


Florida Department of Environmental Protection

Memorandum

TO: Trina Vielhauer, Bureau of Air Regulation
FROM: Jeff Koerner, New Source Review Section 
DATE: January 26, 2009
SUBJECT: Draft Permit No. 0490340-010-AC, Air Construction Permit Revision
Modifies Current Permit Nos. PSD-FL-214D and PSD-FL-344A
Concurrent Draft/Proposed Permit No. 0490340-011-AV, Title V Permit Revision
Modifies Current Permit No. 0490340-006-AV
Seminole Electric Cooperative, Inc.
Midulla Generating Station
Miscellaneous Revisions

Attached for your review is a combined draft permit package to concurrently revise existing Title V air operation Permit No. 0490340-006-AV to incorporate the proposed and final changes in the following air construction permits for the existing combustion turbines.

Concurrent Draft Air Construction Permit Revision No. 0490340-010-AC (PSD-FL-214E / PSD-FL-344B)

Original air construction Permit No. PSD-FL-214 for the existing two combined cycle combustion turbines (Units 1 and 2) will be revised to: replace the current sulfuric acid mist emission limits with a fuel sulfur limitation; and establish the carbon monoxide emissions standard as a surrogate for volatile organic compounds. Original air construction Permit No. PSD-FL-344 for the existing five sets of simple cycle combustion turbines (CT-4A to CT-8B) will be revised to: increase the maximum heat input rate when firing natural gas from 635.6 to 676.2 MMBtu/hour; increase the maximum heat input rate when firing distillate oil from 576.8 to 606.6 MMBtu/hour; and establish the carbon monoxide emissions standard as a surrogate for volatile organic compounds. The changes in maximum heat input rates are to reflect the actual installed capabilities of the equipment as documented by the manufacturer, Pratt & Whitney.

Final Air Construction Permit No. 0490340-012-AC (PSD-FL-344A)

For the Twin Pac simple cycle combustion turbines, this final permit revision replaced the requirement to conduct the annual compliance stack tests for carbon monoxide upstream of the oxidation catalyst systems with a requirement to conduct periodic tests to determine the reactivity of the oxidation catalyst. Annual tests conducted after the oxidation catalysts are still required.

In addition, the Title V revision is being issued for parallel review by EPA Region 4. I recommend your approval of the attached draft/proposed permits for this project.

TLV/jfk

P.E. CERTIFICATION STATEMENT

PERMITTEE

Seminole Electric Cooperative, Inc.
P.O. Box 272000
Tampa, Florida 33688-2000

Draft Air Permit No. PSD-FL-214E
Draft Air Permit No. PSD-FL-344B
Project No. 0490340-010-AC
Seminole Electric Cooperative, Inc.
Midulla Generating Station
Miscellaneous Revisions

PROJECT DESCRIPTION

Seminole Electric Cooperative, Inc. operates the Midulla Generating Station, which is an existing electrical generating plant (SIC No. 4911) located in Hardee County at 6695 County Road 663 in Bowling Green, Florida. This station was formerly known as the Payne Creek Generating Station. The existing facility consists of two combined cycle combustion turbines (488 MW, total), ten simple cycle combustion turbines (300 MW, total) and miscellaneous ancillary support equipment. The combined cycle units are base loaded units and the simple cycle combustion turbines are used during peak periods of electrical power demand.

Revisions to Air Permit No. PSD-FL-214 (Two Combined Cycle Units)

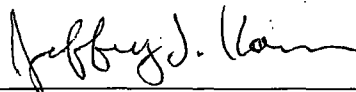
The permit was revised to: remove of the requirement to conduct the annual compliance stack tests for VOC and SAM emissions; and replace the current SAM emission limits with a maximum fuel sulfur limit.

Revisions to Air Permit No. PSD-FL-344 (Five Twin Pac Simple Cycle Units)

The permit is revised to: remove the requirement to conduct compliance stack tests for VOC prior to the air operation permit renewal; increase the maximum heat input rate when firing natural gas from 635.6 MMBtu/hour (based on the higher heating value (HHV) and a compressor inlet temperature of 50° F) to 676.2 MMBtu/hour (based on the HHV and a compressor inlet temperature of 55.4° F); and increase the maximum heat input rate when firing distillate oil from 576.8 MMBtu/hour (based on the HHV and a compressor inlet temperature of 78° F) to 606.6 MMBtu/hour (based on the HHV and a compressor inlet temperature of 85.1° F).

The Department's full review of the project and rationale for issuing the draft permit is provided in the Technical Evaluation and Preliminary Determination.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-210 and 62-212. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).



1-26-09

Jeffery F. Koerner, P.E.
Registration No. 49441

(Date)



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

January 26, 2009

Mr. Mike Roddy, Manager of Environmental Affairs
Seminole Electric Cooperative, Inc.
P.O. Box 272000
Tampa, FL 33688-2000

Re: Midulla Generating Station
Draft/Proposed Permit No. 0490340-011-AV, Title V Permit Revision
Draft Permit No. 0490340-010-AC, Revisions to PSD-FL-214 and PSD-FL-344

Dear Mr. Roddy:

Enclosed is a Draft/Proposed permit package to revise original air construction permits PSD-FL-214 and PSD-FL-344 and concurrently revise Title V air operation permit 0490340-006-AV to incorporate these changes as well as the revisions made in previously issued final permit 0490340-012-AC for the Midulla Generating Station. The existing power plant is located in Hardee County at 6695 County Road 663 in Bowling Green, Florida. The permit package includes the following documents: the Written Notice of Intent to Issue Air Permits, the Public Notice of Intent to Issue Air Permits, the Draft Air Construction Permit Revision, the Technical Evaluation and Preliminary Determination, the Draft Title V Air Permit Revision and the Statement of Basis.

