



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

P.E. CERTIFICATION STATEMENT

PERMITTEE

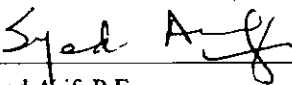
Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33688-2000
Payne Creek Generating Station

Permit Project No. 0490340-004-AC
Modification of Air Permit No. PSD-FL-214A
Permit Project No. 0490340-005-AV
Revision of Title V Air Operation Permit No. 0490340-002-AV

PROJECT DESCRIPTION

The applicant submitted to the Permitting Authority for an Air Construction Permit modification and Title V Air Operation Permit revision. Air Construction Permit Project No. 0490340-004-AC involves the modification of air construction permit No. PSD-FL-214A for the combined cycle gas turbines. The applicant requested increase in authorized periods of excess emissions to 6 hours per day for cold startups; and increase authorized periods of excess emissions to 2 hours per startup event and no more than three startup events in a day for hot and warm startups. Additionally, the applicant requested increase in authorized excess emissions to 2 hours per shutdown event and no more than three shutdown events in a day. Lastly, the applicant requested a concurrent revision of Title V Air Operation Permit No. 0490340-002-AV to incorporate the above request. The revision will be issued as DRAFT Title V Air Operation Permit No. 0490340-005-AV.

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



Syed Arif, P.E.
Registration No. 51861
Department of Environmental Protection
Bureau of Air Regulation, North Permitting Section

4/7/05
Date

"More Protection, Less Process"

Printed on recycled paper.



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Twin Towers Office Building
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Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

April 19, 2005

Mr. Michael P. Opalinski
Vice President of Technical Services
Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33688-2000

Re: Payne Creek Generating Station
DRAFT Air Construction Project No. 0490340-004-AC / PSD-FL-214C
{Modification of Permit No. PSD-FL-214A}
DRAFT Title V Air Operation Permit Revision Project No. 0490340-005-AV
{Revision to Title V Air Operation Permit No. 0490340-002-AV}

Dear Mr. Opalinski:

On November 2, 2004, you submitted an application for an Air Construction Permit Modification and Title V Air Operation Permit Revision for the Payne Creek Generating Station located at 6697 County Road 663 in Bowling Green, Hardee County. Enclosed are the following documents: "Technical Evaluation and Preliminary Determination", "DRAFT Air Construction Permit Modification", "DRAFT Title V Air Operation Permit Revision", "Statement of Basis", and "Public Notice of Intent to Issue Air Construction Permit Modification and Title V Air Operation Permit Revision".

The "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a DRAFT Construction Permit Modification. The proposed "DRAFT Air Construction Permit Modification and DRAFT Title V Air Operation Permit Revision" includes specific conditions that regulate the emissions units at this facility. The "Written Notice of Intent to Issue an Air Construction Permit Modification and a Title V Air Operation Permit Revision" provides important information regarding: the Permitting Authority's intent to issue a Title V air operation permit revision and air construction permit modification (DRAFT Permit); the requirements for publishing a Public Notice of the Permitting Authority's intent to issue the DRAFT Permit; the procedures for submitting comments on the DRAFT Permit; the requirements for requesting a public meeting; the requirements for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice of Intent to Issue an Air Construction Permit Modification and a Title V Air Operation Permit Revision" is the actual notice that you must publish in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Syed Arif, at 850-921-9528.

Sincerely,

Trina L. Vielhauer, Chief
Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

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**WRITTEN NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION**

*In the Matter of an
Application for Permits by:*

Mr. Michael P. Opalinski, V.P. of Technical Services
Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33688-2000

Air Construction Permit Project No. **0490340-004-AC**
DRAFT Title V Permit Revision No. **0490340-005-AV**
Payne Creek Generating Station
Hardee County, Florida

Facility Location: The applicant requests an Air Construction Permit modification and Title V Air Operation Permit revision for the Payne Creek Generating Station located at 6697 County Road 663 in Bowling Green, Hardee County, Florida.

Project: On November 2, 2004, the applicant applied to the Permitting Authority for an Air Construction Permit modification and Title V Air Operation Permit revision. Air Construction Permit Project No. 0490340-004-AC involves the modification of air construction permit No. PSD-FL-214A for the combined cycle gas turbines. The applicant requested increase in authorized periods of excess emissions to 6 hours per day for cold startups; and increase authorized periods of excess emissions to 2 hours per startup event and no more than three startup events in a day for hot and warm startups. Additionally, the applicant requested increase in authorized periods of excess emissions to 2 hours per shutdown event and no more than three shutdown events in a day. Lastly, the applicant requested a concurrent revision of Title V Air Operation Permit No. 0490340-002-AV to incorporate the above request. The revision will be issued as DRAFT Title V Air Operation Permit No. 0490340-005-AV.

Details of the project are provided in the application and the enclosed "Technical Evaluation and Preliminary Determination".

Permitting Authority: Applications for an Air Construction Permit modification and a Title V Air Operation Permit revision are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-213 and 62-214, Florida Administrative Code (F.A.C.). The proposed project is not exempt from construction and Title V permitting procedures and an Air Construction Permit modification and Title V Air Operation Permit revision are required to modify or continue operations at the facility. The Department of Environmental Protection, Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: Florida Department of Environmental Protection, Bureau of Air Regulation, 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Mail Station #5505. The Permitting Authority's telephone number is 850/488-0114 and facsimile number is 850/922-6979.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the DRAFT Permits, the Statement of Basis, the application, the Technical Evaluation and Preliminary Determination and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Title V Air Operation Permit revision and file electronic comments by visiting the following website: <http://www.dep.state.fl.us/air/eproducts/ards/>. A copy of the complete project file is also available at the Florida Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352. Telephone: 813/744-6100.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue a permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station

Air Construction Permit No. **0490340-004-AC**
DRAFT Title V Permit Revision No. **0490340-005-AV**

**WRITTEN NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION**

62-297, F.A.C. The Permitting Authority will issue the Air Construction Permit and the PROPOSED Title V Air Operation Permit Revision and subsequent FINAL Title V Air Operation Permit Revision in accordance with the conditions of the DRAFT Air Construction Permit and the DRAFT Title V Air Operation Permit Revision unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, 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 Modification and Title V Air Operation Permit Revision" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet 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 Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the DRAFT Air Construction Permit for a period of fourteen (14) days and will accept written comments concerning the DRAFT Title V Air Operation Permit Revision for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5 pm), on or before the end of this 14 or 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://tlhora6.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Air Construction Permit or the DRAFT Title V Air Operation Permit Revision, the Permitting Authority shall issue a Revised DRAFT Air Construction Permit or a Revised DRAFT Title V Air Operation Permit Revision and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) 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, F.A.C.

**Seminole Electric Cooperative, Inc.
Payne Creek Generating Station**

**Air Construction Permit No. 0490340-004-AC
DRAFT Title V Permit Revision No. 0490340-005-AV**

**WRITTEN NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION**

A petition that disputes the material facts on which the Permitting Authority'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 each 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 state; (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 the 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 Permitting Authority'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, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit revision. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief
Bureau of Air Regulation

WRITTEN NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION

CERTIFICATE OF SERVICE


The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision" package (including the Public Notice, the Technical Evaluation and Preliminary Determination, the Statement of Basis, and the Draft Permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4/21/05 to the persons listed below.

Mr. Michael P. Opalinski, Seminole Electric Cooperative, Inc.*
Mr. Tom Davis, P.E., ECT, Inc. (tdavis@ectinc.com)
Mr. Jerry Kissel, DEP-SWD
U. S. EPA Region 4

Clerk Stamp

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

Barbara J. Friday (Clerk) 4/21/05 (Date)

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> 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. 	A. Signature <input type="checkbox"/> Agent  <input type="checkbox"/> Addressee
1. Article Addressed to: Mr. Michael P. Opalinski Vice President of Technical Services Seminole Electric Coopeartive, Inc. 16313 North Dale Mabry Highway Tampa, Florida 33688-2000	B. Received by (Printed Name) <input type="checkbox"/> Yes MICHAEL WEBB <input type="checkbox"/> No C. Date of Delivery 4/25/05
2. Article Number (Transfer from service label) 7000 2870 0000 7028 2157	D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No
PS Form 3811, August 2001	3. Service Type <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. 4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes
Domestic Return Receipt	102595-02-M-1540

U.S. Postal Service CERTIFIED MAIL RECEIPT <i>(Domestic Mail Only; No Insurance Coverage Provided)</i>	
7000 2870 0000 7028 2157	Mr. Michael P. Opalinski, Vice Pres.-Tech. Serv.
Postage \$ Certified Fee Return Receipt Fee (Endorsement Required) Restricted Delivery Fee (Endorsement Required) Total Postage & Fees \$	Postmark Here
Sent To Mr. Michael P. Opalinski, Vice Pres.-Tech. Serv.	
Street, Apt. No.; or PO Box No. 16313 North Dale Mabry Highway	
City, State, ZIP+4 Tampa, Florida 33688-2000	
PS Form 3800, May 2000	See Reverse for Instructions

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION**

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Air Construction Permit No. 0490340-004-AC
DRAFT Title V Air Operation Permit Revision No. 0490340-005-AV
Payne Creek Generating Station
Hardee County

Applicant: The applicant for this project is Seminole Electric Cooperative, Inc., 16313 North Dale Mabry Highway, Tampa, Florida 33688-2000. The applicant's responsible official is Mr. Michael P. Opalinski, Vice President of Technical Services.

Facility Location: The applicant operates a nominal 488 MW Power Plant, which is located at 6697 County Road 663, Bowling Green, Hardee County, Florida.

Project: The applicant submitted to the Permitting Authority for an Air Construction Permit modification and Title V Air Operation Permit revision. Air Construction Permit Project No. 0490340-004-AC involves the modification of air construction permit No. PSD-FL-214A for the combined cycle gas turbines. The applicant requested increase in authorized periods of excess emissions to 6 hours per day for cold startups; and increase authorized periods of excess emissions to 2 hours per startup event and no more than three startup events in a day for hot and warm startups. Additionally, the applicant requested increase in authorized excess emissions to 2 hours per shutdown event and no more than three shutdown events in a day. Lastly, the applicant requested a concurrent revision of Title V Air Operation Permit No. 0490340-002-AV to incorporate the above request. The revision will be issued as DRAFT Title V Air Operation Permit No. 0490340-005-AV.

