impact analysis was not conducted. Emissions from the facility will not consume PSD increment and 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 modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit modification issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue PSD permit modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit 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., 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 receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

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

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

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

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

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

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, Draft permit modification, 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 Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

**Memorandum**

Florida Department of
Environmental Protection

TO: Clair Fancy

THRU: Al Linero 8/13

FROM: Syed Arif 8/13

DATE: August 13, 2001

SUBJECT: Payne Creek Generating Station – Testing and Monitoring Relief

Attached for approval and signature is a PSD permit modification to Seminole Electric Cooperative, Inc. for the Payne Creek Generating Station, located near Bowling Green, Hardee County. The permit modification is to provide relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic.

I recommend your approval and signature.

August 13, 2001 is day 33 of the 90-day timeclock.

Attachments

/sa

# Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary


August 14, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative, Inc.
Post Office Box 272000
Tampa, Florida 33688-2000

Re: DEP File No. 1050340-001-AC; PSD-FL-214B
Payne Creek Generating Station

Dear Mr. Roddy:

Enclosed is one copy of the Draft PSD Permit Modification for the Payne Creek Generating Station located near Bowling Green, Hardee County. The Department's Intent to Issue PSD Permit Modification and the "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION" must be published in a newspaper of general circulation in Hardee County. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven (7) 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 call Mr. Syed Arif at 850/921-9528.

Sincerely,

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

CHF/sa

Enclosures

In the Matter of an
Application for Permit Modification by:

Mr. Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative, Inc.
Post Office Box 272000
Tampa, Florida 33688-2000

DEP File No. 1050340-001-AC; PSD-FL-214B
Payne Creek Generating Station
Hardee County

_____/

**INTENT TO ISSUE PSD 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 action, as detailed in the application specified above, for the reasons stated below.

The applicant, Seminole Electric Cooperative, Inc., applied on June 5, 2001 to the Department for a permit modification to provide relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic at the Payne Creek Generating Station located near Bowling Green, Hardee County.

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 PSD permit modification is required.

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

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

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

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

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

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

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

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

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

Mediation is not available in this proceeding.

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

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

permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

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

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

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice of Intent to Issue Air Construction Permit, Technical Evaluation and Preliminary Determination, and the Draft permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 8/17/01 to the person(s) listed:

Mr. M. Roddy, Seminole Electric Cooperative, Inc.*
Mr. B. Thomas, DEP-SWD
Mr. G. Worley, EPA
Mr. J. Bunyak, NPS
Mr. H. Oven, PPSO

Clerk Stamp

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

Barbara J. Friday 8/17/01
(Clerk) (Date)

**PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION**

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 1050340-001-AC; PSD-FL-214B

Payne Creek Generating Station
Bowling Green, Hardee County

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification to Seminole Electric Cooperative, Inc., for the Payne Creek Generating Station located near Bowling Green, Hardee County. The permit modification provides relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic. 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 applicant's mailing address is: Seminole Electric Cooperative, Inc., Post Office Box 272000, Tampa, Florida 33688-2000.

An air quality impact analysis was not conducted. Emissions from the facility will not consume PSD increment and 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 modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

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

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

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

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

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

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

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

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, Draft permit modification, 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 Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

September xx, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative, Inc.
Post Office Box 272000
Tampa, Florida 33688-2000

Re: DEP File No. 1050340-001-AC; PSD-FL-214B
Payne Creek Generating Station

Dear Mr. Roddy:

The Department has reviewed your request of June 5, 2001, and subsequent letter dated July 10, 2001. The request to provide relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic is acceptable to the Department. The Department's acceptance of this request is based on the following:

- Environmental Protection Agency Region IV has routinely received and approved numerous requests for alternative testing and monitoring procedures under Subpart GG. These routine alternatives were recently described in a May 26, 2000 letter from Douglas Neeley to the Region IV State and Local Air Directors. The letter delegates authority to the Florida Department of Environmental Protection for approval of these alternatives. The requests from Seminole fall within the scope of issues addressed in EPA's letter.
- At the time the permit was issued (September 1995), beryllium was a pollutant subject to the Department's PSD rules. At the request of the Florida Coordinating Group, the Department in 1997-98, delisted asbestos, beryllium and vinyl chloride as PSD pollutants consistent with EPA Headquarters guidance.
- Although arsenic was not a "PSD pollutant," it was included in the permit by adherence to the procedures described in Table A-4 of the "Draft New Source Review Workshop Manual," October 1990. These procedures apply to permits issued under the authority of 40 CFR 52.21. The Department concludes that the same logic that "delisted" beryllium as a PSD pollutant would clearly apply to a pollutant that was not even listed.
- The Department reviewed documents (dated May 14 and December 30, 1999) prepared by EPA to support a possible Maximum Achievable Control Technology (MACT) for hazardous air pollutants (HAPs) from gas turbines. Arsenic emissions were not addressed in the documents (as opposed to formaldehyde, benzene, mercury and certain other organic and metal HAPs). The focus of control is on organic emissions and on catalytic oxidation systems. The Seminole project already includes an oxidation system that addresses any possible HAPs concern.

Based on the above, the Department will modify PSD-FL-214A, previously modified on July 23, 1999, as follows:

**SPECIFIC CONDITION Nos. C.1.g. – C.1.j.**

~~g. Trace elements of Beryllium (Be) and Arsenic (As) shall be tested (I, for oil only) using EMTIC Interim Test Methods. As an alternative, EPA Method 104 for Be may be used; or, Be and As may be determined from fuel analysis using either Method 7090 or 7091 and sample extraction using Method 3040, as described in the EPA solid waste regulations SW-846.~~

~~h~~g. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I and A), which can be used for determining $SO_2$ emissions annually.

~~i~~h. ASTM D1072-80, D3031-81, D4084-82, or D3246-81 (or equivalent) for sulfur content of natural gas (I; and, A if deemed necessary by the Department).

~~j~~i. Other USEPA or DEP approved test methods for the permitted facilities may be used for compliance testing after departmental approval. Unless the permittee requests to modify a reference method, or to use a method for which a method was not designed, such approval shall not constitute an alternative test procedure under Section 62-297.620, F.A.C., or otherwise require modification of the permit.

Additionally, the attached Appendix GG will be made a part of the permit.

Appendix GG – 40 CFR 60 NSPS Requirements for Gas Turbines

**NSPS SUBPART GG REQUIREMENTS**

[Note: Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference to the original rules. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in **bold** immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.]

Pursuant to 40 CFR 60.332 Standard for Nitrogen Oxides:

(a) On and after the date of the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraph (b) of this section shall comply with:

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NOx emission allowance for fuel-bound nitrogen as de-fined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

| Fuel-bound nitrogen (percent by weight) | F (NOx percent by volume) |
|---|---|
| N≤0.015 | 0 |
| 0.015<N≤0.1 | 0.04(N) |
| 0.1<N≤0.25 | 0.004+0.0067(N–0.1) |
| N>0.25 | 0.005 |

Where, N = the nitrogen content of the fuel (percent by weight).