The Public Notice of Intent to Issue Air Permits is the actual notice that you must have published 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 Jeff Koerner at 850/921-9536.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/jfk

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

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

Seminole Electric Cooperative, Inc.
P.O. Box 272000
Tampa, Florida 33688-2000

Midulla Generating Station
Facility ID No. 0490340
Draft Permit No. 0490340-010-AC
Air Construction Permit Revisions
Draft/Proposed Permit No. 0490340-011-AV
Title V Air Permit Revision

Responsible Official:
Mr. Mike Roddy, Manager of Environmental Affairs

Facility Location: Seminole Electric Cooperative, Inc. operates the Midulla Generating Station, which is an existing electrical generating plant located in Hardee County at 6695 County Road 663 in Bowling Green, Florida. This station was formerly known as the Payne Creek Generating Station.

Project: Project No. 0490340-010-AC (PSD-FL-214E and PSD-FL-344B) will revise original air construction permit PSD-FL-214 for the existing two combined cycle combustion turbines (Units 1 and 2) and revise original air construction permit PSD-FL-344 for the existing five sets of simple cycle combustion turbines (CT-4A to CT-8B). These projects were subject to preconstruction review in accordance with Rule 62-212.400 of the Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality. Original air construction Permit No. PSD-FL-214 (Units 1 and 2) will be revised to: replace the current sulfuric acid mist emission limits with a fuel sulfur limitation; and establish the carbon monoxide emissions standard as a surrogate for volatile organic compounds. Original air construction Permit No. PSD-FL-344 (CT-4A to CT-8B) will be revised to: increase the maximum heat input rate when firing natural gas from 635.6 to 676.2 MMBtu/hour; increase the maximum heat input rate when firing distillate oil from 576.8 to 606.6 MMBtu/hour, and establish the carbon monoxide emissions standard as a surrogate for volatile organic compounds. The changes in maximum heat input rates are to reflect the actual installed capabilities of the equipment as documented by the manufacturer, Pratt & Whitney.

Project No. 0490340-011-AV will revise existing Title V air operation Permit No. 0490340-006-AV to incorporate the changes proposed in Project No. 0490340-010-AC. In addition, Project No. 0490340-011-AV will incorporate the final changes made in previously issued final Permit No. 0490340-012-AC for the existing five Twin Pac simple cycle combustion turbines. That final project replaced the requirement to conduct annual compliance tests for carbon monoxide upstream of the oxidation catalyst systems with a requirement to conduct periodic tests to determine the reactivity of the oxidation catalyst.

Details of the projects are provided in the attached documents.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the F.A.C. Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210 and 62-213, F.A.C. The projects are not exempt from the permitting procedures for air construction permits and Title V air operation permits. The Permitting Authority responsible for making a permit determination for this project is the Bureau of Air Regulation in the Florida Department of Environmental Protection's Division of Air Resource Management. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114.

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 and Draft/Proposed permits, the Statement of Basis, the Technical Evaluation and Preliminary Determination, the application, and the additional information submitted

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. The Draft/Proposed permit documents can be viewed at the following web site:
<http://www.dep.state.fl.us/air/eproducts/apds>.

Notice of Intent to Issue Permits with Parallel Review by EPA: The Permitting Authority gives notice of its intent to issue a Draft air construction permit revision and a concurrent Draft/Proposed Title V air operation permit revision for the projects 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 applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. The Permitting Authority will issue final permits in accordance with the conditions of the Draft/Proposed Permits unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

The EPA has agreed to treat the Draft Title V air operation permit as a Proposed Title V air operation permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period (parallel review). Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The Final Title V Air Operation Permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that result in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <http://www.epa.gov/region4/air/permits/Florida.htm>.

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 Permits (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 the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 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 and the draft/proposed Title V air operation permit and requests for a public meeting for a period of 30 days from the date of publication of this Public Notice. Written comments and requests for a public meeting must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 30-day period. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly. In addition, if a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received comments result in a significant change to a draft/proposed permit, the Permitting Authority shall revise the draft/proposed permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. All comments filed for these projects will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

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

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

#35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permits. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permits, 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 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 (in a proceeding initiated by another party) 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 when and how each petitioner received notice of the agency action or proposed decision; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; 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 Permit. 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 to the Draft Title V Air Operation Permit: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45 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. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the 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>.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

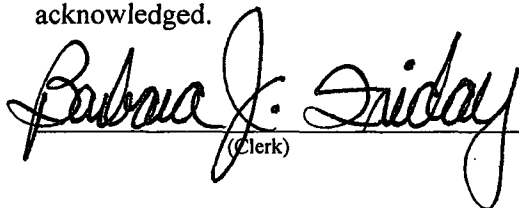
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permits package (including the Written Notice of Intent to Issue Air Permits, the Public Notice of Intent to Issue Air Permits, the Statement of Basis, the Technical Evaluation and Preliminary Determination and the Draft/Proposed Permits) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 1/26/09 to the persons listed below.