Details of the project are provided in the application and the enclosed "Technical Evaluation and Preliminary Determination".

Permitting Authority: Applications for an Air Construction Permit modification and a Title V major source air operation permit revision are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-213 and 62-214 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from construction and Title V permitting procedures and an Air Construction Permit modification and Title V Air Operation Permit revision are required to modify or continue operations at the facility. The Department of Environmental Protection, Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: Florida Department of Environmental Protection, Bureau of Air Regulation, 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Mail Station #5505. The Permitting Authority's telephone number is 850/488-0114 and facsimile number is 850/922-6979.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the DRAFT Permits, the Statement of Basis, the application, the Technical Evaluation and Preliminary Determination and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Title V Air Operation Permit revision and file electronic comments by visiting the following website: <http://www.dep.state.fl.us/air/eproducts/ards/>. A copy of the complete project file is also available at the Florida Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352. Telephone: 813/744-6100.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue a permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. The Permitting Authority will issue the Air Construction Permit and the PROPOSED Title V

(Public Notice to be Published in the Newspaper)

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION**

Air Operation Permit Revision and subsequent FINAL Title V Air Operation Permit Revision in accordance with the conditions of the DRAFT Air Construction Permit and the DRAFT Title V Air Operation Permit Revision unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the DRAFT Air Construction Permit for a period of fourteen (14) days and will accept written comments concerning the DRAFT Title V Air Operation Permit Revision for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5 pm), on or before the end of this 14 or 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://tlhora6.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Air Construction Permit or the DRAFT Title V Air Operation Permit Revision, the Permitting Authority shall issue a Revised DRAFT Air Construction Permit or a Revised DRAFT Title V Air Operation Permit Revision and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached Public Notice or within fourteen (14) days of receipt of this Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 each 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 state; (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 the 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 Permitting Authority'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, F.A.C.

(Public Notice to be Published in the Newspaper)

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT
AND A TITLE V AIR OPERATION PERMIT REVISION**

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Construction Permit and Title V Air Operation Permit Revision. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Objections: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit revision. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

PROJECT

Permit Project No. 0490340-004-AC
Modification of Air Permit No. PSD-FL-214A

Permit Project No. 0490340-005-AV
Revision of Title V Air Operation Permit No. 0490340-002-AV

COUNTY

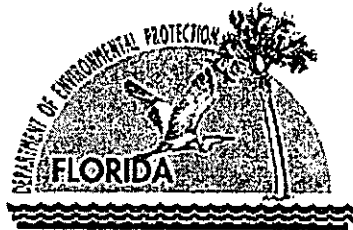
Hardee

APPLICANT

Seminole Electric Cooperative, Incorporated
Payne Creek Generating Station
ARMS Facility ID No. 0490340

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section



April 7, 2005

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL INFORMATION

Applicant Name and Address

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33688-2000

Authorized Representative/Responsible Official:

Mr. Michael P. Opalinski, Vice President of Technical Services

Processing Schedule

11/02/04 Received application

02/02/05 Received waiver through facsimile for the processing time requirements of a construction permit

Facility Description and Location

SECI operates Payne Creek Generating Station (SIC No. 4911) located at 6697 County Road 663 in Bowling Green, Hardee County, Florida. The UTM coordinates are Zone 17, 405.049 km East, and 3057.712 km North (Latitude: 27° 38' 30" North and Longitude: 81° 57' 45" West). This is an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to the Florida and National Ambient Air Quality Standards (NAAQS).

Regulatory Categories

Title III: Based on the Title V permit, the facility is a synthetic minor source of hazardous air pollutants (HAP).

Title IV: The facility operates emissions units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution because potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

PSD: The existing facility is located in an area currently designated as "attainment" or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. The plant is considered a "fossil fuel fired steam electric plant of more than 250 million BTU per hour of heat input", which is one of the 28 PSD source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a major source of air pollution with respect to Rule 62-212.400, F.A.C., the Prevention of Significant Deterioration (PSD) of Air Quality.

NSPS: The facility operates units subject to the New Source Performance Standards of 40 CFR 60 (Subpart GG for the gas turbines.).

2. PROJECT DESCRIPTION

Seminole Electric Cooperative, Inc. (SECI) submitted an application on November 2, 2004 requesting revision to the excess emissions provisions of Title V Permit No. 0490340-002-AV and air construction permit PSD-FL-214A. SECI operates two Siemens Westinghouse combined-cycle combustion turbines (CT) at its Payne Creek Generating Station located in Bowling Green, Hardee County. Additionally, SECI submitted on February 2, 2005, a waiver on the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

The Payne Creek Generating Station CT/heat recovery steam generators (HRSG) units are each equipped with selective catalytic reduction (SCR) and oxidation catalyst (CatOx) control systems to reduce emissions of NOx and CO/VOC, respectively. The Department's Title V permit includes NOx, CO and VOC emission limits, both

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

in concentration (ppmvd) and mass (lb/hr) that reflect the performance of these control technologies.

Both catalytic control technologies (i.e., SCR and CatOx) have temperature constraints below which the control technologies will not be effective. For SCR, the catalyst is not effective in reducing NOx at SCR inlet temperatures below approximately 600°F. For this reason, ammonia is not injected until the minimum inlet SCR operating temperature is reached otherwise the ammonia would pass through the system unreacted. Similarly, the CatOx catalyst is not effective in oxidizing CO/VOC below a minimum catalyst inlet temperature of approximately 500°F. Excess emissions of CO and VOC, although not readily quantifiable, may also occur during startup/shutdown events.

Emissions of NOx and CO/VOC will be higher during the low CT loads that occur during startups and shutdowns. Excess emissions during these startup/shutdown events are unavoidable due to emission control system temperature constraints and the inherent CT emissions that occur at low loads. A longer period of excess emissions is required for cold starts due to the warm-up period required for a steam turbine generator (STG). Startup with one CT/HRSG unit requires the equivalent of 70 MW of CT load to raise the HRSG steam pressure to the level needed to bring the STG on line. This type of startup (i.e., use of only one CT/HRSG unit) causes problems since the HRSG steam temperature is too high resulting in uneven warming of the STG casing. This uneven warming causes the STG cover temperature to rise faster than the STG base temperature. To prevent equipment damage, there are protective trips that occur when this temperature difference reaches 100°F. Once the CT has tripped, the startup cycle must be repeated. Once the STG is on line, the thermal growth of the STG rotor is much more rapid than the thermal growth of the STG casing since the outer casing is solid and not separated by an inner and outer casing. The STG casing growth (i.e., expansion) is very slow. This prevents the CT from increasing in load until the STG casing warms up.

Based on the above, the preferred STG startup approach is with both CT's at approximately 30 MW. This keeps the HRSG steam temperature low so that the STG can be warmed more evenly. This approach also allows the STG to synchronize to the grid faster. However, CT load must be maintained relatively low as the STG rotor growth does not proceed at the same rate as the STG casing. Accordingly, CT load is slowly increased until the STG casing reaches its normal temperature in order to avoid damaging the STG. Once this condition is reached, CT load is increased to the levels that result in compliance with permit limits. A summary of excess emissions based on NOx CEMS data for 2002-2004 is provided in Table 1.

The proposed changes will affect the following emission units.

EU No.	Emissions Unit Description
001	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
002	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

The applicant requests the following changes to Permit No. PSD-FL-214A for Unit's 001 and 002 combined cycle gas turbine.

1. **Cold Startup:** Authorize up to 6 hours of excess emissions from any combustion turbine (CT)/heat recovery steam generator (HRSG) unit in any 24-hour period from cold startups. Cold startup is defined as startup following a CT/HRSG shutdown of 48 hours or more. NOx emissions from such periods would still be included to demonstrate compliance with the annual facility-wide emission cap of 906 tpy.
2. **Hot and Warm Startup:** Authorize up to 2 hours of excess emissions per startup event and no more than three startup events in any 24-hour period from any CT/HRSG unit resulting from hot and warm startups. Hot and warm startup is defined as a startup following a CT/HRSG shutdown of less than 48 hours. NOx emissions from such periods would still be included to demonstrate compliance with the annual facility-wide emission cap of 906 tpy.
3. **Shutdown:** Authorize up to 2 hours of excess emissions per shutdown event and no more than three shutdown events in any 24-hour period from any CT/HRSG. NOx emissions from such periods would still

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

be included to demonstrate compliance with the annual facility-wide emission cap of 906 tpy.

The applicant also requests the following changes to Air Permit No. 0490340-002-AV.

4. Title V Revision: Simultaneous revision of the Title V Permit to incorporate the above changes.

3. DEPARTMENT REVIEW

Startup (Permit No. PSD-FL-214A)

PSD permit 214A for Unit's 001 and 002 included the following condition (B.4):

"Excess emissions from a turbine resulting from startup, shutdown, malfunction, fuel switch or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. The permittee shall provide a general description of the procedure to be followed during periods of startup, shutdown, malfunction, fuel switch or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation."

For a day with a cold startup, the applicant requests up to 6 hours of excess emissions from any CT/HRSG units. Similarly, the applicant requests 2 hours of excess emissions per startup event and no more than three startup events in any 24-hour period from any CT/HRSG units resulting from a hot and warm startups. Additionally, applicant requests 2 hours of excess emissions per shutdown event and no more than three shutdown events in any 24-hour period from any CT/HRSG units. Although the likelihood of such multiple occurrences is relatively low, the Department does recognize the possibility. The Department approves the request and will modify the PSD air permit accordingly, provided the applicant meets the following three provisions:

- NOx excess emissions data shall not be excluded from the annual NOx emissions cap. This is necessary to maintain an enforceable emissions cap.
- The permittee shall submit quarterly reports that identify the amount of NOx emission data excluded from compliance determination with the short-term limit due to startups, shutdowns, documented malfunctions and fuel switches.
- Excess emissions greater than 6 hours in any 24-hour period shall be reported to the Department's Southwest District Office within 24 hours.