**Department requirement: While firing gas, the "F" value shall be assumed to be 0.**

**[Note: This is required by EPA's March 12, 1993 determination regarding the use of NOx CEMS. The "Y" values are approximately 10.0 for natural gas and 10.6 for fuel oil. The equivalent emission standards are 108 and 102 ppmvd at 15% oxygen. The emissions standards of this permit is more stringent than this requirement.]**

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

Pursuant to 40 CFR 60.333 Standard for Sulfur Dioxide:

On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

Pursuant to 40 CFR 60.334 Monitoring of Operations:

(b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

**Department requirement: The owner or operator is allowed to use vendor analyses of the fuel as received to satisfy the sulfur content monitoring requirements of this rule for fuel oil. Alternatively, if the fuel oil storage tank is isolated from the combustion turbines while being filled, the owner or operator is allowed to determine the sulfur content of the tank after completion of filling of the tank, before it is placed back into service.**

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

**Department requirement: The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. The requirement to monitor the nitrogen content of fuel oil fired is waived because a NOx CEMS shall be used to demonstrate compliance with the NOx limits of this permit. For purposes of complying with the sulfur content monitoring requirements of this rule, the owner or operator shall obtain a monthly report from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation.**

**[Note: This is consistent with EPA's custom fuel monitoring policy and guidance from EPA Region 4.]**

(c) For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) *Nitrogen oxides.* Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in § 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in § 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

**Department requirement: NOx emissions monitoring by CEM system shall substitute for the requirements of paragraph (c)(1) because a NOx monitor is required to demonstrate compliance with the standards of this permit. Data from the NOx monitor shall be used to determine "excess emissions" for purposes of 40 CFR 60.7 subject to the conditions of the permit.**

**[Note: As required by EPA's March 12, 1993 determination, the NOx monitor shall meet the applicable requirements of 40 CFR 60.13, Appendix B and Appendix F for certifying, maintaining, operating and assuring the quality of the system; shall be capable of calculating NOx emissions concentrations corrected to 15% oxygen; shall have no less than 95% monitor availability in any given calendar quarter; and shall provide a minimum of four data points for each hour and calculate an hourly average. The requirements for the CEMS specified by the specific conditions of this permit satisfy these requirements.]**

(2) *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

Pursuant to 40 CFR 60.335 Test Methods and Procedures:

(a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.

(b) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

(c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:

(1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

$$NOx = (NOxo)\,(Pr/Po)^{0.5}\, e^{19(Ho-0.00633)}\,(288°K/Ta)^{1.53}$$

where:

NOx = emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent.

NOxo = observed NOx concentration, ppm by volume.

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po = observed combustor inlet absolute pressure at test, mm Hg.

Ho = observed humidity of ambient air, g H2O/g air.

e = transcendental constant, 2.718.

Ta = ambient temperature, °K.

**Department requirement: The owner or operator is not required to have the NOx monitor required by this permit continuously calculate NOx emissions concentrations corrected to ISO conditions. However, the owner or operator shall keep records of the data needed to make the correction, and shall make the correction when required by the Department or Administrator.**

**[Note: This is consistent with guidance from EPA Region 4.]**

(2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

**Department requirement: The owner or operator is allowed to conduct initial performance tests at a single load because a NOx monitor shall be used to demonstrate compliance with the BACT NOx limits of this permit.**

**[Note: This is consistent with guidance from EPA Region 4.]**

(3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

**Department requirement: The owner or operator is allowed to make the initial compliance demonstration for NOx emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, initial compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NOx monitor. The span value specified in the permit shall be used instead of that specified in paragraph (c)(3) above.**

**[Note: These initial compliance demonstration requirements are consistent with guidance from EPA Region 4. The span value is changed pursuant to Department authority and is consistent with guidance from EPA Region 4.]**

(d) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference – see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

**Department requirement: The permit specifies sulfur testing methods and allows the owner or operator to follow the requirements of 40 CFR 75 Appendix D to determine the sulfur content of liquid fuels.**

**[Note: This requirement establishes different methods than provided by paragraph (d) above, but the requirements are equally stringent and will ensure compliance with this rule.]**

(e) To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

**[Note: The fuel analysis requirements of the permit meet or exceed the requirements of this rule and will ensure compliance with this rule.**

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

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

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

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

Mr. M. Roddy, SECI*
Mr. H. Oven, PPSO
Mr. B. Thomas, DEP-SWD
Mr. G. Worley, EPA
Mr. J. Bunyak, NPS

Clerk Stamp

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

(Clerk) (Date)

**SENDER: COMPLETE THIS SECTION**

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

1. Article Addressed to:

Mr. Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative
P. O. Box 272000
Tampa, FL 33688-2000

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by *(Please Print Clearly)*: W. Shy
B. Date of Delivery: 8-21-01

C. Signature
X [signature] ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
7000 0600 0026 4129 8238

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

**U.S. Postal Service**
**CERTIFIED MAIL RECEIPT**
*(Domestic Mail Only; No Insurance Coverage Provided)*

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Mr. Mike Roddy

| | |
|---|---|
| Postage | $ |
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| Return Receipt Fee (Endorsement Required) | |
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| **Total Postage & Fees** | $ |

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*Recipient's Name (Please Print Clearly) (to be completed by mailer)*
Seminole Electric Cooperative
*Street, Apt. No.; or PO Box No.*
P.O. Box 272000
*City, State, ZIP+4*
Tampa, FL 33699-2000

PS Form 3800, February 2000 See Reverse for Instructions

# Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary


September 20, 2001

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative, Inc.
Post Office Box 272000
Tampa, Florida 33688-2000

Re: DEP File No. 1050340-001-AC; PSD-FL-214B
Payne Creek Generating Station

Dear Mr. Roddy:

The Department has reviewed your request of June 5, 2001, and subsequent letter dated July 10, 2001. The request to provide relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic is acceptable to the Department. The Department's acceptance of this request is based on the following:

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Based on the above, the Department will modify PSD-FL-214A, previously modified on July 23, 1999, as follows:

**SPECIFIC CONDITION Nos. C.1.g. – C.1.j.**

~~g. Trace elements of Beryllium (Be) and Arsenic (As) shall be tested (I, for oil only) using EMTIC Interim Test Methods. As an alternative, EPA Method 104 for Be may be used; or, Be and As may be determined from fuel analysis using either Method 7090 or 7091 and sample extraction using Method 3040, as described in the EPA solid waste regulations SW-846.~~

~~h~~g. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I and A), which can be used for determining $SO_2$ emissions annually.

~~i~~h. ASTM D1072-80, D3031-81, D4084-82, or D3246-81 (or equivalent) for sulfur content of natural gas (I; and, A if deemed necessary by the Department).

~~j~~i. Other USEPA or DEP approved test methods for the permitted facilities may be used for compliance testing after departmental approval. Unless the permittee requests to modify a reference method, or to use a method for which a method was not designed, such approval shall not constitute an alternative test procedure under Section 62-297.620, F.A.C., or otherwise require modification of the permit.

Additionally, the attached Appendix GG will be made a part of the permit.

Appendix GG – 40 CFR 60 NSPS Requirements for Gas Turbines

**NSPS SUBPART GG REQUIREMENTS**

[Note: Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference to the original rules. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in **bold** immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.]

Pursuant to 40 CFR 60.332 Standard for Nitrogen Oxides:

(a) On and after the date of the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraph (b) of this section shall comply with:

(1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = NOx emission allowance for fuel-bound nitrogen as de-fined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

| Fuel-bound nitrogen (percent by weight) | F (NOx percent by volume) |
|---|---|
| N≤0.015 | 0 |
| 0.015<N≤0.1 | 0.04(N) |
| 0.1<N≤0.25 | 0.004+0.0067(N–0.1) |
| N>0.25 | 0.005 |

Where, N = the nitrogen content of the fuel (percent by weight).