- Mr. Mike Roddy, SECI (wmroddy@seminole-electric.com)
- Mr. Juan Ramirez, Seminole Electric Cooperative, Inc. (jramirez@seminole-electric.com)
- Mr. Walt Hentze, Seminole Electric Cooperative, Inc. (whentze@seminole-electric.com)
- Mr. Tom Davis, ECT, Inc. (tdavis@ectinc.com)
- Mr. Mike Halpin, Siting Office (Halpin_M@dep.state.fl.us)
- Ms. Cindy Zhang-Torres, Southwest District Office (Cindy.Zhang-Torres@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epamail.epa.gov)
- Ms. Vickie Gibson, BAR Reading File (victoria.gibson@dep.state.fl.us)
- Ms. Barbara Friday, BAR Title V Section (barbara.friday@dep.state.fl.us)

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.

 1/26/09
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

Florida Department of Environmental Protection

Notice of Intent to Issue Air Permits

Seminole Electric Cooperative, Inc., Midulla Generating Station

Draft/Proposed Permit No. 0490340-011-AV, Title V Air Permit Revisions

Draft Permit No. 0490340-010-AC, Air Construction Permit Revisions

Applicant: The applicant for this project is Seminole Electric Cooperative, Inc. The applicant's responsible official is Mr. Mike Roddy, the Manager of Environmental Affairs for Seminole Electric Cooperative, Inc. The applicant's mailing address is P.O. Box 272000, Tampa, Florida 33688-2000.

Facility Location: Seminole Electric Cooperative, Inc. operates the Midulla Generating Station, which is an existing electrical generating plant located in Hardee County at 6695 County Road 663 in Bowling Green, Florida. This station was formerly known as the Payne Creek Generating Station.

Project: Project No. 0490340-010-AC (PSD-FL-214E and PSD-FL-344B) will revise original air construction permit PSD-FL-214 for the existing two combined cycle combustion turbines (Units 1 and 2) and revise original air construction permit PSD-FL-344 for the existing five sets of simple cycle combustion turbines (CT-4A to CT-8B). These projects were subject to preconstruction review in accordance with Rule 62-212.400 of the Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality. Original air construction Permit No. PSD-FL-214 (Units 1 and 2) will be revised to: replace the current sulfuric acid mist emission limits with a fuel sulfur limitation; and establish the carbon monoxide emissions standard as a surrogate for volatile organic compounds. Original air construction Permit No. PSD-FL-344 (CT-4A to CT-8B) will be revised to: increase the maximum heat input rate when firing natural gas from 635.6 to 676.2 MMBtu/hour; increase the maximum heat input rate when firing distillate oil from 576.8 to 606.6 MMBtu/hour; and establish the carbon monoxide emissions standard as a surrogate for volatile organic compounds. The changes in maximum heat input rates are to reflect the actual installed capabilities of the equipment as documented by the manufacturer, Pratt & Whitney.

Project No. 0490340-011-AV will revise existing Title V air operation Permit No. 0490340-006-AV to incorporate the changes proposed in Project No. 0490340-010-AC. In addition, Project No. 0490340-011-AV will incorporate the final changes made in previously issued final Permit No. 0490340-012-AC for the existing five Twin Pac simple cycle combustion turbines. That final project replaced the requirement to conduct annual compliance tests for carbon monoxide upstream of the oxidation catalyst systems with a requirement to conduct periodic tests to determine the reactivity of the oxidation catalyst.

Details of the projects are provided in the attached documents.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, F.S. and Chapters 62-4, 62-210 and 62-213, F.A.C. The projects are not exempt from the permitting procedures for air construction permits and Title V air operation permits. The Permitting Authority responsible for making a permit determination for this project is the Bureau of Air Regulation in the Florida Department of Environmental Protection's Division of Air Resource Management. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/488-0114.

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 and draft/proposed permits, the Statement of Basis, the Technical Evaluation and Preliminary Determination, the application, and the additional information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number

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listed above. The draft/proposed permit documents can be viewed at:
<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Notice of Intent to Issue Permits with Parallel Review by EPA: The Permitting Authority gives notice of its intent to issue a draft air construction permit revision and a concurrent draft/proposed Title V air operation permit revision for the projects 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 applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. The Permitting Authority will issue final permits in accordance with the conditions of the draft/proposed Permits unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

The EPA has agreed to treat the draft Title V air operation permit as a Proposed Title V air operation permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period (parallel review). Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The Final Title V Air Operation Permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that result in a different decision or significant change of terms or conditions. The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address: <http://www.epa.gov/region4/air/permits/Florida.htm>.