Accordingly Specific Condition B.4 of PSD Permit 214A will be modified to read as follows:

"Excess emissions from a turbine resulting from startup, shutdown, malfunction, fuel switch or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period ~~unless specifically authorized by the Department for a longer duration~~ except for the following specific cases:

- For cold startups, excess emissions from any CT/heat recovery steam generator (HRSG) unit shall not exceed six hours in any 24-hour period. "Cold startup" is defined as a startup following a CT/HRSG shutdown of 48 hours or more.
- For hot and warm startups, excess emissions from any CT/HRSG unit shall not exceed two hours per startup event, and no more than three startup events in any 24-hour period. "Hot and warm startup" is defined as a startup following a CT/HRSG shutdown of less than 48 hours.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- c. For shutdowns, excess emissions from any CT/HRSG unit shall not exceed two hours per shutdown event, and no more than three shutdown events in any 24-hour period.

All quality-assured hourly NOx emissions data shall be used when demonstrating compliance with the emissions cap. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).

The permittee shall provide a general description of the procedure to be followed during periods of startup, shutdown, malfunction, fuel switch or load change-to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.”

Additionally new Specific Conditions E.5, E.6 and E.7 are added to read as follows:

5. The permittee shall notify the Department’s Southwest District Office by telephone, facsimile transmittal or electronic mail within 24 hours if the NOx excess emissions exceed six hours in any 24-hour period.

[Applicant Request]

6. The permittee shall include the NOx excess emissions data in determining compliance with the annual facility-wide emission cap of 906 tpy.

[Rule 62-4.070(3), F.A.C.]

7. “Quarterly NOx Monitoring Report. Within 30 days following each calendar quarter, the permittee shall submit a report to the Department’s Southwest District Office that summarizes the following information for the quarter.

- a. Identify the hours of NOx emission data excluded from compliance determination with the short-term limit due to each of the following: startups, shutdowns, documented malfunctions and fuel switches.
- b. For each malfunction, identify the: date; approximate time range; duration (hours) of the malfunction; NOx emission levels during the malfunction; problem and cause of the problem (if known); and corrective action taken (if any).
- c. Identify the hours of NOx monitoring system down time due to each of the following: monitor malfunctions; non-monitor malfunctions; quality assurance calibrations; other known causes; and unknown causes. Identify the monitor availability.

[Rules 62-4.070(3), 62-4.130, 62-4.160(14)(b), and Rule 62-210.700(6), F.A.C.]

Permit Project No. 0490340-005-AV (Revision to Title V Permit Air Operation Permit No. 0490340-002-AV)

The applicant requests a simultaneous revision of the Title V operating permit to incorporate the above changes. The Department approves the request and will provide a single public notice package for the revised permits. The public notice will allow 30 days for public comment. If no administrative hearing is requested and no comments are received that would result in substantial changes, the two air construction permits (PSD-FL-214C and 0490340-004-AC) will be issued as final permitting actions. The Title V revision will continue to the “proposed permit” phase of the Title V permitting process.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permits. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the specific conditions of the draft permits. Syed Arif is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

Table 1. Payne Creek Generating Station (Revised 3/17/05)
Excess Emissions Summary - Startup/Shutdown/Malfunction

No. of Days	Duration and NO _x Concentrations of Daily Excess Emission Events											
	2002				2003				2004			
	CT1		CT2		CT1		CT2		CT1		CT2	
	(hrs)	(ppmvd NO _x)	(hrs)	(ppmvd NO _x)	(hrs)	(ppmvd NO _x)	(hrs)	(ppmvd NO _x)	(hrs)	(ppmvd NO _x)	(hrs)	(ppmvd NO _x)
1	3.0	13	3.0	13	4.0	37	5.8	23	2.3	26	2.6	29
2	5.0	26	4.0	26	3.0	12	4.0	20	2.8	31	2.4	21
3	3.0	29	3.0	37	8.2	23	9.8	24	2.7	15	3.9	19
4	3.0	20	3.0	19	3.0	10	2.0		3.4	22	2.6	23
5	3.0	40	4.0	37	4.3	45	2.1	26	2.4	25	3.0	22
6	9.0	13	3.0	21	4.8	46	3.0	37	2.2	16	2.6	20
7	3.0	32	6.0	56	3.4	25	8.0	12	2.0	14	2.5	26
8	3.0	25	3.0	28	2.5	29	3.0	9	2.7	14	2.1	27
9	4.0	36	3.0	28	2.2	29	2.1	17	11.8	41	3.3	22
10	3.0	18	3.0	28	2.6	19	2.0	24	6.4	30	3.0	23
11	3.0	27	3.0	22	2.2	23	2.7	17			2.8	19
12	3.0	24	7.0	31	4.1	24	3.6	17			2.9	18
13	3.0	28	4.0	45	5.2	30	4.4	20			3.4	12
14	4.0	21	5.0	26	2.2	21	2.6	17			3.1	18
15	4.0	24	12.0	35	2.2	21	2.9	17			3.3	16
16	5.0	19	3.0	40	2.3	16	2.8	48			4.5	39
17	3.0	27	3.0	38	3.0	13	3.0	44			4.0	16
18	3.0	20	3.0	30	3.0	11	3.0	58			2.4	15
19	6.0	22	3.0	24	5.6	22	3.1	22			8.1	30
20	3.0	21	4.0	25	2.4	26	5.0	10			2.4	28
21	3.0	25	4.0	47			10.0	10				
22	3.0	26	3.0	40			3.0	27				
23	4.0	25	4.0	22			3.0	12				
24	3.0	34	3.0	24			2.1	20				
25	3.0	26	6.0	23			3.6	13				
26	3.0	26	3.0	23								
27	4.0	22	3.0	30								
28	3.0	91	3.0	22								
29	3.0	26	3.0	20								
30	3.0	12	3.0	14								
31	3.0	24	4.0	18								
32	3.0	28	3.0	20								
33	4.0	24	3.0	20								
34	3.0	21	4.0	24								
35	3.0	25	3.0	20								
36	3.0	23	3.0	25								
37	4.8	38	3.0	20								
38	3.5	28	3.0	18								
39	2.9	43	2.3	25								
40			4.5	30								

2002 - 2004		
Frequency of Excess Emission Events		
(hrs/day)	Events	%
0 - 3	99	64.3
>3 - 4	28	18.2
>4 - 5	11	7.1
>5 - 6	6	3.9
>6	10	6.5
Totals	154	100.0

Notes:
Malfunction events shown in bold type.
NO_x concentrations are corrected to 15% oxygen.

Sources: ECT, 2005.
SECI, 2005.

May xx, 2005

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael P. Opalinski, Vice President of Technical Services
Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33688-2000

Re: Payne Creek Generating Station
Project No. 0490340-004-AC / PSD-FL 214C
Modification of Permit No. PSD-FL-214A, Unit's 1 and 2 Excess Emissions Conditions

Dear Mr. Opalinski:

On November 2, 2004, the Department received your request to make several changes to the PSD air construction permit 214A for Unit's 1 and 2. Based on your application, the Department makes the following determinations and modifies this permit accordingly.

MODIFICATION OF PERMIT NO. PSD-FL-214A (UNIT'S 1 AND 2)

Applicant Request: For a day with a cold startup, the applicant requests up to 6 hours of excess emissions from any Combustion Turbine (CT)/Heat Recovery Steam Generator (HRSG) units. Similarly, the applicant requests 2 hours of excess emissions per startup event and no more than three startup events in any 24-hour period from any CT/HRSG units resulting from a hot and warm startups. Additionally, applicant requests 2 hours of excess emissions per shutdown event and no more than three shutdown events in any 24-hour period from any CT/HRSG units.

Determination: The request is approved provided the applicant meets the following three provisions:

- NOx excess emissions data shall not be excluded from the annual NOx emissions cap. This is necessary to maintain an enforceable emissions cap.
- The permittee shall submit quarterly reports that identify the amount of NOx emission data excluded from compliance determination with the short-term limit due to startups, shutdowns, documented malfunctions and fuel switches.
- Excess emissions greater than 6 hours in any 24-hour period shall be reported to the Department's Southwest District Office within 24 hours.

Accordingly, the following revisions of Permit No. PSD-FL-214A will be made.

Revise Condition No. B 4 as follows:

"Excess emissions from a turbine resulting from startup, shutdown, malfunction, fuel switch or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration except for the following specific cases:

- a. For cold startups, excess emissions from any CT/heat recovery steam generator (HRSG) unit shall not exceed six hours in any 24-hour period. "Cold startup" is defined as a startup following a CT/HRSG shutdown of 48 hours or more.

- b. For hot and warm startups, excess emissions from any CT/HRSG unit shall not exceed two hours per startup event, and no more than three startup events in any 24-hour period. "Hot and warm startup" is defined as a startup following a CT/HRSG shutdown of less than 48 hours.
- c. For shutdowns, excess emissions from any CT/HRSG unit shall not exceed two hours per shutdown event, and no more than three shutdown events in any 24-hour period.

All quality-assured hourly NOx emissions data shall be used when demonstrating compliance with the emissions cap. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).

New Condition Nos. E.5, E.6 and E.7 are added as follows:

- 5. The permittee shall notify the Department's Southwest District Office by telephone, facsimile transmittal or electronic mail within 24 hours if the NOx excess emissions exceed six hours in any 24-hour period.
[Applicant Request]
- 6. The permittee shall include the NOx excess emissions data in determining compliance with the annual facility-wide emission cap of 906 tpy.
[Rule 62-4.070(3), F.A.C.]
- 7. Quarterly NOx Monitoring Report. Within 30 days following each calendar quarter, the permittee shall submit a report to the Department's Southwest District Office that summarizes the following information for the quarter.
 - a. Identify the hours of NOx emission data excluded from compliance determination with the short-term limit due to each of the following: startups, shutdowns, documented malfunctions and fuel switches.
 - b. For each malfunction, identify the: date; approximate time range; duration (hours) of the malfunction; NOx emission levels during the malfunction; problem and cause of the problem (if known); and corrective action taken (if any).
 - c. Identify the hours of NOx monitoring system down time due to each of the following: monitor malfunctions; non-monitor malfunctions; quality assurance calibrations; other known causes; and unknown causes. Identify the monitor availability.
[Rules 62-4.070(3), 62-4.130, 62-4.160(14)(b), and Rule 62-210.700(6), F.A.C.]