**Department requirement: While firing gas, the "F" value shall be assumed to be 0.**

**[Note: This is required by EPA's March 12, 1993 determination regarding the use of NOx CEMS. The "Y" values are approximately 10.0 for natural gas and 10.6 for fuel oil. The equivalent emission standards are 108 and 102 ppmvd at 15% oxygen. The emissions standards of this permit is more stringent than this requirement.]**

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

Pursuant to 40 CFR 60.333 Standard for Sulfur Dioxide:

On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:

(b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

Pursuant to 40 CFR 60.334 Monitoring of Operations:

(b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

**Department requirement: The owner or operator is allowed to use vendor analyses of the fuel as received to satisfy the sulfur content monitoring requirements of this rule for fuel oil. Alternatively, if the fuel oil storage tank is isolated from the combustion turbines while being filled, the owner or operator is allowed to determine the sulfur content of the tank after completion of filling of the tank, before it is placed back into service.**

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.

**Department requirement: The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. The requirement to monitor the nitrogen content of fuel oil fired is waived because a NOx CEMS shall be used to demonstrate compliance with the NOx limits of this permit. For purposes of complying with the sulfur content monitoring requirements of this rule, the owner or operator shall obtain a monthly report from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation.**

**[Note: This is consistent with EPA's custom fuel monitoring policy and guidance from EPA Region 4.]**

(c) For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

(1) *Nitrogen oxides.* Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in § 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in § 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

Department requirement: **NOx emissions monitoring by CEM system shall substitute for the requirements of paragraph (c)(1) because a NOx monitor is required to demonstrate compliance with the standards of this permit. Data from the NOx monitor shall be used to determine "excess emissions" for purposes of 40 CFR 60.7 subject to the conditions of the permit.**

**[Note: As required by EPA's March 12, 1993 determination, the NOx monitor shall meet the applicable requirements of 40 CFR 60.13, Appendix B and Appendix F for certifying, maintaining, operating and assuring the quality of the system; shall be capable of calculating NOx emissions concentrations corrected to 15% oxygen; shall have no less than 95% monitor availability in any given calendar quarter; and shall provide a minimum of four data points for each hour and calculate an hourly average. The requirements for the CEMS specified by the specific conditions of this permit satisfy these requirements.]**

(2) *Sulfur dioxide.* Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

Pursuant to 40 CFR 60.335 Test Methods and Procedures:

(a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.

(b) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.

(c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:

(1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

$$NOx = (NOxo)\,(Pr/Po)^{0.5}\, e^{19(Ho-0.00633)}\,(288°K/Ta)^{1.53}$$

where:

NOx = emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent.

NOxo = observed NOx concentration, ppm by volume.

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po = observed combustor inlet absolute pressure at test, mm Hg.

Ho = observed humidity of ambient air, g H2O/g air.

e = transcendental constant, 2.718.

Ta = ambient temperature, °K.

**Department requirement: The owner or operator is not required to have the NOx monitor required by this permit continuously calculate NOx emissions concentrations corrected to ISO conditions. However, the owner or operator shall keep records of the data needed to make the correction, and shall make the correction when required by the Department or Administrator.**

**[Note: This is consistent with guidance from EPA Region 4.]**

(2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

**Department requirement: The owner or operator is allowed to conduct initial performance tests at a single load because a NOx monitor shall be used to demonstrate compliance with the BACT NOx limits of this permit.**

**[Note: This is consistent with guidance from EPA Region 4.]**

(3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

**Department requirement: The owner or operator is allowed to make the initial compliance demonstration for NOx emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, initial compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NOx monitor. The span value specified in the permit shall be used instead of that specified in paragraph (c)(3) above.**

**[Note: These initial compliance demonstration requirements are consistent with guidance from EPA Region 4. The span value is changed pursuant to Department authority and is consistent with guidance from EPA Region 4.]**

(d) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference – see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

**Department requirement: The permit specifies sulfur testing methods and allows the owner or operator to follow the requirements of 40 CFR 75 Appendix D to determine the sulfur content of liquid fuels.**

**[Note: This requirement establishes different methods than provided by paragraph (d) above, but the requirements are equally stringent and will ensure compliance with this rule.]**

(e) To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

**[Note: The fuel analysis requirements of the permit meet or exceed the requirements of this rule and will ensure compliance with this rule.**

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

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

Executed in Tallahassee, Florida.

for Howard L. Rhodes, Director
Division of Air Resources Management

CERTIFICATE OF SERVICE

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

Mr. M. Roddy, SECI*
Mr. H. Oven, PPSO
Mr. B. Thomas, DEP-SWD
Mr. G. Worley, EPA
Mr. J. Bunyak, NPS

Clerk Stamp

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

Victoria Gibson (Clerk) 9/21/01 (Date)

# FINAL DETERMINATION

## Seminole Electric Cooperative, Incorporated (SECI)
## Payne Creek Generating Station
## DEP File No. PSD-FL-214B / 1050340-001-AC

An Intent to Issue a PSD Permit Modification for SECI, Payne Creek Generating Station, located near Bowling Green, Hardee County, Florida, was distributed on August 17, 2001. The Public Notice of Intent to Issue PSD Permit Modification was published in the Herald-Advocate on August 23, 2001. Copies of the draft permit modification were available for public inspection at the Department offices in Tampa and Tallahassee.

The Department received no comments from the public, the applicant, the EPA Region 4 office or the National Park Service.

The final action of the Department is to issue the construction permit as proposed.

**SENDER: COMPLETE THIS SECTION**

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

1. Article Addressed to:

Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative, Inc.
P. O. Box 272000
Tampa, FL 33688-2000

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by *(Please Print Clearly)*: Bill Shy
B. Date of Delivery: 9-25-9

C. Signature
X [signature] ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
7000 0600 0026 4129 8986

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

**U.S. Postal Service**
**CERTIFIED MAIL RECEIPT**
*(Domestic Mail Only; No Insurance Coverage Provided)*

| | |
|---|---|
| Postage | $ |
| Certified Fee | |
| Return Receipt Fee (Endorsement Required) | |
| Restricted Delivery Fee (Endorsement Required) | |
| **Total Postage & Fees** | $ |

Postmark Here

*Recipient's Name (Please Print Clearly) (to be completed by mailer)*
Mike Roddy
*Street, Apt. No.; or PO Box No.*
PO Box 272000
*City, State, ZIP+4*
Tampa, FL 33688-2000

7000 0600 0026 4129 8986

PS Form 3800, February 2000 See Reverse for Instructions

**Memorandum**

Florida Department of
Environmental Protection

Is signed for
Howard as he is out.
Clair

TO: Howard L. Rhodes

THRU: Clair Fancy
Al Linero 9/21

FROM Syed Arif 9/20

DATE: September 20, 2001

SUBJ: Seminole Electric Cooperative Incorporated
Payne Creek Generating Station
DEP File No. 1050340-001-AC; PSD-FL-214B

Attached for approval and signature is the final modification for the above referenced permit. The facility was required to do a public notice. No comments were received during the public notice period.

The permit modification is to provide relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic.

I recommend your approval and signature.

September 20, 2001 is day 44 of the 90-day time clock.

Seminole Electric
COOPERATIVE, INC.
IN PARTNERSHIP WITH THOSE WE SERVE

August 29, 2001

RECEIVED
AUG 30 2001
BUREAU OF AIR REGULATION

Mr. Syed Arif
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Payne Creek Generating Station
Permit No. PSD-FL-214A

Dear Syed:

Attached please find the proof of publication for the recent permit modification. The notice ran in The Herald-Advocate on Thursday August 23, 2001. Your effort in this modification was greatly appreciated.