Comments: The Permitting Authority will accept written comments concerning the draft air construction permit and the draft/proposed Title V air operation permit and requests for a public meeting for a period of 30 days from the date of publication of this Public Notice. Written comments and requests for a public meeting must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 30-day period. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly. In addition, if a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received comments result in a significant change to a draft/proposed permit, the Permitting Authority shall revise the draft/proposed permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. All comments filed for these projects will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

Petitions: A person whose substantial interests are affected by the proposed permitting decisions 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 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or within fourteen 14 days of receipt of written notice, 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 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 (in a proceeding initiated by another party) 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

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

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 when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; 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 Public Notice of Intent to Issue Air Permits. 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 to the Draft Title V Air Operation Permit: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45 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. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the 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

Project No. 0490340-010-AC
Draft Air Construction Permit Revisions PSD-FL-214E and PSD-FL-344B
Miscellaneous Air Construction Permit Revisions

COUNTY

Hardee

APPLICANT

Seminole Electric Cooperative, Inc.
Midulla Generating Station
ARMS Facility ID No. 0490340

**PERMITTING
AUTHORITY**

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
New Source Review Section



January 26, 2009

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

Facility Description and Location

Seminole Electric Cooperative, Inc. operates the Midulla Generating Station, which is an existing electrical generating plant (SIC No. 4911) located in Hardee County at 6695 County Road 663 in Bowling Green, Florida. The UTM coordinates are Zone 17, 405 km East and 3057.7 km North. This station was formerly known as the Payne Creek Generating Station. The existing facility consists of two combined cycle combustion turbines (488 MW, total), ten simple cycle combustion turbines (300 MW, total) and miscellaneous ancillary support equipment. The combined cycle units are base loaded units and the simple cycle combustion turbines are used during peak periods of electrical power demand.

Combined Cycle Units

The combined cycle system consists of two combustion turbines, two heat recovery steam generators (HRSG), two exhaust stacks and common steam turbine-electrical generator. Without a bypass stack, each combustion turbine operates in combined cycle mode to generate 157.5 megawatts (MW) of direct power. Each HRSG recovers energy from the combustion turbine exhaust to provide steam to the shared steam turbine-electrical generator and produce an additional 173 MW of steam-generated power. The combined cycle combustion turbines are base loaded units. Emissions of particulate matter (PM), sulfur dioxide (SO₂) and sulfuric acid mist (SAM) are minimized by the firing of natural gas as the primary fuel and low sulfur distillate oil as a backup fuel. To control carbon monoxide (CO) and volatile organic compound (VOC) emissions, each unit is equipped with a catalytic oxidation system. To control nitrogen oxides (NO_x) emissions, each unit is equipped with dry low-NO_x combustion technology and selective catalytic reduction (SCR) for firing natural gas, and wet injection for firing distillate oil. The water-to-fuel ratio is continuously monitored and recorded for each unit. Pursuant to the federal Acid Rain program, each unit monitors NO_x emissions with a continuous emissions monitoring system (CEMS).

Simple Cycle Units

Each simple cycle system is known as a Twin Pac and consists of two combustion turbines, two exhaust stacks and common electrical generator. Each of the five Twin Pac systems is rated at 60 MW of direct power. The simple cycle units are used during periods of peak electrical demand. All units fire natural gas as the primary fuel and may fire low sulfur distillate oil as a backup fuel. To control CO and VOC emissions, all combustion turbines are equipped with catalytic oxidation systems. To control NO_x emissions for both natural gas and distillate oil firing, all units are equipped with water injection. The water-to-fuel ratio is continuously monitored and recorded for each unit. A NO_x CEMS is installed on one of the ten combustion turbines.

Regulatory Categories

- The facility is a synthetic minor source of hazardous air pollutants.
- The facility operates units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.).
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

On June 9, 2008, the Department received an application to revise original air construction permit PSD-FL-214 for the two combined cycle units and concurrently revise the existing Title V air operation permit, 0490340-006-AV. The applicant requests: removal of the requirement to conduct the annual compliance stack tests for VOC and SAM emissions; and replacement of the current SAM emission limits with a maximum fuel sulfur limit.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

On June 30, 2008, the Department received a revision to this application. The applicant also requests a revision of original air construction permit PSD-FL-344 for the five simple cycle combustion turbine sets and a concurrent revision of the existing Title V air operation permit, 0490340-006-AV. The new request is to: remove the requirement to conduct the annual compliance stack tests for CO upstream of the oxidation catalyst system; and to remove the requirement to conduct compliance stack tests for VOC prior to the air operation permit renewal.

On August 13, 2008, the Department received a revision to this application. The applicant also requests a revision of original air construction permit PSD-FL-344 for the five simple cycle combustion turbine sets and a concurrent revision of the existing Title V air operation permit, 0490340-006-AV. The new request is to: increase the maximum heat input rate when firing natural gas from 635.6 million British Thermal Units per hour (MMBtu/hour, based on the higher heating value (HHV) and a compressor inlet temperature of 50° F) to 676.2 MMBtu/hour (based on the HHV and a compressor inlet temperature of 55.4° F); and increase the maximum heat input rate when firing distillate oil from 576.8 MMBtu/hour (based on the HHV and a compressor inlet temperature of 78° F) to 606.6 MMBtu/hour (based on the HHV and a compressor inlet temperature of 85.1° F).

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference
62-210	Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review, PSD Review, and Non-attainment Area Review
62-213	Title V Air Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

Federal Regulations

This project is also subject to the applicable federal provisions regarding air quality as established by the Environmental Protection Agency (EPA) in the following sections of the Code of Federal Regulations (CFR).

<u>Title 40, CFR</u>	<u>Description</u>
Part 60	Subpart A - General Provisions for NSPS Sources NSPS Subpart GG – Stationary Gas Turbines

General PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's approved PSD program specified in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories defined for major stationary sources, or

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- 5 tons per year of lead.