Details of the Department's review are available in the Technical Evaluation and Preliminary Determination that accompanied the Draft Permit modification package. This permit modification is issued pursuant to Chapter 403 of the Florida Statutes. Attached are copies of air construction permit No. PSD-FL-214A. A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes 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 (30) days after this order is filed with the clerk of the Department.

Sincerely,

(DRAFT)

Michael G. Cooke, Director
Division of Air Resource Management

CERTIFICATE OF SERVICE

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

- Mr. Michael P. Opalinski, Seminole Electric Cooperative, Inc.*
- Mr. Tom Davis, P.E., Environmental Consulting & Technology, Inc.
- Mr. Jerry Kissel, DEP-SWD
- Mr. Gregg Worley, EPA Region 4

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)



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Scrubs
Secretary

PERMITTEE:
Seminole Electric Cooperative
Incorporated
P.O. Box 272000
Tampa, FL 33688-2000

Permit Number: PSD-FL-214A/PA-89-25SA
Issued: 9/28/95 Revised: 7/21/99
County: Polk & Hardee
Latitude/Longitude: 27°38'30"N
81°57'45"W
Project: 488 MW Combined Cycle
Power Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-212 and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and specifically described as follows:

For a 488 MW (nominal) combined cycle power plant consisting of two 157.5 MW (nominal) combustion turbines (CTs), two heat recovery steam generators (HRSGs), a 173 MW (nominal) steam turbine generator and a 4.4 million gallon fuel oil storage tank. The maximum heat input at 32°F is 1962 MMBtu/hr/CT (natural gas) and 1888 MMBtu/hr/CT (oil). The plant will be located at the Polk and Hardee County site near Bowling Green, Florida which is also the site of a 295 MW power plant which is operated by Hardee Power Partners Limited (HPPL). The combustion turbines are to be Westinghouse Model 501F (D) or equivalent and equipped with dry low NO_x combustors and a Selective Catalytic Reduction (SCR) system for natural gas firing and wet injection for fuel oil firing. The CT will be fired with natural gas and No. 2 low sulfur fuel oil with a sulfur content limit not to exceed 0.05 percent, by weight, as a back-up only. Each CT will also be equipped with a carbon monoxide oxidation catalyst control system.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Howard L. Rhodes, Director
Division of Air Resources
Management

PERMITTEE:
Seminole Electric Cooperative Inc.

Permit Number: PSD-FL-214A
(PA-89-25SA)

Attachments are listed below:

1. Seminole Electric Cooperative Incorporated's (SECI) application received May 9, 1994.
2. Department's letters dated June 27, September 21, and November 16, 1994.
3. SECI's letters dated August 26, October 6, and November 23, 1994.
4. SECI's letter dated February 9, 1995.
5. SECI's letters dated December 1 and December 21, 1998; January 29 and February 11, 1999.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary

PERMITTEE:
Seminole Electric Cooperative Inc.

Permit Number: PSD-FL-214A
(PA-89-25SA)

to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. A description of and cause of non-compliance; and,
- b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

PERMITTEE:
Seminole Electric Cooperative Inc.

Permit Number: PSD-FL-214A
(PA-89-25SA)

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) Determination of Prevention of Significant Deterioration (PSD)
- (X) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and,
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

16. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly pursuant to Rule 62-210.650 F.A.C.

SPECIFIC CONDITIONS:

The construction and operation of the project shall be in accordance with all applicable provisions of Chapters 62-210 through 62-297 and 62-4, Florida Administrative Code (F.A.C.), and 40 CFR 60, Subpart GG, Appendix A, Appendix B, and Appendix F (1994 version). The following emission limitations and conditions reflect the BACT determinations for the 315 megawatts (nominal) (MW; two 157.5 MW (nominal) combined cycle combustion turbines) of generating

PERMITTEE:
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capacity. Each combustion turbine (CT) will be connected to a heat recovery steam generator (HRSG), which will recover the waste heat to produce steam for utilization in a single 173 MW (nominal) steam turbine. There is no fuel firing in the associated HRSG. The facility will have a total nominal generating capacity of 488 MW (nominal) In addition to the foregoing, the project shall comply with the following Specific Conditions:

A. General Requirements

1. Pursuant to Rule 62-212.200(56), F.A.C., Potential to Emit (PTE), the maximum heat input to each Westinghouse 501F (D) CT, or equivalent, at an ambient temperature of 32°F, shall neither exceed 1,962 MMBtu/hr while firing natural gas nor 1,888 MMBtu/hr while firing fuel oil.
2. Pursuant to Rule 62-212.200(56), F.A.C., PTE, the CTs may operate continuously, i.e., 8,760 hrs/year.
3. Pursuant to Rule 62-212.200(56), F.A.C., PTE, only natural gas or No. 2 fuel oil is allowed to be fired in the CTs. The maximum sulfur content limit of the No. 2 fuel oil shall not exceed 0.05 percent, by weight.
4. Pursuant to Rule 62-212.200(56), F.A.C., PTE, the maximum No. 2 fuel oil consumption allowed to be burned is 41,751,000 gallons per year, which is equivalent to 1500 hours per CT per year of operation at full load(not to exceed 3,000 hrs/yr between the two CTs). The No. 2 fuel oil is to be used as a back-up fuel only.
5. Pursuant to Rule 62-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter (PM), the emissions of unconfined PM shall be minimized during the construction period by covering or watering dust generating areas.

B. Emission Limits

1. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from two CTs, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

MAXIMUM ALLOWABLE EMISSION LIMITATIONS

<u>POLLUTANT</u>	<u>FUEL</u>	<u>CONCENTRATION</u>	<u>lbs/hr(a)</u>	<u>TPY(b)</u>	<u>TPY(TOTAL)^c</u>
NO _x	Gas	9 ppmvd(d)	68	596	906
	Oil	42 ppmvd(e)	336	504	
CO	Gas	20 ppmvd	71	622	618
	Oil	25 ppmvd	91	136	
PM/PM ₁₀	Gas		7	65	147
	Oil		67	100	
SO ₂	Gas		5	47	182
	Oil		101	152	
VOC	Gas	5 ppmvd	10	88	99
	Oil	10 ppmvd	21	31	
Sulfuric Acid Mist	Gas		1	6	39
	Oil		22	34	
Beryllium	Oil		0.0049	0.007	0.007
Arsenic	Oil		0.0097	0.014	0.014
Visible Emissions	Gas		≤ 10 percent opacity		
	Oil		≤ 10 percent opacity		

(a) The emission limitations in lbs/hr/CT are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Condition C.1 below.

(b) The annual emission limitations (TPY) for natural gas are based on two CTs operating at full load for 8,760 hours per year. The annual emission limitations (TPY) for fuel oil are based on the equivalent of full-load operation for a maximum of 1500 hours per year for each of the two CTs (not to exceed 3,000 hrs/yr between the two CTs). The emission calculations are also based at a worst case ambient temperature of 32°F.

(c) Maximum allowable emissions from two CTs if any fuel oil is burned at the facility during the year. The emission calculations are also based at an ambient temperature of 59°F.

(d) The natural gas NO_x allowable emission limitation of 9 ppmvd is corrected to 15 percent O₂. An interim limit of 12 ppmvd (91 lb/hr/CT, 797 TPY) corrected to 15 percent O₂ shall be allowed for a period of one year from the startup date. Compliance shall be determined through the initial and annual compliance tests.

(e) The fuel oil NO_x allowable emission limitation of 42 ppmvd is corrected to 15 percent oxygen. Compliance shall be determined through the initial and annual compliance tests. The annual compliance test will be required if the fuel oil is fired for more than 400 hours in the preceding 12-months.

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For fuel oil firing, NO_x emissions of 42 ppmvd @ 15 percent O₂ are based on fuel bound nitrogen (FBN) content of 0.015 percent by weight or less. When FBN levels are above this percentage, the CTs may produce higher NO_x concentrations due to increased fuel NO_x formation. When FBN levels are above 0.015 percent, the operator shall employ all reasonable measures to maintain the NO_x concentrations below 42 ppmvd. However, NO_x emissions (ppmvd and lb/hr), as calculated from the formula below, shall be allowed if the permittee submits data (FBN levels from most recent fuel shipment or as fired fuel sampling and hourly averages of: fuel rate, heat rate, ambient conditions, and NO_x control system parameters) which demonstrates that emissions (hourly averages) above 42 ppmvd are due solely to FBN levels above 0.015 percent.

The emission level for NO_x is adjusted for higher fuel nitrogen contents up to a maximum of 0.030 percent by weight as follows:

FUEL BOUND NITROGEN (% by weight)	NO _x LEVELS (ppmvd @ 15% O ₂)	NO _x EMISSIONS (lb/hr/CT) ¹	NO _x EMISSIONS INCREASE (TPY) ¹
0.015 or less	42	336.2	0
0.020	44	352.1	0
0.025	46	368.2	0
0.030	48	384.2	0

1, - From 336.2 lb/hr/CT at 32⁰F basis.