Sincerely,

Mike Roddy
Senior Environmental Engineer

cc: Bill Thomas, SWD ✓
Bregg Worley, EPA ✓
John Bunyak, NPS ✓
Buck Baren, DEP PPSO ✓

16313 North Dale Mabry Highway P.O. Box 272000 Tampa, Florida 33688-2000
Telephone 813.963.0994 Fax 813.264.7906 www.seminole-electric.com

# AFFIDAVIT OF PUBLICATION

## *The Herald-Advocate*

Published Weekly at Wauchula, Florida

STATE OF FLORIDA,
COUNTY OF HARDEE

Before the undersigned authority personally appeared

who on oath says he is the of The Herald-Advocate, a news paper published at Wauchula, in Hardee County, Florida; that the attached copy of advertisement, being a Public Notice

in the matter of #1050340-001-AC PSD-FL-214B

in the Court, was published in said newspaper in the issues of 8:23, 2001

Affiant further says that the said Herald-Advocate is a newspaper published at Wauchula, in said Hardee County, Florida, and that the said newspaper has heretofore been continuously published in said Hardee County, Florida, each week and has been entered as second class mail matter at the post office in Wauchula, in said Hardee County, Florida, for a period of one year next preceding the publication of the attached copy of advertisement; and affiant further says that he 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.

Sworn to and subscribed before me this 23 day of August A. D. 19 2001

Notary Public

My Commission Expires June 22, 19 2004

**PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION**

**STATE OF FLORIDA**
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**DEP File No. 1050340-001-AC;**
**PSD-FL-214B**

**Payne Creek Generating Station**
**Bowling Green, Hardee County**

**The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification to Seminole Electric Cooperative, Inc., for the Payne Creek Generating Station located near Bowling Green, Hardee County. The permit modification provides relief from 40 CFR 60 Subpart GG testing and monitoring requirements as well as removing initial testing requirement for beryllium and arsenic. 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 applicant's mailing address is: Seminole Electric Cooperative, Inc., Post Office Box 272000, Tampa, Florida 33688-2000.**

**An air quality impact analysis was not conducted. Emissions from the facility will not consume PSD increment and 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 modification with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.**

**The Department will accept written comments concerning the proposed permit modification issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue PSD permit modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit 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., 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 receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

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

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

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

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

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

Dept. of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, Draft permit modification, 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 Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

8:23c

Seminole Electric
COOPERATIVE, INC.
IN PARTNERSHIP WITH THOSE WE SERVE

July 10, 2001

RECEIVED
JUL 11 2001
BUREAU OF AIR REGULATION

Mr. Syed Arif
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Payne Creek Generating Station
Permit No. PSD-FL-214A
105 0340-001-AC

Dear Syed:

As we previously discussed, the Payne Creek Generating station combustion turbines are subject to 40 CFR 60 Subpart GG and as such, must comply with the applicable emission limits and monitoring requirements of this Subpart. Subpart GG is an older regulation, having been promulgated over 20 years ago. The $NO_x$ control technology on modern gas turbines and the almost exclusive use of pipeline natural gas and low sulfur No. 2 fuel oil have essentially made the regulation obsolete. At the time Subpart GG was promulgated, $NO_x$ emissions from gas turbines were controlled by steam or water injection into the combustion zone. Typical emissions were 75-150 ppm $NO_x$. Modern gas turbines that burn pipeline natural gas do not typically use water or steam injection but use variations of "lean burn" technology for $NO_X$ control. Emissions from these units range from 9 to 25 ppm $NO_x$ when burning gaseous fuels. When firing No. 2 fuel oil, many turbines still use water injection; however, due to improvements in combustion control and water injection, emissions are significantly below "old" Subpart GG levels – typically ranging from 35 to 45 ppm. Consequently, the monitoring and reporting sections of Subpart GG have been made superfluous, especially in light of the 40 CFR Part 75 monitoring and reporting requirements.

Based on the above situation, the Environmental Protection Agency (EPA) Region IV has routinely received and approved numerous requests for alternative testing and monitoring procedures under Subpart GG. These routine alternatives were recently described in a May 26, 2000 letter from Douglass Neeley to the Region IV State and Local Air Directors. This letter delegates authority to the Florida Department of Environmental Protection(FDEP) for approval of these alternatives.

Since BACT requirements for $NO_x$ emissions from Payne Creek are far below those specified by NSPS and Part 75 requires the use of CEMS, Seminole is requesting relief , through the modification of our PSD Permit, from the requirements specified under 40 CFR Part 60, Subpart GG and Method 20 $NO_x$ and $O_2$ measurement testing requirements.

16313 North Dale Mabry Highway P.O. Box 272000 Tampa, Florida 33688-2000
Telephone 813.963.0994 Fax 813.264.7906 www.seminole-electric.com

In addition to the above requests concerning Subpart GG, we are also requesting the removal of the monitoring requirement C.1.g , from the performance testing section of the permit. This requirement for initial beryllium and arsenic testing on oil is no longer applicable as these pollutants were removed from the list of PSD parameters.

Attached please find a detailed description of the requested approvals following the EPA Policy, and a check for the $ 250.00 modification fee. If you have any questions or require any additional information, please contact me at (813) 963-0994, ext 1224 or email me at wmroddy@seminole-electric.com.

Sincerely,

Mike Roddy
Senior Environmental Engineer

cc : Hamilton S. Oven – Power Plant Siting
Bill Thomas, SWD
Greg Worley, EPA

# Payne Creek Generating Station
# Alternative Testing and Monitoring Procedures
# PSD-FL-214A

**Request 1: Nitrogen Content Monitoring**
Seminole requests to be relieved of the requirements, under 40 CFR 60.334(b) and 40 CFR 60.335(a), to monitor, determine, compute and record the nitrogen content of the fuel combusted in the turbines. Each turbine will be fueled exclusively with pipeline natural gas and premium distillate No. 2 fuel oil (which contain no fuel bound nitrogen) and the allowed emission limits specified in the permit are well below NSPS requirements. Instead $NO_x$ emissions will be monitored by the CEMS which is required by 40 CFR 75.12(c).

**Request 2: Sulfur Content Monitoring**
In the case of Payne Creek, the gas burned conforms to the regulatory requirements for pipeline natural gas (a maximum $H_2S$ content of 0.3 gr./100 cf.). This has been confirmed by the gas pipeline tariffs as specified in 40 CFR Part 75. The sulfur content will still be approximately 500 times less than that allowed by 40 CFR Part 60, Subpart GG. Subpart GG allows for a fuel sulfur content of 0.8% by weight and this is equivalent to an $H_2S$ content of approximately 300 gr/100 scf. It is suggested that this huge sulfur content compliance margin eliminates the need for sulfur content sampling and analysis based on the characteristics of the fuel. $SO_2$ emissions will be reported based on the 40 CFR Part 75, Appendix D default factor of 0.0006 lb. $SO_2/10^6$ Btu.

As outlined in the EPA Policy letter, Seminole will initially supply the Department with six months of fuel sulfur analyses acquired from Florida Gas Transmission(FGT) and semiannually obtain and file additional analyses from FGT.

**Request 3: Water to Fuel Ratio Monitoring**
The two Westinghouse Model 501(F) turbines will employ "dry low-$NO_x$" technology when burning gas and water injection technology when burning oil. Each HRSG is equipped with a SCR catalyst bed to reduce the formation of nitrogen oxides. Seminole requests to be relieved of the requirements, under 40 CFR 60.334(a) and 40 CFR 60.335(c)(2) -- to install, monitor and record the turbines' fuel consumption and the ratio of water to fuel. Instead Seminole proposes to determine $NO_x$ concentrations and emission rates using the data collected for compliance with 40 CFR 75.12(c). A CEMS is required by 40 CFR 75.12.