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates as defined in Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

PSD Applicability for Project

The project is located in Hardee County, which is in an area that is currently in attainment with the state and federal AAQS or otherwise designated as unclassifiable. The facility is an existing PSD-major stationary source and the project is subject to a PSD applicability review. However, there are no expected actual emissions increases and only minor changes to the existing permit conditions are requested. Therefore, the project is not subject to PSD preconstruction review.

3. DEPARTMENT'S PROJECT REVIEW

Revisions to Permit PSD-FL-214, Combined Cycle Turbine Units 1 and 2

On September 28, 1995, the Department issued air construction Permit PSD-FL-214 which authorized Seminole Electric, Inc. to construct combined cycle combustion turbine Units 1 and 2. The original permit has been revised four times since initial issuance. For the current project, the applicant requests the following changes.

1. *Applicant Request:* Replace the current SAM emissions limits (1 lb/hour for gas firing and 22 lb/hour for oil firing) in Condition B.1 with a maximum fuel sulfur limit of pipeline natural gas and 0.05% by weight for distillate oil. As justification, the applicant cites consistency with "Department policy" regarding SAM emissions testing for combustion turbines.

Department Response: The Department reviews each PSD application on a case-by-case basis and establishes BACT in accordance with the regulatory requirements. It does not have a "Department policy" regarding SAM emission testing for combustion turbines. However, SAM emissions are generated based on the sulfur content of the fuel fired since there are no control devices or techniques available for reducing these emissions from the combustion turbines. Previous tests conducted for SAM emissions (2001 to 2007) demonstrate compliance with the standards. Therefore, the Department agrees to establish the following authorized fuels as the surrogate standards for SAM emissions: natural gas; and distillate oil with a maximum fuel sulfur content of 0.05% by weight. To accommodate this change, the following text will be added to the table in Condition B.1 under "Concentration" for SAM emissions.

"SAM emissions shall be controlled by complying with the fuel sulfur specifications of this permit. The SAM mass emissions rates shown are estimated maximum emissions. [PSD-FL-214E]"

No other changes were necessary because the authorized fuels are already established in Condition A.3.

2. *Applicant Request:* Remove the requirement in Condition C.1.f to conduct annual compliance tests for SAM emissions.

Department Response: Since the SAM emissions limit will be removed, the requirement to conduct annual testing will also be removed. Because this revises a BACT standard, the public comment period for this modification project will be 30 days.

3. *Applicant Request:* Replace the requirement in Condition C.1.e to conduct annual VOC compliance tests for each fuel fired for more than 400 hours per federal fiscal year with a requirement that VOC compliance tests are not required if a unit is in compliance with the CO emissions limit. As justification, the applicant cites consistency with "Department policy" regarding VOC emissions testing for combustion turbines.

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Department Response: See above regarding "Department policy". For combustion turbines, low CO emissions generally mean low VOC emissions. Previous tests conducted for VOC emissions (2001 to 2007) demonstrate compliance with the standards. Therefore, the condition will be revised to include the following provision, "Provided compliance is demonstrated with the CO emissions standards, subsequent compliance tests for VOC emissions are not required."

Revisions to Permit PSD-FL-344, Ten Simple Cycle Combustion Turbines CT-4A through CT-8B

On June 29, 2005, the Department issued air construction permit PSD-FL-344, which authorized Seminole Electric Cooperative, Inc. to construct five combustion turbine sets (Twin Pacs) consisting of two combustion turbines per set. The applicant requests the following changes to this permit.

1. *Applicant Request:* Currently, Condition 25a requires annual CO tests for each fuel type to be conducted both upstream and downstream of the oxidation catalyst. The results of the CO tests are then used to calculate the CO destruction efficiency of the oxidation catalyst. The applicant requests removal of the requirement to conduct the annual tests for CO upstream of the oxidation catalyst. The applicant states that the annual CO tests are unnecessary since compliance is demonstrated by the results of the CO emissions tests conducted on the combustion turbine exhaust. In addition, testing CO emissions upstream of the oxidation catalyst is problematic due to space constraints.

Department Response: In September of 2008, the Department issued final Project No. 0490340-012-AC (PSD-FL-344A) as a separate permitting action, which modified original Permit No. PSD-FL-344 to revise the CO test requirements. No further revision to the air construction permit is necessary.

2. *Applicant Request:* Currently, Condition 26 requires VOC compliance tests prior to air operation permit renewal. Similar to the VOC testing requirements for Units 1 and 2, the applicant requests replacing this provision with a requirement that VOC compliance tests are not required if a unit is in compliance with the CO emissions limit.

Department Response: Again, for combustion turbines, low CO emissions generally mean low VOC emissions. Previous tests conducted for VOC emissions (2006 to 2008) demonstrate compliance with the standards. Therefore, the condition will be revised to include the following provision, "Provided compliance is demonstrated with the CO emissions standards, subsequent compliance tests for VOC emissions are not required."