For intermediate values of FBN use the formula:

$$STD = 0.0042 + F$$

where,

STD = allowable NO_x emissions (ppmvd @ 15% O₂)

F = NO_x emission allowance for fuel bound nitrogen

and

N (fuel bound nitrogen), is defined as follows:

N (% by weight)	F (NO _x % by volume)
0 < N ≤ 0.015	0
0.015 < N ≤ 0.030	0.04 (N - 0.015)
0.030 < N	0.0006

2. The following estimated CT emissions are tabulated for PSD tracking purposes only:

ESTIMATED EMISSIONS

<u>POLLUTANT</u>	<u>FUEL</u>	<u>TPY</u>
Lead	Oil(a,b)	0.16
Fluoride	Oil(a,b)	0.090
Mercury	Gas(c)	0.0003
	Oil(a,b)	0.024

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(a) The annual emission limitations (TPY) for fuel oil are based on full-load operation for a total of 3,000 hours per year between the two CTs at an ambient temperature of 59°F.

(b) The No. 2 fuel oil shall have a maximum sulfur content limit of 0.05 percent, by weight.

(c) The annual emission limitation (TPY) for natural gas is based on two CTs operating at full-load for 8,760 hours per year at an ambient temperature of 59°F.

3. The permittee will install a dry low-NO_x (DLN) combustor or an SCR system on each CT. Ammonia slip from the SCR system shall not exceed 10 ppm. The permittee shall make every practicable effort to achieve the lowest possible NO_x emission rate, but must not exceed 12 ppmvd at 15 percent O₂ per CT on a continuous basis when firing natural gas during the first year of operation. The final limit for NO_x one year after startup will be 9 ppmvd at 15% O₂.

4. Excess emissions from a turbine resulting from start up, shutdown, malfunction, fuel switch or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. The permittee shall provide a general description of the procedures to be followed during periods of start up, shutdown, malfunction, fuel switch or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.

5. Excess emissions from fuel switching shall not exceed 15 minutes.

6. Excess emissions due to fuel bound nitrogen levels above 0.015 percent are allowed pursuant to Condition B.1 foot note (e) of the emission limitation table.

C. Performance Testing

1. Initial (I) compliance tests shall be performed on each CT using both fuels. 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. Annual (A) compliance tests shall be performed on the CT with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests at permit renewal shall also be performed on the non-PSD pollutants. Tests and procedures shall be in accordance with 40 CFR 60.335. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C, and follows:

a. Reference Method 5B for PM (I, A: for oil only; assumption is that all PM is PM₁₀).

b. Reference Method 9 for VE (I, A).

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- c. Reference Method 10 for CO (I, A).
- d. Reference Method 20 for NO_x (I, A) or Method 7E if sampling downstream of the heat recovery steam generator.
- e. Reference Method 18 or 25A for VOC (I, A).
- f. Reference Method 8 for H₂SO₄ Mist (I, A).
- 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. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I and A), which can be used for determining SO₂ emissions annually.
- i. 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. 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.

2. The maximum sulfur content of the fuel oil shall not exceed 0.05 percent, by weight. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334(b).

3. As an alternative to Condition C.1.i above, natural gas supplier data for sulfur content may be submitted. However, the applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. 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 pursuant to 40 CFR 60.335(e) (1993 version). Any request for a future custom monitoring schedule shall be made in writing to the Department's Bureau of Air Regulation. Any custom schedule approved by the USEPA pursuant to 40 CFR 60.334(b) (1993 version) will be recognized as enforceable provisions of the permit.

D. Monitoring Requirements

Monitoring of operations shall be in accordance with 40 CFR 60.334. Also, and for each CT, the permittee shall install, operate, and maintain a continuous emission monitoring system (CEMS) to monitor nitrogen oxides in accordance with 40 CFR 60, Appendix F, and, if necessary, a diluent gas (CO₂ or O₂). The Federal Acid Rain Program requirements of 40 CFR 75 shall apply.

1. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B.

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2. CEMS data shall be recorded and reported in accordance with Rule 62-297.500, F.A.C.; 40 CFR 60; and, 40 CFR 75, if it becomes applicable. The record shall include periods of start up, shutdown, load change, fuel switch, high fuel bound nitrogen, and malfunction.

3. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

4. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of all CEMS. In addition, 40 CFR 75 shall apply (Federal Acid Rain Program).

5. For purposes of the reports required under this permit, excess emissions, as determined pursuant to Condition B.6 herein, are defined as any calculated average emission rate which exceeds the applicable emission limitation in Condition B.1.

E. Notification, Reporting and Recordkeeping

1. To determine compliance with the natural gas and fuel oil firing heat input limitation, the permittee shall maintain daily records of natural gas and fuel oil consumption for each turbine, and provide the heating value for each fuel during the compliance test. All records shall be maintained for a minimum of three years after the date of each record and shall be made available to representatives of the Department upon request.

2. The project shall comply with all the applicable requirements of Chapters 62-210 through 62-297 and 62-4, F.A.C., and 40 CFR 60, Subparts A and GG. The requirements shall include:

- a. 40 CFR 60.7(a)(1) - By postmarking or delivering notification of the start of construction no more than 30 days after such date.
- b. 40 CFR 60.7(a)(2) - By postmarking or delivering notification of the anticipated date of the initial start up of each CT not less than 30 days prior to such date.
- c. 40 CFR 60.7(a)(3) - By postmarking or delivering notification of the actual start up of each turbine within 15 days after such date.
- d. 40 CFR 60.7(a)(5) - By postmarking or delivering notification of the date for demonstrating the CEMS performance, no less than 30 days prior to such date.
- e. 40 CFR 60.7(a)(6) - By postmarking or delivering notification of the anticipated date for conducting the opacity observations no less than 30 days prior to such date.
- f. 40 CFR 60.7(b) - By initiating a recordkeeping system to record the occurrence and duration of any start up, shutdown, load change, fuel switch, high fuel bound

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nitrogen, and malfunction of a turbine, malfunction of the air pollution control equipment, and the periods when the CEMS is inoperable.

- g. 40 CFR 60.7(c) - By postmarking or delivering a quarterly excess emissions and monitoring system performance report within 30 days after the end of each calendar quarter. This report shall contain the information specified in 40 CFR 60.7(c) and (d).
- h. 40 CFR 60.8(a) - By conducting all performance tests within 60 days after achieving the maximum turbine and boiler firing rates, but not more than 180 days after the initial start up of each CT.
- i. 40 CFR 60.8(d) - By postmarking or delivering notification of the date of each performance test required by this permit at least 30 days prior to the test date; and,
- j. Rule 62-297.345 - By providing stack sampling facilities for each turbine.
- k. All notifications and reports required by this specific condition shall be submitted to the Department's Southwest District office. Performance test results shall be submitted within 45 days of completion of such test.

3. The following information shall be submitted to the Department's Bureau of Air Regulation within 90 days after the permittee has made the selection of the following:

- a. Description of the final selection of the turbines, SCR and CO oxidation catalyst control systems. The descriptions shall include the specific make and model numbers and any changes in the proposed method of operation, fuels, emissions or equipment.
- b. Description of the CEMS selected. The description shall include the type of sensors and the manufacturer and model numbers of the equipment.

4. The following protocols shall be submitted to the Department's Southwest District office for approval:

- a. CEMS Protocol - Within 120 days after selection of the CEMS, but 180 days prior to the initial startup, a CEMS protocol describing the system, its installation, operating and maintenance characteristics and requirements. The protocol shall meet the requirements of 40 CFR 60.13, Appendix B and Appendix F or 40 CFR 75, and be approved within 60 days.
- b. Performance Test Protocol - At least 90 days prior to conducting the initial performance tests required by this permit, the permittee shall submit to the Department's Southwest District office a protocol outlining the procedures to be followed, the test methods and any differences between the reference methods and the test methods proposed to be used to verify compliance with the conditions of this permit. The Department shall approve the testing protocol within 60 days provided that it meets the requirements of this permit.

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c. Heat Input Curves - Within 120 days after final selection of the turbine, but 180 days prior to initial startup of the turbine, manufacturer's curves or equations of heat input and NOx emission rate (lbs/hr) corrections to other temperatures shall be provided to the Department.

d. Subject to the approval by the Department for technical validity while applying sound engineering principles, the manufacturer's curves shall be used to establish the heat input rates over a range of temperatures for the purposes of compliance determination.

F. Modifications

The permittee shall give written notification to the Department when there is any modification to this facility pursuant to Rule 62-212.200, F.A.C., Definitions - Modifications. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and, the anticipated completion date of the change.

G. No. 2 Fuel Oil Storage Tank

The permittee shall be in compliance with the monitoring requirements of 40 CFR 60.116b(a) and (b).

H. Additional General Conditions

1. Pursuant to Rule 62-4.090, F.A.C., the permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit.

2. An application for an operation permit pursuant to Rule 62-4.220, F.A.C., is not required if the facility is also certified under the Power Plant Siting Act, Chapter 403, Part II, F.S. That certification serves as the operation permit also. The permittee must submit an application for an operation permit for a major source of pollution pursuant to Chapter 62-213, F.A.C.

3. Approval to construct shall become invalid if construction is not commenced by June, 2000, if construction is discontinued for a period of 18 months or more, or if construction is not completed by March 4, 2002. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)].

STATEMENT OF BASIS

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station
Facility ID No.: 0490340
Hardee County

Initial Title V Air Operation Permit
DRAFT Permit No.: 0490340-005-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of two nominal 157.5 megawatts (MW) combined-cycle Siemens Westinghouse 501F(D) combustion turbines. The combined-cycle turbines each include one unfired heat recovery steam generator (HRSG). The combustion turbines only operate in combined-cycle mode (i.e., the HRSGs are not equipped with bypass stacks). Steam generated by the two HRSGs is sent to one common nominal 173 MW steam turbine. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel.

These emissions units are two nominal 157.5 megawatts (MW) combined-cycle Siemens Westinghouse 501F(D) combustion turbines equipped with dry low-NO_x (DLN) combustors. The combined-cycle turbines each include one unfired heat recovery steam generator (HRSG) equipped with selective catalytic reduction (SCR) for NO_x control and oxidation catalyst control systems for CO control. The turbines will also utilize water injection to control NO_x emissions when firing distillate fuel oil. The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated September 27, 1995. The combined cycle combustion turbines began operation in December, 2001.