**Request 4: International Standard Organization Corrections**
Seminole requests relief from the 40 CFR 60, Subpart GG 60.335(c)(1), requirement to continuously correct CEMS results to International Standard Organization (ISO) standard day conditions. Since each unit is subject to $NO_x$ limits that are substantially more stringent than those in Subpart GG, Seminole asks that the requirement to correct CEMS results to ISO standard day conditions be waived. Likewise, Payne Creek will maintain on-site, in a format suitable for Agency inspection, sufficient records of the data that would allow them to make this correction at the request of EPA or the appropriate state or local pollution control Agency.

**Request 5: Performance Testing (Load Levels)**
Seminole requests a waiver of the four-load test requirement specified in 40 CFR Part 60.335(c)(2). In accordance with Subpart GG requirements, the $NO_x$ performance test for each turbine is supposed to be conducted at 30, 50, 75 and 100 percent of peak load, or at four points in the normal operating range of the gas turbine. The purpose of this Subpart GG testing requirement is to establish water-to-fuel ratio limits that can be applied over the units' operating range. Since water-to-fuel ratios will not be used to determine compliance, it is not necessary to conduct the performance tests at multiple loads.

With one exception, Seminole proposes to perform all CEMS and compliance testing at a normal, high load. For Part 75, the $NO_x$ CEMS RATA must be performed at normal load. As specified in Specific Condition (C)(1) of permit PSD-FL-214A/PS-89-25SA, "Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature for the CT during the test." In addition to the high load tests, testing will be conducted at the lowest sustainable level to determine CO emissions.

**Request 6: Performance Testing (RATA)**
Seminole requests a waiver of the performance testing requirements under 40 CFR 60.335(b) and (c)(3). Seminole proposes to use the provisions of 40 CFR Part 75, which include an initial CEMS certification per the testing requirement methods of Appendix A, to demonstrate compliance with the standard for nitrogen oxides. A relative accuracy test audit (RATA) is required by 40 CFR Part 75, Appendix A §6.5. Also, to ensure that conservative quality assurance checks specified under Method 20 are met while performing the CEMS RATA, Seminole acknowledges that pre- and post-run calibration checks as specified under Method 20 must be performed during the RATA. Seminole proposes using the initial certification RATA, utilizing reference methods 3A and 7E, in conjunction with the Method 20 calibration checks to meet the requirements specified in Subpart GG, 60.335(c)(3). Since each of the nine (9) or more RATA runs will be conducted for a minimum of twenty one (21) minutes, the total time of the performance test will be a minimum of three (3) hours. A separate RATA will be conducted when burning pipeline natural gas and No. 2 fuel oil.

**Request 7: Beryllium and Arsenic**
Seminole requests the removal of the permit condition C.1.g which requires an initial test for beryllium and arsenic on oil . This condition is no longer applicable since these parameters were removed from the PSD list.

Seminole Electric
COOPERATIVE, INC.
IN PARTNERSHIP WITH THOSE WE SERVE

RECEIVED
JUN 13 2001
BUREAU OF AIR REGULATION

June 5, 2001

Mr. Syed Arif
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Payne Creek Generating Station
Permit No. PSD-FL-214A
1050340-001-AC

Dear Syed: PSD-FL-214B

As we previously discussed, the Payne Creek Generating station combustion turbines are subject to 40 CFR 60 Subpart GG and as such, must comply with the applicable emission limits and monitoring requirements of this Subpart. Subpart GG is an older regulation, having been promulgated over 20 years ago. The $NO_x$ control technology on modern gas turbines and the almost exclusive use of pipeline natural gas and low sulfur No. 2 fuel oil have essentially made the regulation obsolete. At the time Subpart GG was promulgated, $NO_x$ emissions from gas turbines were controlled by steam or water injection into the combustion zone. Typical emissions were 75-150 ppm $NO_x$. Modern gas turbines that burn pipeline natural gas do not typically use water or steam injection but use variations of "lean burn" technology for $NO_X$ control. Emissions from these units range from 9 to 25 ppm $NO_x$ when burning gaseous fuels. When firing No. 2 fuel oil, many turbines still use water injection; however, due to improvements in combustion control and water injection, emissions are significantly below "old" Subpart GG levels – typically ranging from 35 to 45 ppm. Consequently, the monitoring and reporting sections of Subpart GG have been made superfluous, especially in light of the 40 CFR Part 75 monitoring and reporting requirements.

Based on the above situation, the Environmental Protection Agency (EPA) Region IV has routinely received and approved numerous requests for alternative testing and monitoring procedures under Subpart GG. These routine alternatives were recently described in a May 26, 2000 letter from Douglass Neeley to the Region IV State and Local Air Directors. This letter delegates authority to the Florida Department of Environmental Protection(FDEP) for approval of these alternatives.

Since BACT requirements for $NO_x$ emissions from Payne Creek are far below those specified by NSPS and Part 75 requires the use of CEMS, Seminole is requesting relief , through the modification of our PSD Permit, from the requirements specified under 40 CFR Part 60, Subpart GG and Method 20 $NO_x$ and $O_2$ measurement testing requirements.

16313 North Dale Mabry Highway P.O. Box 272000 Tampa, Florida 33688-2000
Telephone 813.963.0994 Fax 813.264.7906 www.seminole-electric.com

Attached please find a detailed description of the requested approvals following the EPA Policy, and a check for the $ 250.00 modification fee. If you have any questions or require any additional information, please contact me at (813) 963-0994, ext 1224 or email me at wmroddy@seminole-electric.com.

Sincerely,

Mike Roddy
Senior Environmental Engineer

cc : Hamilton S. Oven – Power Plant Siting
Joe Kahn, DEP
Bill Thomas, SWD
Jeff Spicer, Padd Co.
Greg Worley, EPA

# Payne Creek Generating Station
# Alternative Testing and Monitoring Procedures
# PSD-FL-214A

**Request 1: Nitrogen Content Monitoring**
Seminole requests to be relieved of the requirements, under 40 CFR 60.334(b) and 40 CFR 60.335(a), to monitor, determine, compute and record the nitrogen content of the fuel combusted in the turbines. Each turbine will be fueled exclusively with pipeline natural gas and premium distillate No. 2 fuel oil (which contain no fuel bound nitrogen) and the allowed emission limits specified in the permit are well below NSPS requirements. Instead $NO_x$ emissions will be monitored by the CEMS which is required by 40 CFR 75.12(c).

**Request 2: Sulfur Content Monitoring**
In the case of Payne Creek, the gas burned conforms to the regulatory requirements for pipeline natural gas (a maximum $H_2S$ content of 0.3 gr./100 cf.). This has been confirmed by the gas pipeline tariffs as specified in 40 CFR Part 75. The sulfur content will still be approximately 500 times less than that allowed by 40 CFR Part 60, Subpart GG. Subpart GG allows for a fuel sulfur content of 0.8% by weight and this is equivalent to an $H_2S$ content of approximately 300 gr/100 scf. It is suggested that this huge sulfur content compliance margin eliminates the need for sulfur content sampling and analysis based on the characteristics of the fuel. $SO_2$ emissions will be reported based on the 40 CFR Part 75, Appendix D default factor of 0.0006 lb. $SO_2/10^6$ Btu.

As outlined in the EPA Policy letter, Seminole will initially supply the Department with six months of fuel sulfur analyses acquired from Florida Gas Transmission(FGT) and semiannually obtain and file additional analyses from FGT.