3. *Applicant Request:* The applicant requests a revision to: increase the maximum heat input rate when firing natural gas from 635.6 MMBtu/hour (HHV and a compressor inlet temperature of 50 deg. F) to 676.2 MMBtu/hour (HHV and a compressor inlet temperature of 55.4 deg. F); and increase the maximum heat input rate when firing distillate oil from 576.8 MMBtu/hour (HHV and a compressor inlet temperature of 78 deg. F) to 606.6 MMBtu/hour (HHV and a compressor inlet temperature of 85.1 deg. F). The maximum heat input rates are for base load operation at 80% relative humidity and an ambient air pressure of 14 psia. The requested rates reflect the maximum heat input rates provided by the gas turbine manufacturer, Pratt & Whitney. The units will continue to comply with all current emissions standards and operating limitations in all valid permits.

Department Response: The applicant provided data from the manufacturer, Pratt & Whitney, to verify the higher heat input rates. In September of 2008, the Department issued an exemption from the requirement to obtain an air construction permit to authorize temporary operation at the higher heat input rates to gather operational and emissions data. Data collected during previous tests as well as the 2008 tests indicate that the Twin Pac units are capable of complying with the existing emissions standards while operating at the requested higher heat input rates. Unit 5B was removed from service and returned to Pratt & Whitney for repair. Tests conducted on Unit 5B after being reinstalled, also confirm compliance with the emissions standards at the increased heat input rates.

The Department considers this action a minor revision to identify the actual installed maximum heat input

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

rates because these units recently began operation in 2006, require no additional modifications to realize the increased heat input rates, and will not result in any emissions increases. The permit will be revised accordingly.

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 permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Jeff Koerner 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.

DRAFT PERMIT

NOTICE OF FINAL PERMIT REVISION

In the Matter of an
Application for Permit by:

Mr. Mike Roddy, Manager of Environmental Affairs
Seminole Electric Cooperative, Inc.
P.O. Box 272000
Tampa, FL 33688-2000

Permit Nos. PSD-FL-214E and PSD-FL-344B
Project No. 0490340-010-AC
Midulla Generating Station
Facility ID No. 0490340
Miscellaneous Air Construction Permit Revisions

Enclosed is Final Permit Nos. PSD-FL-214E and PSD-FL-344B (Project No. 0490340-010-AC), which revises the original air construction permits for the two combined cycle units and five combustion turbine sets, respectively, at Seminole Electric Cooperative, Inc.'s Midulla Generating Station. This facility is an existing electrical power plant (SIC No. 4911) located in Hardee County at 6695 County Road 663 in Bowling Green, Florida. This plant was formerly known as the Payne Creek Generating Station. A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order 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 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

(DRAFT)

Joseph Kahn, Director
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 1/26/09 to the persons listed below.

- Mr. Mike Roddy, SECI (wmroddy@seminole-electric.com)
- Mr. Juan Ramirez, Seminole Electric Cooperative, Inc. (jramirez@seminole-electric.com)
- Mr. Walt Hentze, Seminole Electric Cooperative, Inc. (whentze@seminole-electric.com)
- Mr. Tom Davis, ECT, Inc. (tdavis@ectinc.com)
- Mr. Mike Halpin, Siting Office (Halpin_M@dep.state.fl.us)
- Ms. Cindy Zhang-Torres, Southwest District Office (Cindy.Zhang-Torres@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epamail.epa.gov)
- Ms. Vickie Gibson, BAR Reading File (victoria.gibson@dep.state.fl.us)

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.

Paula J. Friday (Clerk) 1/26/09 (Date)

REVISIONS TO PERMIT PSD-FL-214

The original air construction permit had previously been modified by PSD-FL-214A, PSD-FL-214B, PSD-FL-214C and PSD-FL-214D. All construction related to this project is complete and no further construction is authorized by this action. The following permit conditions are revised as follows. Deleted text is shown as ~~strikethrough~~ and new added text is shown with double underline. All other conditions are unchanged and the affected emissions units remain subject to the applicable requirements.

B. Emission Limits

1. Pursuant to Rule 62-212.410, F.A.C., BACT (now Rule 62-212.400, F.A.C.), 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)</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	Compliance with the PM/PM ₁₀ mass emissions limits shall be demonstrated with initial tests only. Thereafter, compliance with the fuel sulfur specifications of this permit shall serve as a surrogate for compliance with the emissions limits.	7	65	147
	Oil		67	100	
SO ₂	Gas	SO ₂ emissions shall be controlled by complying with the fuel sulfur specifications of this permit. The SO ₂ mass emissions rates shown are estimated maximum emissions.	5	65	182
	Oil		101	100	
VOC	Gas	5 ppmvd	10	88	99
	Oil	10 ppmvd	21	31	
Sulfuric Acid Mist (SAM)	Gas	SAM emissions shall be controlled by complying with the fuel sulfur specifications of this permit. The SAM mass emissions rates shown are estimated maximum emissions. <u>PSD-FL-214E</u>	1	6	39
	Oil		22	34	
Visible Emissions	Gas		≤ 10 percent opacity		
	Oil		≤ 10 percent opacity		

{Permitting Note: The emissions limitations for beryllium and arsenic were removed in PSD-FL-214B.}

- (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 15 ppmvd is corrected to 15 percent O₂. Compliance shall be determined through the initial stack tests and by CEMS thereafter.
- (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 stack tests and by CEMS thereafter.