The proposed changes will affect the following emission units:

EU No.	Emissions Unit Description
001	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
002	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

The applicant requests the following changes to Permit No. PSD-FL-214A for Unit's 001 and 002 combined cycle gas turbine.

1. Cold Startup: Authorize up to 6 hours of excess emissions from any combustion turbine

(CT)/heat recovery steam generator (HRSG) unit in any 24-hour period from cold startups. Cold startup is defined as startup following a CT/HRSG shutdown of 48 hours or more. NOx emissions from such periods would still be included to demonstrate compliance with the annual facility-wide emission cap.

2. Hot and Warm Startup: Authorize up to 2 hours of excess emissions per startup event and no more than three startup events in any 24-hour period from any CT/HRSG unit resulting from hot and warm startups. Hot and warm startup is defined as a startup following a CT/HRSG shutdown of less than 48 hours. NOx emissions from such periods would still be included to demonstrate compliance with the annual facility-wide emission cap.
3. Shutdown: Authorize up to 2 hours of excess emissions per shutdown event and no more than three shutdown events in any 24-hour period from any CT/HRSG. NOx emissions from such periods would still be included to demonstrate compliance with the annual facility-wide emission cap.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on additional information amending the Title V permit application received July 10, 2002, this facility is a synthetic minor source of hazardous air pollutants (HAPs).

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station
Facility ID No.: 0490340
Hardee County

Title V Air Operation Permit
DRAFT Permit No.: 0490340-005-AV

Project Description:
Permit Revision to Include
Excess Emission Provisions for Unit's 1 and 2

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
North Permitting Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Initial Title V Air Operation Permit
DRAFT Permit No.: 0490340-005-AV

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Permittee:

Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33688-2000

DRAFT Permit No.: 0490340-005-AV**Facility ID No.:** 0490340**SIC Nos.:** 49, 4911**Project:** Revised Title V Air Operation Permit

This permit is for the operation of the Payne Creek Generating Station. This facility is located at 6697 County Road 663, Bowling Green, Hardee; UTM Coordinates: Zone 17, 405.049 km East and 3057.712 km North; and, Latitude: 27° 38' 30" North and Longitude: 81° 57' 45" West.

This Title V Air Operation Permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit. This revision modified the Title V Air Operation Permit to include excess emissions provisions for startup, shutdown or malfunction for Emissions Units 1 and 2.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02

APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96

TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND

MONITORING SYSTEM PERFORMANCE REPORT version dated 07/96

PHASE II ACID RAIN APPLICATION/COMPLIANCE PLAN (received June 14, 2000)

Effective Date: January 1, 2003**Revised Date:** Draft**Renewal Application Due Date:** July 5, 2007**Expiration Date:** December 31, 2007

Michael G. Cooke, Director
Division of Air Resource
Management

MGC/sa

Section I. Facility Information.

Subsection A. Facility Description.

The regulated emissions units at the facility include two nominal 157.5 megawatts (MW) combined-cycle Siemens Westinghouse 501F(D) combustion turbines. The combined-cycle turbines each include one unfired heat recovery steam generator (HRSG). The combustion turbines only operate in combined-cycle mode (i.e., the HRSGs are not equipped with bypass stacks). Steam generated by the two HRSGs is sent to one common nominal 173 MW steam turbine. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on additional information amending the Title V permit application received July 10, 2002, this facility is a synthetic minor source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U.

ID No. Brief Description

- 001 Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
- 002 Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

Unregulated Emissions Units and/or Activities

E.U.

ID No. Brief Description of Emissions Units and/or Activity

- 003 One or more emergency generators which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
- 004 One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1: Permit History/ID Number Changes

Statement of Basis

These documents are on file with permitting authority:

Initial Title V Permit Application received December 5, 2001

Additional Information Request dated January 29, 2002

Additional Information Response received March 20, 2002

Additional Information received July 10, 2002

Application No. 0490340-004-AC and 0490340-005-AV received on November 2, 2004 to Revise Permit No. PSD-FL-214A and 0490340-002-AV

Documents on file with USEPA

The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only.
Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]
3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
 - b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
 - c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:
RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

Any required reports to be sent to the National Response Center, should be sent to:
National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:
Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

8. [Not federally enforceable.] Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: chemical or water application to unpaved roads and unpaved yard areas as needed, paving and maintenance of roads and parking areas, confining abrasive blasting where possible, and, other techniques, as necessary.
[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received December 5, 2001]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4., F.A.C. (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS.)}

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-4, TITLE V CONDITIONS.)}

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office.

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

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155, Fax: 404/562-9164

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

14. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. The Annual Operating Report shall include an estimate of all HAPS emitted, such that the Department can affirm that the facility complies with its synthetic minor status. [Rule 62-210.370(2), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U.

ID No.

Brief Description

-001	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
-002	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

The emissions units addressed in this subsection are two nominal 157.5 megawatts (MW) combined-cycle Siemens Westinghouse 501F(D) combustion turbines equipped with dry low-NO_x (DLN) combustors. The combined-cycle turbines each include one unfired heat recovery steam generator (HRSG) equipped with selective catalytic reduction (SCR) for NO_x control and oxidation catalyst control systems for CO control. The turbines will also utilize water injection to control NO_x emissions when firing distillate fuel oil. The combustion turbines only operate in combined-cycle mode (i.e., the HRSGs are not equipped with bypass stacks). Steam generated by the two HRSGs is sent to one common nominal 173 MW steam turbine. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel.

{Permitting note(s): The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated September 27, 1995. The combined cycle combustion turbines began operation in December, 2001.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum heat input rate to each Siemens Westinghouse 501F(D) combustion turbine, at an ambient temperature of 32° F, shall neither exceed 1,962 million Btu per hour while firing natural gas nor 1,888 million Btu per hour while firing No. 2 fuel oil. Heat input rates will vary depending on gas turbine characteristics, ambient conditions, and alternate methods of operation.

{Permitting note: These heat input limitations are included in the permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 95 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load) and to aid in determining future rule applicability. Regular recordkeeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in this permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including, but not

limited to, fuel flow metering or tank drop measurements, or using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.) [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-214A]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.35. [Rule 62-297.310(2), F.A.C.]

A.3. Methods of Operation. Fuels.

- a. These emissions units fire natural gas as the primary fuel.
- b. These emissions units fire No. 2 distillate oil. The firing of No. 2 fuel oil is limited as follows:
 - 1. The maximum No. 2 fuel oil consumption allowed to be burned is 41,751,000 gallons per year, which is equivalent to 1500 hours per CT per year of operation at full load (not to exceed 3,000 hrs/yr between the two CTs). The No. 2 fuel oil is to be used as a back-up fuel only.
 - 2. Before regular operation on No. 2 distillate oil is authorized, the permittee must demonstrate compliance with all emissions limits for No. 2 distillate oil as specified by this permit and receive acknowledgement from the Department that compliance has been demonstrated.

[Rules 62-212.400, 62-212.410, and 62-213.410, F.A.C.; PSD-FL-214A; and, Applicant's response to a request for additional information dated March 19, 2002]

A.4. Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.5. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from two CTs, when firing natural gas or No. 2 fuel oil, shall not exceed the following:

MAXIMUM ALLOWABLE EMISSION LIMITATIONS

POLLUTANT	FUEL	CONCENTRATION	lbs/hr ^(a)	TPY ^(b)	TPY(TOTAL) ^(c)
NO _x	Gas	9 ppmvd(d)	68	596	906
NO _x	Oil	42 ppmvd(e)	336	504	
CO	Gas	20 ppmvd	71	622	618
CO	Oil	25 ppmvd	91	136	
PM/PM ₁₀	Gas		7	65	147
PM/PM ₁₀	Oil		67	100	
SO ₂	Gas		5	47	182
SO ₂	Oil		101	152	
VOC	Gas	5 ppmvd	10	88	99
VOC	Oil	10 ppmvd	21	31	
Sulfuric Acid Mist	Gas		1	6	39
Sulfuric Acid Mist	Oil		22	34	

- (a) The emission limitations in lbs/hr/CT are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Specific Conditions **A.22. to A.33.**, below.
- (b) The annual emission limitations (TPY) for natural gas are based on two CTs operating at full load for 8,760 hours per year. The annual emission limitations (TPY) for fuel oil are based on the equivalent of full-load operation for a maximum of 1500 hours per year for each of the two CTs (not to exceed 3,000 hrs/yr between the two CTs). The emission calculations are also based at a worst case ambient temperature of 32°F.
- (c) Maximum allowable emissions from two CTs if any fuel oil is burned at the facility during the year. The emission calculations are also based at an ambient temperature of 59°F.
- (d) The natural gas NO_x allowable emission limitation of 9 ppmvd is corrected to 15 percent O₂. An interim limit of 12 ppmvd (91 lbs/hr/CT, 797 TPY) corrected to 15 percent O₂ shall be allowed for a period of one year from the startup date. Compliance shall be determined through the initial and annual compliance tests.
- (e) The fuel oil NO_x allowable emission limitation of 42 ppmvd is corrected to 15 percent oxygen. Compliance shall be determined through the initial and annual compliance tests. The annual compliance test will be required if the fuel oil is fired for more than 400 hours in the preceding 12-months.

For fuel oil firing, NO_x emissions of 42 ppmvd @ 15 percent O₂ are based on fuel bound nitrogen (FBN) content of 0.015 percent by weight or less. When FBN levels are above this percentage, the CTs may produce higher NO_x concentrations due to increased fuel NO_x formation. When FBN levels are above 0.015 percent, the operator shall employ all reasonable measures to maintain the NO_x concentrations below 42 ppmvd. However, NO_x emissions (ppmvd and lb/hr), as calculated from the formula below, shall be allowed if the permittee submits data (FBN levels from most recent fuel shipment or as fired fuel sampling and hourly averages of: fuel rate, heat rate, ambient conditions, and NO_x control system parameters) which demonstrates that emissions (hourly averages) above 42 ppmvd are due solely to FBN levels above 0.015 percent.