**Request 3: Water to Fuel Ratio Monitoring**
The two Westinghouse Model 501(F) turbines will employ "dry low-$NO_x$" technology when burning gas and water injection technology when burning oil. Each HRSG is equipped with a SCR catalyst bed to reduce the formation of nitrogen oxides. Seminole requests to be relieved of the requirements, under 40 CFR 60.334(a) and 40 CFR 60.335(c)(2) -- to install, monitor and record the turbines' fuel consumption and the ratio of water to fuel. Instead Seminole proposes to determine $NO_x$ concentrations and emission rates using the data collected for compliance with 40 CFR 75.12(c). A CEMS is required by 40 CFR 75.12.

**Request 4: International Standard Organization Corrections**
Seminole requests relief from the 40 CFR 60, Subpart GG 60.335(c)(1), requirement to continuously correct CEMS results to International Standard Organization (ISO) standard day conditions. Since each unit is subject to $NO_x$ limits that are substantially more stringent than those in Subpart GG, Seminole asks that the requirement to correct CEMS results to ISO standard day conditions be waived. Likewise, Payne Creek will maintain on-site, in a format suitable for Agency inspection, sufficient records of the data that would allow them to make this correction at the request of EPA or the appropriate state or local pollution control Agency.

**Request 5: Performance Testing (Load Levels)**
Seminole requests a waiver of the four-load test requirement specified in 40 CFR Part 60.335(c)(2). In accordance with Subpart GG requirements, the $NO_x$ performance test for each turbine is supposed to be conducted at 30, 50, 75 and 100 percent of peak load, or at four points in the normal operating range of the gas turbine. The purpose of this Subpart GG testing requirement is to establish water-to-fuel ratio limits that can be applied over the units' operating range. Since water-to-fuel ratios will not be used to determine compliance, it is not necessary to conduct the performance tests at multiple loads.

With one exception, Seminole proposes to perform all CEMS and compliance testing at a normal, high load. For Part 75, the $NO_x$ CEMS RATA must be performed at normal load. As specified in Specific Condition (C)(1) of permit PSD-FL-214A/PS-89-25SA, "Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature for the CT during the test." In addition to the high load tests, testing will be conducted at the lowest sustainable level to determine CO emissions.

**Request 6: Performance Testing (RATA)**
Seminole requests a waiver of the performance testing requirements under 40 CFR 60.335(b) and (c)(3). Seminole proposes to use the provisions of 40 CFR Part 75, which include an initial CEMS certification per the testing requirement methods of Appendix A, to demonstrate compliance with the standard for nitrogen oxides. A relative accuracy test audit (RATA) is required by 40 CFR Part 75, Appendix A §6.5. Also, to ensure that conservative quality assurance checks specified under Method 20 are met while performing the CEMS RATA, Seminole acknowledges that pre- and post-run calibration checks as specified under Method 20 must be performed during the RATA. Seminole proposes using the initial certification RATA, utilizing reference methods 3A and 7E, in conjunction with the Method 20 calibration checks to meet the requirements specified in Subpart GG, 60.335(c)(3). Since each of the nine (9) or more RATA runs will be conducted for a minimum of twenty one (21) minutes, the total time of the performance test will be a minimum of three (3) hours. A separate RATA will be conducted when burning pipeline natural gas and No. 2 fuel oil.

# Determination Detail

Control Number: 0000063

**Category:** NSPS
**EPA Office:** Region 4
**Date:** 05/26/2000
**Title:** Alternative Testing & Monitoring for Combustion Turbines
**Recipient:** Region 4 Air Division Directors
**Author:** R. Douglas Neeley
**Comments:**

**Subparts:** Part 60, GG Stationary Gas Turbines

**References:** 60.333(b)
60.334(b)
60.334(b)(1)
60.334(b)(2)
60.334(c)(1)
60.335(c)(1)
60.335(c)(2)
60.335(c)(3)

**Abstract:**

Q: Has authority been delegated to State and Local Agencies to approve certain monitoring and testing alternatives for stationary gas turbines subject to Subpart GG?

A: Yes. All State and Local Agencies in Region 4 have been delegated the authority to approve certain monitoring and testing alternatives for stationary gas turbines subject to 40 CFR Subpart GG. Based upon the fact that these alternatives are routinely approved by Region 4, it was determined that requiring them to be submitted to the Region for case-by-case reviews consumes significant resources without providing a corresponding environmental benefit.

**Letter:**

4APT-ARB

State or Local Air Director

SUBJ: Approval of Routine Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated Under New Source Performance Standards

Dear State or Local Air Director:

Over the past year, Region 4 has received numerous requests for approval of alternative testing and monitoring procedures for combustion turbines (CTs) regulated under 40 C.F.R. Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines). In the process of reviewing these requests, we have identified several alternatives that are routinely approved. Although these alternatives are being approved on a regular basis, the U.S. Environmental Protection Agency (EPA) Region 4 has typically required that all alternative testing and monitoring proposals be submitted for case-by-case reviews. Since the approval of certain alternatives has become so routine, we have concluded that submitting them to Region 4 for review consumes regional, state, and local agency resources and slows down the approval process without providing a corresponding environmental benefit. Specific alternatives for which we have found this to be the case are described in detail in the remainder of this letter, and due to their routine nature, it will no longer be necessary for you to submit such alternative testing or monitoring proposals to Region 4 for case-by-case review or approval. These (alternatives) may be approved by your Agency without additional input from Region 4.

Nitrogen monitoring requirement for gas-fired CTs

Under the provisions for 40 C.F.R. Section 60.334(b)(2), owners and operators of CTs who do not have intermediate bulk storage for the fuel fired in their turbines are required to conduct daily monitoring to determine the sulfur and nitrogen content of the fuel combusted. Under the terms of the enclosed August 14, 1987, custom fuel monitoring policy issued by EPA Headquarters, the nitrogen monitoring requirement for pipeline quality natural gas-fired turbines can be waived because this fuel does not contain fuel-bound nitrogen and any free nitrogen that it may contain does not contribute appreciably to the formation of nitrogen oxides (NOx) emissions. Based upon the precedent set in the August 1987 custom fuel monitoring policy, the requirement to monitor the nitrogen content of pipeline quality natural gas can be waived for all Subpart GG turbines.

Sulfur monitoring for gas-fired CTs

EPA's August 1987 custom fuel monitoring policy also provides details regarding a procedure that owners and operators of natural gas-fired

turbines can follow in order to obtain approval to reduce their sulfur analysis frequency from a daily to a semiannual basis. Under this policy, owners and operators of affected facilities can obtain approval for a semiannual monitoring frequency by collecting and analyzing samples under the following schedule:

1. Samples must initially be collected and analyzed twice a month for six months. If six months of bi-monthly sampling and analysis indicate that sulfur concentrations are well below the applicable standard with low variability, the sampling frequency can be reduced to a quarterly basis.

2. If six quarters of quarterly sampling and analysis indicate that sulfur concentrations are well below the applicable standard with low variability, the sampling frequency can be reduced to a semiannual basis.

3. If any analyses indicate noncompliance with the applicable sulfur limit of 0.8 weight percent in 40 C.F.R. Section 60.333(b), samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined.

4. If there is a substantial change in fuel quality, samples must be collected and analyzed on a weekly basis while the custom fuel monitoring schedule is re-examined.

In addition to situations where the owner or operator of a CT regulated under Subpart GG proposes a custom fuel monitoring schedule that is identical to the one outlined in EPA's August 1987 policy, there are two other natural gas sulfur content monitoring alternatives that will not have to be submitted to Region 4 for review. One of these alternatives involves allowing an owner or operator of a new facility to use a semiannual monitoring frequency for natural gas sulfur content immediately upon startup if they can provide the results of bi-monthly and quarterly analyses conducted in accordance with the first and second steps of the schedule outlined above. Region 4 has approved this type of alternative on several occasions. The analytical data needed to justify a waiver of the bi-monthly and quarterly sampling steps may be available when a new unit is added to a source where ongoing monitoring is being conducted for other CTs at the site or when the company's gas supplier can provide previous analytical results for samples whose sulfur content is representative of the fuel that it will be supplying for the new CT.