C. Performance Testing

1. Initial (I) compliance tests shall be performed on each CT using each fuels. Annual (A) compliance tests shall be performed on each CT for each fuel used for more than 400 hours in the federal fiscal year. Tests shall also be conducted prior to permit renewal (R). Testing of emissions shall be conducted at 90% to 100% of the permitted maximum heat input rate for each fuel at average ambient conditions during the test. Tests shall be conducted using EPA reference in Chapter 62-297, F.A.C, and follows:

- a. Reference Method 5B for PM (I: for oil only, assumption is that all PM is PM₁₀). No subsequent testing is required unless requested by the Department pursuant to Rule 62-297.310(7)(b), F.A.C.
- b. Reference Method 9 for VE (I, A, ~~R~~ for oil only).
- c. Reference Method 10 for CO (I, A, ~~R~~).
- d. Reference Method 20 or 7E for NO_x (I). Thereafter, compliance shall be demonstrated by NO_x CEMS.
- e. Reference Method 18 or 25A for VOC (I, ~~A~~). ~~Provided compliance is demonstrated with the CO emissions standards, subsequent compliance tests for VOC emissions are not required.~~
- f. Reference Method 8 for H₂SO₄ Mist (I, ~~A~~).
- g. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I and A), which can be used for determining SO₂ emissions annually.
- h. ASTM D1072-80, D3031-81, D4084-82, or D3246-81 (or equivalent) for sulfur content of natural gas (I and A, if deemed necessary by the Department).
- i. Other U.S. EPA 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.

REVISIONS TO PERMIT NO. PSD-FL-344

The original air construction permit had previously been modified by PSD-FL-344A for revised CO testing. All construction related to this project is complete and no further construction is authorized by this action. The following permit conditions are revised as follows. Deleted text is shown as ~~striketrough~~ and new added text is shown with double underline. All other conditions are unchanged and the affected emissions units remain subject to the applicable requirements.

Emissions Performance Testing

4. Permitted Capacity: The heat input to each combustion turbine set from firing natural gas shall not exceed 635.6 ~~676.2~~ MMBtu per hour based on the following: 100% base load, a higher heating value (HHV) for natural gas and a compressor inlet air temperature of 50 ~~55.4~~° F. The heat input to each combustion turbine set from firing No. 2 fuel oil shall not exceed 576.8 ~~606.6~~ MMBtu per hour based on the following: 100% base load, HHV and a compressor inlet air temperature of 78 ~~85~~° F. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Heat input rates will vary depending upon compressor conditions and the combustion turbine characteristics. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves on file with the Department. [Design, Rule 62-210.200, F.A.C. (Definition - PTE)]

25. Annual Performance Tests:

Note: The following condition incorporates the changes from previously issued Permit No. PSD-FL-344A for revised CO testing. Therefore, only the changes in current Project No. 0490340-010-AC (PSD-FL-344B) are shown in ~~striketrough~~ and double underline.

(a) To demonstrate compliance with the emission standards specified in this permit, the permittee shall conduct annual performance tests for NO_x, CO, and visible emissions for each combustion turbine on each fuel. ~~Provided compliance is demonstrated with the CO emissions standards, subsequent compliance tests for VOC emissions are not required. VOC emission tests are not required annually provided the CO emission standards are being met.~~ The CO standard shall be demonstrated initially by the measurement of CO emissions upstream and downstream of the oxidation catalyst and by calculating CO removal efficiency; thereafter, compliance with the CO standard shall be demonstrated by conducting tests downstream of the oxidation catalyst. Within the first 24 months of operation, the permittee shall have one coupon of the catalyst from each Twin Pac (5 total) analyzed for catalytic reactivity. Subsequent samples shall be taken at 24-month intervals (± 2 months) and analyzed for catalytic reactivity. The purpose of the sampling program is to track the loss of catalyst reactivity. Based on data collected for the samples, the operator shall appropriately plan for the addition of catalyst or the replacement of catalyst as necessary to ensure compliance with the emissions standards of this permit. Within 60 days of determining the catalyst reactivity, the permittee shall submit a report to the Compliance Authority summarizing the results, the general trend of catalyst reactivity, all CO emissions tests and plans for adding or replacing catalyst. Testing for ammonia slip is required during the first scheduled annual performance tests after the cumulative hours of operation on each combustion turbine exceed 1,500 hours of oil firing or 5,000 hours of gas firing starting from the initial installation of the SCR catalysts. Thereafter, ammonia testing is required during the first scheduled annual performance tests after subsequent cumulative 1,500 hours of oil firing and 5,000 hours of gas firing in each combustion turbine or after regeneration, replacement or addition to the SCR catalyst system. If conducted at permitted capacity, NO_x emissions data collected during the annual NO_x continuous monitor RATA required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th). In the event that the operation of a combustion turbine is

less than 400 hours per year on natural gas or distillate oil, annual testing is not required for that year and that fuel. [Rule 62-297.310(7)(a), F.A.C.]

There are no changes to paragraphs (b) and (c).

26. Tests Prior to Permit Renewal: Prior to renewing the air operation permit, the permittee shall conduct performance tests for CO, NO_x, ~~VOC~~ and visible emissions from each combustion turbine. ~~Provided compliance is demonstrated with the CO emissions standards, subsequent compliance tests for VOC emissions are not required.~~ Testing for ammonia slip meeting the requirements of Condition 25 (above) "Annual Performance Tests" will satisfy the requirements of this condition. These tests shall be conducted within the 12-month period prior to renewing the air operation permit. For pollutants required to be tested annually, the permittee may submit the most recent annual compliance test to satisfy the requirements of this provision. [Rule 62-297.310(7)(a)3, F.A.C.]