The emission level for NO_x is adjusted for higher fuel nitrogen contents up to a maximum of 0.030 percent by weight as follows:

FUEL BOUND NITROGEN (% by weight)	NO _x LEVELS (ppmvd @ 15% O ₂)	NO _x EMISSIONS (lbs/hr/CT) ¹	NO _x EMISSIONS INCREASE (TPY) ¹
0.015 or less	42	336.2	0
0.020	44	352.1	0
0.025	46	368.2	0
0.030	48	384.2	0

1 - From 336.2 lbs/hr/CT at 32°F basis.

For intermediate values of FBN use the formula:

$$STD = 0.0042 + F$$

where,

STD = allowable NO_x emissions (ppmvd @ 15% O₂)

F = NO_x emission allowance for fuel bound nitrogen

and

N (fuel bound nitrogen), is defined as follows:

N (% by weight)	F (NO _x % by volume)
0 < N ≤ 0.015	0
0.015 < N ≤ 0.030	0.04 (N-0.015)
0.030 < N	0.0006

[PSD-FL-214A]

A.6. The following estimated CT emissions are tabulated for **PSD tracking purposes only**:

ESTIMATED EMISSIONS

POLLUTANT	FUEL	TPY
Lead	Oil(a,b)	0.16
Fluoride	Oil(a,b)	0.090
Beryllium	Oil(a,b)	0.007
Arsenic	Oil(a,b)	0.014
Mercury	Gas(c)	0.0003
	Oil(a,b)	0.024

(a) The annual emission limitations (TPY) for fuel oil are based on full-load operation for a total of 3,000 hours per year between the two CTs at an ambient temperature of 59°F.

(b) The No. 2 fuel oil shall have a maximum sulfur content limit of 0.05 percent, by weight.

(c) The annual emission limitation (TPY) for natural gas is based on two CTs operating at full-load for 8,760 hours per year at an ambient temperature of 59°F.

[PSD-FL-214B]

A.7. Ammonia slip from the SCR system shall not exceed 10 ppm.

[PSD-FL-214A]

A.8. Sulfur Dioxide - Sulfur Content. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. See specific condition A.30.

[PSD-FL-214A]

A.9. Visible Emissions. Visible emissions shall not exceed 10 percent opacity when firing natural gas or No. 2 fuel oil.

[PSD-FL-214A]

Excess Emissions

A.10. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period ~~unless specifically authorized by the Department for longer duration~~ except for the following specific cases:

- a. For cold startups, excess emissions from any CT/heat recovery steam generator (HRSG) unit shall not exceed six hours in any 24-hour period. "Cold startup" is defined as a startup following a CT/HRSG shutdown of 48 hours or more.
- b. For hot and warm startups, excess emissions from any CT/HRSG unit shall not exceed two hours per startup event, and no more than three startup events in any 24-hour period. "Hot and warm startup" is defined as a startup following a CT/HRSG shutdown of less than 48 hours.
- c. For shutdowns, excess emissions from any CT/HRSG unit shall not exceed two hours per shutdown event, and no more than three shutdown events in any 24-hour period.
- d. The permittee shall include the NOx excess emissions data in determining compliance with the annual facility-wide emission cap of 906 tpy.

All quality-assured hourly NOx emissions data shall be used when demonstrating compliance with the emissions cap. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).

[Rule 62-210.700(1), F.A.C.]

A.11. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

A.12. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

[Rule 62-210.700(5), F.A.C.]

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

A.13. Excess emissions from a turbine resulting from startup, shutdown, malfunction, fuel switch or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period ~~unless specifically authorized by the Department for a longer duration~~ except for the specific cases authorized by Condition A.10. The permittee shall provide a general description of the procedures to be followed during periods of startup, shutdown, malfunction, fuel switch or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.

[PSD-FL-214A]

A.14. Excess emissions from fuel switching shall not exceed 15 minutes.

[PSD-FL-214A]

A.15. Excess emissions due to fuel bound nitrogen levels above 0.015 percent are allowed pursuant to foot note (e) of Specific Condition **A.5.**
[PSD-FL-214A]

A.16. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
[PSD-FL-214A]

A.17. For purposes of the reports required under this permit, excess emissions, as determined pursuant to Condition **A.13.** herein, are defined as any calculated average emission rate which exceeds the applicable emission limitation in Condition **A.5.**
[PSD-FL-214A]

Monitoring of Operations

A.18. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A.19. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator. **Nitrogen oxide continuous emissions monitors may be used to determine compliance with this requirement.**
[40 CFR 60.334(a); and , PSD-FL-214B]

A.20. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG 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. **Nitrogen oxide continuous emissions monitors may be used to determine compliance with this 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 40 CFR 60.334(b). **The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. 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.**

[40 CFR 60.334(b)(1) & (2); and, PSD-FL-214B]

A.21. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.22. 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 Department to determine the nitrogen content of the fuel being fired. Nitrogen oxide continuous emissions monitors may be used to determine compliance with this requirement.

[40 CFR 60.335(a); and , PSD-FL-214B]

A.23. During performance tests to determine compliance, measured NO_x emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$\text{NO}_X = [\text{NO}_X \text{ obs}] \left[\left(\frac{P_{\text{ref}}}{P_{\text{obs}}} \right)^{0.5} / P_{\text{obs}} \right] e^{19} [H_{\text{obs}} - 0.00633] [288^\circ \text{K} / T_{\text{amb}}] 1.53$$

where:

NO_X = Emissions of NO_X at 15 percent oxygen and ISO standard ambient conditions.

NO_X obs = Measured NO_X emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

e = Transcendental constant (2.718)

H_{obs} = Specific humidity of ambient air at test.

T_{amb} = Temperature of ambient air at test.

The owner or operator is not required to have the NO_X monitor required by this permit continuously calculate NO_X 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.

[40 CFR 60.335(c)(1); and, PSD-FL-214B]

A.24. When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO_X standard 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. **The owner or operator is allowed to conduct performance tests at a single load because a NO_X monitor shall be used to demonstrate compliance with the BACT NO_X limits of this permit.**

[40 CFR 60.335(c)(2); and, PSD-FL-214B]

A.25. The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 as follows:

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) 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 NO_X emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2). **The owner or operator is allowed to make compliance demonstrations for NO_X 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, compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NO_X monitor. The applicable span value specified in 40 CFR Part 75 shall be used instead of that specified in this condition.**

[40 CFR 60.335(c)(3); and, PSD-FL-214B]

A.26. Volatile Organic Compounds. The initial and annual test method for volatile organic compounds shall be EPA Method 18 or 25A, incorporated by reference in Chapter 62-297, F.A.C.

[PSD-FL-214A]

A.27. Carbon Monoxide. The initial and annual test method for carbon monoxide shall be EPA Method 10, incorporated by reference in Chapter 62-297, F.A.C.

[PSD-FL-214A]

A.28. PM/PM₁₀. The initial and annual test method for PM/PM₁₀ when firing oil shall be EPA Method 5B, incorporated by reference in Chapter 62-297, F.A.C. It is assumed all PM is PM₁₀.
[PSD-FL-214A]

A.29. Nitrogen Oxides. The initial and annual test method for NO_x shall be EPA Method 20 or EPA Method 7E if sampling downstream of the heat recovery steam generator, incorporated by reference in Chapter 62-297, F.A.C.
[PSD-FL-214A]

A.30. The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or the latest edition, 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. **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.**
[40 CFR 60.335(d); and, PSD-FL-214B].

A.31. As an alternative, natural gas supplier data for sulfur content may be submitted. However, the applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. 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 pursuant to 40 CFR 60.335(e) (1993 version). Any request for a future custom monitoring schedule shall be made in writing to the Department's Bureau of Air Regulation. Any custom schedule approved by the USEPA pursuant to 40 CFR 60.334(b) (1993 version) will be recognized as enforceable provisions of the permit. See specific condition **A.24**.
[PSD-FL-214A]

A.32. Visible Emissions. The initial and annual test method for visible emissions shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.
[PSD-FL-214A]

A.33. Sulfuric Acid Mist. The initial and annual test method for sulfuric acid mist emissions shall be EPA Method 8, incorporated by reference in Chapter 62-297, F.A.C.
[PSD-FL-214A]

A.34. 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 Rule 62-297.620, F.A.C., or otherwise require modification of the permit.
[PSD-FL-214A]

A.35. Operating Rate During Testing. Initial compliance tests shall be performed on each combustion turbine using both fuels. Testing of emissions shall be conducted at 95 to 100 percent of the manufacturer's rated heat input based on the average ambient air temperature for the combustion turbine during the test. Annual compliance tests shall be performed on the combustion turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests at permit renewal shall also be performed on the non-PSD pollutants. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.; and, PSD-FL-214A]

A.36. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

A.37. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive, five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards. [Rule 62-297.310(1), F.A.C.]

A.38. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

A.39. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

A.40. The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

A.41. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
- a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

Continuous Monitoring Requirements

A.42. For each combustion turbine, a continuous emission monitoring system (CEMS) shall be installed, operated, and maintained in accordance with 40 CFR 60, Appendix F, and shall meet the performance specifications of 40 CFR 60, Appendix B, to monitor nitrogen oxides and a diluent gas (carbon dioxide or oxygen). The applicable continuous emissions monitoring procedures of 40 CFR Part 75 may also be used to satisfy the requirements, above.
[PSD-FL-214A]

A.43. A performance evaluation of the CEMS shall be conducted during any required performance test or within 30 days thereafter in accordance with the applicable performance specifications of 40 CFR 60, Appendix B and at other times as required by the Administrator.
[40 CFR 60.13(c)]

A.44. The zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts shall be checked at least once daily in accordance with a written procedure. The zero and span shall, at a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications of 40 CFR 60, Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.
[40 CFR 60.13(d)(1)]

A.45. Reserved.