The other natural gas sulfur monitoring alternative that will not have to be submitted to Region 4 for case-by-case reviews involves situations in which the owner or operator of a CT subject to Subpart GG proposes that the gas samples be collected at a place in the gas transmission line either upstream or downstream of the site where the CT is located. In several previous determinations Region 4 has indicated using such sampling locations is acceptable provided that no new gas enters the transmission line between the sampling location and the affected facility in question. The basis for approval of an alternate sampling location in this situation is that if no new gas enters the transmission line between the offsite sampling location and the CT, the sulfur content of the samples collected and analyzed will be representative of that burned in the affected facility.

Use of continuous emission monitors for NOx

The monitoring provisions in 40 C.F.R. Section 60.334(c)(1) use operating parameters (water-to-fuel injection rates and fuel nitrogen content) to identify periods of NOx excess emissions. Since many of the turbines being installed today are fired with pipeline quality natural gas and do not rely on water injection control, the monitoring required in Subpart GG will not provide any useful information about excess emissions for such turbines. According to the enclosed May 31, 1994, EPA Headquarters' determination, owners and operators of CTs that do not use water injection for NOx control must propose a method for monitoring excess emissions under Subpart GG. One approach that many CT owners and operators rely on to address this requirement is to use NOx continuous emission monitoring systems (CEMS) that have been installed and certified under other requirements such as the acid rain monitoring rule in 40 C.F.R. Part 75 or through conditions in a Prevention of Significant Deterioration (PSD) permit. The enclosed March 12, 1993, EPA Headquarters' determination contains detailed requirements when CEMS are used as an alternative means of monitoring NOx emissions under Subpart GG. Requests from owners and operators proposing to follow these procedures would not have to be submitted to Region 4 for review. In cases where a CEMS is used to satisfy the NOx monitoring requirements under Subpart GG, the requirement to collect and analyze oil samples for nitrogen content under the provisions in 40 C.F.R. Section 60.334(b) can also be waived.

Correcting NOx data to International Standards Organization conditions

One provision in the March 12, 1993, Headquarters' policy regarding the use of NOx CEMS for which Region 4 has routinely approved alternatives involves the requirement that the continuous monitor be capable of calculating emission rates corrected to International Standards Organization (ISO) standard day conditions (288 degrees Kelvin, 60 percent relative humidity, and 101.3 kilopascals of pressure). Since the testing provision in 40 C.F.R. Section 60.335(c)(1) requires that performance test results be corrected to ISO standard day conditions, CEMS results must also be expressed on this same basis in order to conclusively identify periods of excess emissions. In many cases today, however, CTs are subject to NOx limits under PSD that are considerably more stringent than those in Subpart GG, and typically these PSD limits are not expressed on an ISO-corrected basis. Depending on the type of turbine, the applicable NOx standard in Subpart GG is either 75 parts per million (ppm) or 150 ppm, and limits contained in PSD permits being issued today are often less than 10 ppm. Based upon the fact that these limits are more stringent than those in Subpart GG, New Source Performance Standard (NSPS) compliance would generally be a concern only in cases where a source is in violation of the corresponding PSD limit. On this basis, Region 4 routinely waives the requirement to correct CEMS results to ISO standard day conditions on a continuous basis provided that the source owner or operator maintains records of the data (ambient temperature, ambient humidity, and combustor inlet pressure) that would enable it to make the correction at the request of EPA or a state or local agency to which the authority to implement Subpart GG has been delegated. Based upon the previous approvals granted by Region 4, requests that CEMS not be required to make ISO corrections on a continuous basis when units are subject to PSD NOx limits that are more stringent than those in Subpart GG would not have to be submitted to Region 4 for case-by-case reviews. One condition imposed on any such approvals, however, must be that the CT owner or operator keeps records of the data needed to make the correction.

Multiple load testing requirements

Under the provisions of 40 C.F.R. Section 60.335(c)(2), owners and operators of CTs subject to Subpart GG must conduct NOx performance testing at four different loads across the unit operating range. There are two circumstances under which it would be acceptable for initial performance testing to be conducted at a single operating load. One circumstance which is addressed in the enclosed EPA Region 2

determination dated May 19, 1994, would be one in which a turbine is subject to a permit condition which restricts the unit to operating at a single load level. In this situation, a single load test provides adequate assurance of compliance, and nothing would be gained by conducting testing for three additional load levels at which the turbine is not intended to operate.

Although we are not aware of many CTs that are restricted to operating at a single load level, one common situation where a waiver of the requirement to conduct a multiple load performance test on a CT would be one in which a CEMS is used to satisfy the NOx monitoring requirements in the rule. One reason for conducting a multiple load test on a CT is to determine the water injection rate needed to maintain NOx compliance across the unit's normal operating range. Since it is difficult to predict which operating load will represent "worst case" conditions for a CT, conducting a multiple load test is often necessary in order to provide an adequate level of compliance assurance even for turbines that do not use water injection for NOx control. For CTs equipped with NOx CEMS, however, the monitors will provide credible evidence regarding the unit's compliance status on a continuous basis following the initial test, and the level of compliance assurance provided in this case is sufficient to justify approval of requests that initial performance testing be allowed at a single operating load.

Initial NOx performance testing options for CEMS-equipped units

In addition to approving requests that single-load testing be accepted for units equipped with NOx CEMS, Region 4 has also allowed companies to use certified monitors to collect the data needed for demonstrating initial compliance. The NOx test method specified for Subpart GG under the provisions in 40 C.F.R. Section 60.335(c)(3) is EPA Method 20, and once a NOx CEMS has been certified, the main difference between using the monitor or Method 20 to collect the data for the initial performance test involves the number of traverse points at which the sampling is conducted. Although a CEMS extracts the sample from a single point instead of the eight traverse points required under Method 20, part of the monitor certification process involves verifying that the CEMS probe is collecting a sample from a representative location in the stack. Therefore, Region 4 has allowed owners and operators of Subpart GG turbines to use certified CEMS to collect data for initial NOx performance testing on a number of occasions. Conditions for these approvals have been that compliance be based on a minimum of three test runs representing a total of at least three hours of data and that the CEMS be calibrated in accordance with the procedure in Section 6.2.3 of Method 20 following each run. Provided that owners and operators agree to these conditions, it will not be necessary to submit future proposals for using NOx CEMS to conduct initial performance testing on Subpart GG turbines to Region 4 for a case-by-case review.

Another initial testing alternative that we know has recently been approved in at least one other EPA Region involves demonstrating compliance with the emission standard in Subpart GG using the data collected during the relative accuracy test audit (RATA) performed on a NOx CEMS. Although no CT owner or operator has made a specific proposal of this type in Region 4, it would be acceptable to us since the amount of sampling conducted during the RATA (a minimum of nine 21-minute test runs) using EPA reference test methods provides enough representative emissions data to determine the CT's compliance status. Therefore, if you receive any proposals to determine NOx compliance for a CT using the reference method test data collected during a RATA conducted on the unit's CEMS, it will not be necessary to submit the proposal to Region 4 for a case-by-case review.