Friday, Barbara

To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC
Attachments: 0490340010AC-011AVCombinedWrittenNoticeofIntent.pdf

Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". **We must receive verification that you are able to access the documents.** Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0490340.010.AC.D_pdf.zip

Attention: Jeff Koerner

Owner/Company Name: SEMINOLE ELECTRIC COOPERATIVE, INC.
Facility Name: MIDULLA GENERATING STATION
Project Number: 0490340-010-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HARDEE

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

Friday, Barbara

From: Exchange Administrator
Sent: Monday, January 26, 2009 12:56 PM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)
Attachments: ATT127400.txt; SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

WMRoddy@seminole-electric.com
JRamirez@seminole-electric.com
whentze@seminole-electric.com

Friday, Barbara

From: Juan Ramirez [JRamirez@seminole-electric.com]
Sent: Monday, January 26, 2009 1:00 PM
To: Friday, Barbara
Subject: Re: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATINGSTATION;
0490340-010-AC

Received. Thanks,

Juan Ramirez
Senior Environmental Engineer
Seminole Electric Cooperative Inc.
16313 N. Dale Mabry
Tampa, FL 33618
813-739-1219 Office
813-610-4748 Cell
813-264-7906 Fax

>>> "Friday, Barbara" <Barbara.Friday@dep.state.fl.us> 1/26/2009 12:55 PM >>>

Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". **We must receive verification that you are able to access the documents.** Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0490340.010.AC.D_pdf.zip

Attention: Jeff Koerner

Owner/Company Name: SEMINOLE ELECTRIC COOPERATIVE, INC.
Facility Name: MIDULLA GENERATING STATION
Project Number: 0490340-010-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HARDEE

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please

advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

**** NOTICE ****

This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential, proprietary and privileged information. Any un-authorized review, copying, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

Friday, Barbara

From: Exchange Administrator
Sent: Monday, January 26, 2009 12:56 PM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)
Attachments: ATT127397.txt; SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

tdavis@ectinc.com

Friday, Barbara

From: Tom Davis [tdavis@ectinc.com]
Sent: Monday, January 26, 2009 1:06 PM
To: Friday, Barbara
Subject: RE: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC

Barbara,

I have received and can view the documents provided.

Thanks.

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Monday, January 26, 2009 12:55 PM
To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC

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Attention: Jeff Koerner

Owner/Company Name: SEMINOLE ELECTRIC COOPERATIVE, INC.
Facility Name: MIDULLA GENERATING STATION
Project Number: 0490340-010-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HARDEE

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Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any

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Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Friday, Barbara

From: System Administrator
To: Halpin, Mike
Sent: Monday, January 26, 2009 12:55 PM
Subject: Delivered:SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC

Your message

To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC
Sent: 1/26/2009 12:55 PM

was delivered to the following recipient(s):

Halpin, Mike on 1/26/2009 12:55 PM

Friday, Barbara

From: Zhang-Torres
To: Friday, Barbara
Sent: Monday, January 26, 2009 12:58 PM
Subject: Read: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION;
0490340-010-AC

Your message

To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC
Sent: 1/26/2009 12:55 PM

was read on 1/26/2009 12:58 PM.

Friday, Barbara

From: System Administrator
To: Koerner, Jeff; Zhang-Torres; Gibson, Victoria
Sent: Monday, January 26, 2009 12:55 PM
Subject: Delivered:SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC

Your message

To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC
Sent: 1/26/2009 12:55 PM

was delivered to the following recipient(s):

Koerner, Jeff on 1/26/2009 12:55 PM
Zhang-Torres on 1/26/2009 12:55 PM
Gibson, Victoria on 1/26/2009 12:55 PM

Friday, Barbara

From: Gibson, Victoria
To: Friday, Barbara
Sent: Monday, January 26, 2009 1:06 PM
Subject: Read: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION;
0490340-010-AC

Your message

To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC
Sent: 1/26/2009 12:55 PM

was read on 1/26/2009 1:06 PM.

Friday, Barbara

From: Mail Delivery System [MAILER-DAEMON@mseive02.rtp.epa.gov]
Sent: Monday, January 26, 2009 12:56 PM
To: Friday, Barbara
Subject: Successful Mail Delivery Report
Attachments: Delivery report; Message Headers

This is the mail system at host mseive02.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<Forney.Kathleen@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250
OK, sent 497DF926_31930_1191_1 4F4B41DC009

<abrams.heather@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250
OK, sent 497DF926_31930_1191_1 4F4B41DC009

Friday, Barbara

From: Halpin, Mike
To: Friday, Barbara
Sent: Monday, January 26, 2009 12:56 PM
Subject: Read: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION;
0490340-010-AC

Your message

To: Mike Roddy
Cc: Juan Ramirez; whentze@seminole-electric.com; Tom Davis; Halpin, Mike; Zhang-Torres; Forney.Kathleen@epamail.epa.gov; abrams.heather@epamail.epa.gov; Gibson, Victoria; Koerner, Jeff
Subject: SEMINOLE ELECTRIC COOPERATIVE, INC. - MIDULLA GENERATING STATION; 0490340-010-AC
Sent: 1/26/2009 12:55 PM

was read on 1/26/2009 12:56 PM.