A.46. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
[40 CFR 60.13(e)(2)]

A.47. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.
[40 CFR 60.13(f)]

A.48. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdown, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g. ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit. (e.g. rounded to the nearest 1 percent opacity).
[40 CFR 60.13(h)]

Record Keeping and Reporting Requirements

A.49. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(a) The permittee shall notify the Department's Southwest District Office by telephone, facsimile transmittal or electronic mail within 24 hours if the NOx excess emissions exceed six hours in any 24-hour period.
[Applicant Request]

(b) Quarterly NOx Monitoring Report. Within 30 days following each calendar quarter, the permittee shall submit a report to the Department's Southwest District Office that summarizes the following information for the quarter.

- Identify the hours of NOx emission data excluded from the compliance determination with the short-term limit due to each of the following: startups, shutdowns, documented malfunctions and fuel switches.
- For each malfunction, identify the: date; approximate time range; duration (hours) of the malfunction; NOx emission levels during the malfunction; problem and cause of the problem (if known); and corrective action taken (if any).
- Identify the hours of NOx monitoring system down time due to each of the following: monitor malfunctions; non-monitor malfunctions; quality assurance calibrations; other known causes; and unknown causes. Identify the monitor availability.

[Rules 62-4.070(3), 62-4.130, 62-4.160(14)(b), and Rule 62-210.700(6), F.A.C.]

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

A.50. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. The requirements include initiating a recordkeeping system to record the occurrence and duration of any start up, shutdown, load change, fuel switch, high fuel bound nitrogen, and malfunction of a turbine, malfunction of the air pollution control equipment, and the periods when the CEMS is inoperable.
[40 CFR 60.7(b); and, PSD-FL-214A]

A.51. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

- a. 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 the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 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 initial performance test. 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).

NOx emissions monitoring by CEM system shall substitute for the requirements of this condition 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.]

[Rule 62-296.800, F.A.C.; 40 CFR 60.334(c)(1); and, PSD-FL-214B]

A.52. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate).

Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3), & (4)]

A.53. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

[40 CFR 60.7(d)(1) & (2)]

A.54. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)]

A.55. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

A.56. All recorded data shall be maintained on file by the Source for a period of five years.

[Rule 62-213.440, F.A.C.]

A.57. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

A.58. To determine compliance with the natural gas and fuel oil firing heat input limitation, the permittee shall maintain daily records of natural gas and fuel oil consumption for each turbine, and provide the heating value for each fuel during the compliance test. All records shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Department upon request.

[PSD-FL-214A]

A.59. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.

11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Miscellaneous Requirements.

A.60. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.

[40 CFR 60.2; and, Rule 62-204.800(7)(a), F.A.C.]

A.61. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

A.62. Heat Input Curves. Manufacturer's curves or equations of heat input and NOx emission rate (lbs/hr) corrections to other temperatures shall be provided to the Department. Manufacturer's curves were supplied to the Department's Southwest District office on May 11, 2001.

[PSD-FL-214A]

A.63. Subject to the approval by the Department for technical validity while applying sound engineering principles, the manufacturer's curves shall be used to establish the heat input rates over a range of temperatures for the purposes of compliance determination.

[PSD-FL-214A]

A.64. Modifications. The permittee shall give written notification to the Department when there is any modification to this facility pursuant to Rule 62-212.200, F.A.C., Definitions - Modifications. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and, the anticipated completion date of the change.

[PSD-FL-214A]

Section IV. This section is the Acid Rain Part.

Operated by: Seminole Electric Cooperative, Inc.
ORIS code: 7380

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-001	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
-002	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

A.1. The Phase II permit applications submitted for this facility, as approved by the Department, are a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

- a. DEP Form No. 62-210.900(1)(a)
 [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO₂) allowance allocations requirements for each Acid Rain unit are as follows:

<u>E.U. ID</u>	<u>EPA ID</u>	<u>Year</u>	2003	2004	2005	2006	2007
-001	**1A	SO₂ allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-002	**1B	SO₂ allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*

* The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 or 3 of 40 CFR 73.

A.3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title-IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

3. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

A.4. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.

{40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, Definitions - Applicable Requirements, F.A.C.]

Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station

DRAFT Permit No.: 0490340-005-AV
Facility ID No.: 0490340

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

<u>E.U. ID No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
-003	One or more emergency generators which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.
-004	One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have a total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station

DRAFT Permit No.: 0490340-005-AV
Facility ID No.: 0490340

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Internal combustion engines in boats, aircraft, and vehicles used for transportation of passengers or freight
2. Vacuum pumps in laboratory operations
3. Equipment used for steam cleaning
4. Belt or drum sanders having a total sanding surface of 5 square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more
5. Equipment used exclusively for space heating, excluding boilers
6. Laboratory equipment used exclusively for chemical or physical analyses
7. Brazing, soldering and welding
8. Fire and safety equipment
9. Surface coatings operations utilizing 6.0 gallons per day or less, averaged monthly, of coatings containing greater than 5.0 percent VOC, by volume
10. Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume
11. Degreasing units using heavier-than-air vapors exclusively, except any unit using or emitting any substance classified as a hazardous air pollutant
12. Petroleum lubrication systems
13. Application of fungicide, herbicide, or pesticide
14. Non-halogenated solvent storage and cleaning operations, provided the solvents contain none of the hazardous air pollutants listed at Rule 62-210.200, F.A.C.
15. Vehicle refueling operations and associated fuel storage
16. Storage tanks <250 gallons
17. General plant maintenance activities including, but not limited to, welding, grinding, and general vehicle repairs (excluding air conditioning systems)
18. Water treatment equipment
19. Distillate fuel oil truck unloading equipment
20. One, 1.35 million gallon distillate fuel oil storage tank subject, only, to the recordkeeping requirements of 40CFR60, Subpart Kb
21. Oil/water separators
22. Lube oil tank vents
23. Architectural (equipment) maintenance painting
24. Sand blasting and grit blasting where temporary total enclosures are used to contain particulate
25. Two, 5.0 MMBtu/hr natural gas-fired fuel gas heaters
26. One, 275 BHP fire water pump diesel engine

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Appendix H-1: Permit History

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station

DRAFT Permit No.: 0490340-005-AV
Facility ID No.: 0490340

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type ¹
All	Facility	PSD-FL-214	09/28/1995	01/01/2000	Construction (new)
All	Facility	PSD-FL-214A	07/21/1999	03/04/2002	Construction (mod)
All	Facility	0490340-001-AC / PSD-FL-214B	09/21/2001	03/04/2002	Construction (mod);
All	Facility	0490340-002-AV	01/01/2003	12/31/2007	Title V: Initial
All	Facility	0490340-004-AC / PSD-FL-214C			Construction (mod)
All	Facility	0490340-005-AV	Draft		Title V: Revision

¹ Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).

Table 1-1, Summary of Air Pollutant Standards and Terms

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station

DRAFT Permit No.: 0490340-005-AV
Facility ID No.: 0490340

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description
[-001]	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
[-002]	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
VE	All	8,760	10% Opacity					PSD-FL-214A	III.A.9.
NO _x	Gas	8,760	9 ppmvd	68	596.0			PSD-FL-214A	III.A.5.
NO _x	Oil	3,000	42 ppmvd	336	504.0			PSD-FL-214A	III.A.5.
VOC	Gas	8,760	5 ppmvd	10	88.0			PSD-FL-214A	III.A.5.
VOC	Oil	3,000	10 ppmvd	21	31.0			PSD-FL-214A	III.A.5.
CO	Gas	8,760	20 ppmvd	71	622.0			PSD-FL-214A	III.A.5.
CO	Oil	3,000	25 ppmvd	91	136.0			PSD-FL-214A	III.A.5.
PM / PM ₁₀	Gas	8,760		7	65.0			PSD-FL-214A	III.A.5.
PM / PM ₁₀	Oil	3,000		67	100.0			PSD-FL-214A	III.A.5.
SO ₂	Gas	8,760		5	47.0			PSD-FL-214A	III.A.5.
SO ₂	Oil	3,000	0.05% Sulfur	101	152.0			PSD-FL-214A	III.A.5. & III.A.8.
Sulfuric Acid	Gas	8,760		1	6.0			PSD-FL-214A	III.A.5.
Sulfuric Acid	Oil	3,000		22	34.0			PSD-FL-214A	III.A.5.
Ammonia Slip	All	8,760	10 ppm					PSD-FL-214A	III.A.7.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

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Table 2-1, Summary of Compliance Requirements

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station

DRAFT Permit No.: 0490340-005-AV
Facility ID No.: 0490340

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description
[-001]	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1
[-002]	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	Compliance	
						CMS**	See permit condition(s)
NO _x	All	EPA Method 20 or 7E	Annual	12/10/01	1-hour	Yes	III.A.22. - III.A.25. & III.A.29. III.A.30. III.A.30. & III.A.31. III.A.26. III.A.27. III.A.28. III.A.32. III.A.33.
SO ₂	Gas	ASTM Methods		12/10/01			
SO ₂ % Sulfur	Oil	ASTM Methods	Fuel Transfer				
VOC	All	EPA Method 18 or 25A	Annual	12/10/01	1-hour		
CO	All	EPA Method 10	Annual	12/10/01	1-hour		
PM / PM ₁₀	All	EPA Method 5B	Annual	12/10/01	1-hour		
VE	All	EPA Method 9	Annual	12/10/01	30-minutes		
Sulfuric Acid Mist	All	EPA Method 8	Annual	12/10/01	1-hour		

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS [=] continuous monitoring system

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Memorandum

Florida Department of
Environmental Protection

TO: Trina Vielhauer
THRU: Jim Pennington *JKP*
FROM: Syed Arif *Syed Arif*
DATE: April 7, 2005
SUBJECT: Payne Creek Generating Station / Seminole Electric Cooperative, Inc.
Permit Project No. 0490340-004-AC
Modification of Air Permit No. PSD-FL-214A
Permit Project No. 0490340-005-AV
Revision of Title V Air Operation Permit No. 0490340-002-AV

Attached is the Draft Permit package for a modification of the PSD permit for Unit's 1 and 2 that authorizes increased periods of excess emissions due to cold startups and hot startups. In addition, the package includes a concurrent revision to the Title V Air Operation Permit. A detailed review of the project is provided in the attached Technical Evaluation.

I recommend your approval and signature.

Attachments

JKP/sa