Alternative sampling procedures for oil storage tanks

The monitoring provisions for units that have bulk storage tanks require that fuel samples be collected and analyzed each time that oil is added to the tank [see 40 C.F.R. Section 60.334(b)(1)]. In several recent determinations, Region 4 has approved alternatives to these requirements for owners and operators that use large bulk storage tanks to supply oil to their CTs. For facilities that use tanker trucks to fill large storage tanks, collecting a sample each time oil is added to the tank has the potential to be burdensome due to the fact that a large number of samples might have to be analyzed, and our goal when approving alternative sampling procedures for such tanks has been to reduce the sampling and analysis burden while ensuring that the results of the sampling provide adequate assurance of compliance. One of the alternatives which Region 4 has approved involves situations where a facility owner or operator has multiple storage tanks and switches between the tanks used to supply oil for its CTs. In situations where a tank is isolated from the CTs while it is being filled, we have approved an alternative procedure in which sampling is not required until the owner or operator has finished filling the tank. The basis for the approval of this alternative is that, if the tank is isolated from the CTs while it is being filled, a sample collected once the tank is full will be representative of the oil supplied to the CTs when the tank is put back into service.

Region 4 has also allowed owners and operators that receive oil in tanker trucks to use vendor analyses to satisfy the oil nitrogen and sulfur monitoring requirements under Subpart GG. In order for this option to be acceptable, the sulfur and nitrogen content of all the oil delivered to the source must meet the applicable limits. The sulfur content limit promulgated at 40 C.F.R. Section 60.333(b) is 0.8 weight percent, and according to 40 C.F.R. Section 60.334(c)(1), the nitrogen content limit is set using baseline conditions during a performance test. Allowing an owner or operator to monitor oil sulfur and nitrogen content using "as-delivered" samples instead of samples collected from its storage tank is acceptable if the sulfur and nitrogen content of all the oil delivered meets the applicable limits since the average sulfur and nitrogen content of the oil in the storage tank will meet the applicable limits by default under this scenario. Also, determining the nitrogen content of the oil burned in a CT is not necessary in cases where NOx excess emissions are monitored using a CEMS.

In summary, this letter identifies several Subpart GG testing and monitoring alternatives that can be approved by your agency without additional input from Region 4. In the event that the owner or operator of a Subpart GG turbine proposes other testing or monitoring alternatives, the request(s) for approval should be forwarded to Region 4 for review. In the course of evaluating such additional requests, we may identify other alternatives that do not need to be submitted for Region 4 review because their approval becomes routine. If this occurs, we will notify you accordingly.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,

R. Douglas Neeley
Chief
Air and Radiation Technology Branch Air, Pesticides and Toxics Management Division

Enclosures

(1) August 14, 1987, EPA Headquarters custom fuel monitoring policy for Subpart GG turbines

(2) May 31, 1994, EPA Headquarters determination regarding monitoring obligations for CTs that do not use water injection for NOx control

(3) March 12, 1993, EPA Headquarters determination regarding the use of CEMS for excess emission monitoring under NSPS Subpart GG

(4) May 19, 1994, EPA Region 2 approval for single load NOx performance testing on a CT that is restricted to operating at one load

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# Perry 36" Stream #1
# Pipeline Natural Gas Sulfur ( ppm )

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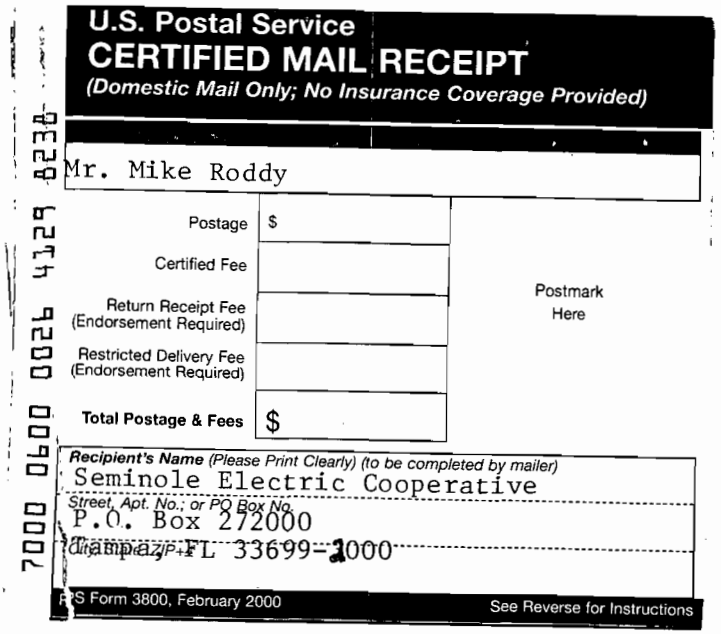

**U.S. Postal Service**
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7000 0600 0026 4129 8238

Mr. Mike Roddy

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| Return Receipt Fee (Endorsement Required) | |
| Restricted Delivery Fee (Endorsement Required) | |
| **Total Postage & Fees** | $ |

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Seminole Electric Cooperative
*Street, Apt. No.; or PO Box No.*
P.O. Box 272000
*City, State, ZIP+4*
Tampa, FL 33699-1000

PS Form 3800, February 2000 — See Reverse for Instructions

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1 Article Addressed to:

Mr. Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative
P. O. Box 272000
Tampa, FL 33688-2000

***COMPLETE THIS SECTION ON DELIVERY***

A. Received by *(Please Print Clearly)*: W. Shy
B. Date of Delivery: 8-21-01

C. Signature
X [signature] ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2 Article Number *(Copy from service label)*
7000 0600 0026 4129 8238

PS Form 3811, July 1999 — Domestic Return Receipt — 102595-99-M-1789

UNITED STATES POSTAL SERVICE

TAMPA, FL 336
PM
21 AUG
2001

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Dept. of Environmental Protection
Division of Air Resources Mgt.
Bureau of Air Regulation, NSR
2600 Blair Stone Rd., MS 5505
Tallahassee, FL 32399-2400

01

**U.S. Postal Service**
**CERTIFIED MAIL RECEIPT**
*(Domestic Mail Only; No Insurance Coverage Provided)*

7000 0600 0026 4129 8986

| | |
|---|---|
| Postage | $ |
| Certified Fee | |
| Return Receipt Fee (Endorsement Required) | |
| Restricted Delivery Fee (Endorsement Required) | |
| **Total Postage & Fees** | $ |

Postmark Here

***Recipient's Name*** *(Please Print Clearly) (to be completed by mailer)*
Mike Roddy
*Street, Apt. No., or PO Box No.*
PO Box 272000
*City, State, ZIP+4*
Tampa, FL 33688-2000

PS Form 3800, February 2000 — See Reverse for Instructions

**SENDER:** ***COMPLETE THIS SECTION***

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

1 Article Addressed to:

Mike Roddy
Senior Environmental Engineer
Seminole Electric Cooperative, Inc.
P. O. Box 272000
Tampa, FL 33688-2000

***COMPLETE THIS SECTION ON DELIVERY***

A. Received by *(Please Print Clearly)* Bill Shy — B. Date of Delivery 9-25-9

C. Signature
X William R Shy ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2 Article Number *(Copy from service label)*
7000 0600 0026 4129 8986

PS Form 3811, July 1999 — Domestic Return Receipt — 102595-99-M-1789

UNITED STATES POSTAL SERVICE

TAMPA, FL 33
PM
25 SEP
2001

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

Dept. of Environmental Protection
Division of Air Resources Mgt.
Bureau of Air Regulation, NSR
2600 Blair Stone Rd., MS 5505
Tallahassee, FL 32399-2400

RECEIVED
SEP 27 2001
BUREAU OF AIR REGULATION

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