



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

October 21, 2005

Mr. Michael P. Opalinski, Vice President of Technical Services
Seminole Electric Cooperative, Inc.
Seminole Generating Station
Post Office Box 272000
Tampa, Florida 33688

Re: Title V Air Operation Permit Revision
PROPOSED Permit Project No.: 1070025-003-AV
Renewal of Title V Air Operation Permit No.: 1070025-002-AV
Seminole Generating Station

Dear Mr. Opalinski:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Seminole Generating Station located East of U.S. Highway 17, approximately seven miles north of Palatka, Putnam County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Jonathan Holtom, P.E., at 850/921-9531.

Sincerely,

Trina L. Vielhauer (electronically signed)

Trina L. Vielhauer
Chief
Bureau of Air Regulation

TV/h
Enclosures

E-mail Copy furnished to:
Mr. Thomas W. Davis, P.E., Ph.D., Environmental Consulting & Technology (tdavis@ectinc.com)
Mr. Chris Kirts, NED (chris.kirts@dep.state.fl.us)
U.S. EPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

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

Proposed Permit No.: 1070025-003-AV

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" to Seminole Electric Cooperative, Inc., for the Seminole Generating Station located East of U.S. Highway 17, approximately seven miles north of Palatka, Putnam County, was clerked on September 7, 2005. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was published in The Palatka Daily News on September 13, 2005. The DRAFT Title V Air Operation Permit was available for public inspection at the permitting authority's office in Tallahassee and the Department's Northeast District office in Jacksonville. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was received on October 6, 2005.

II. Public Comment(s).

No Public Comments were received during the 30 (thirty)-day public comment period.

III. Conclusion.

The permitting authority will issue the PROPOSED Permit Number 1070025-003-AV, with no changes from the DRAFT permit.

STATEMENT OF BASIS

Seminole Electric Cooperative, Inc.
Seminole Generating Station
Facility ID No.: 1070025
Putnam County

Title V Air Operation Permit Revision
PROPOSED Permit No.: 1070025-003-AV

This Title V air operation permit revision 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 714.6 megawatts, electric, coal fired steam electric generators; a coal handling and storage system; a limestone unloading, handling and storage system, and a flue gas desulfurization (FGD) sludge stabilization system.

The purpose of this Title V permit revision is to reflect the removal of an ambient monitoring station for sulfur dioxide and total suspended particulate matter that was authorized by a revision to the Power Plant Site Certification, issued July 5, 2005, and to replace Appendix TV-4, Title V Conditions (version dated 02/12/02) with Appendix TV-5, Title V Conditions (version dated 03/28/05).

The following changes are the only changes being made to permit No. 1070025-002-AV as a result of this permitting project:

1. To reflect the replacement of Appendix TV-4, Title V Conditions (version dated 02/12/02) with Appendix TV-5, Title V Conditions (version dated 03/28/05), the following changes have been made:

(a) The reference to Appendix TV-4 under the Referenced Attachments section on the Placard page has been changed to Appendix TV-5.

(b) In **Section II. Facility-wide Conditions**, Condition Number 1. has been changed:

FROM:

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 a copy when requested or otherwise appropriate.}

TO:

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

(c) In **Section II. Facility-wide Conditions**, Condition Number 8. has been changed:

FROM:

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS):

The following requirements are “not federally enforceable”:

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and plant grounds;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible; and,
- e. Other techniques as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the renewal Title V permit application received July 2, 2004.]

TO:

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-5, TITLE V CONDITIONS):

The following requirements are “not federally enforceable”:

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and plant grounds;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible; and,
- e. Other techniques as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the renewal Title V permit application received July 2, 2004.]

(d) In **Section II. Facility-wide Conditions**, Condition Number 10. has been changed:

FROM:

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.)}

TO:

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-5, TITLE V CONDITIONS.)}

(e) Appendix TV-4, Title V Conditions (version dated 02/12/02) has been replaced by Appendix TV-5, Title V Conditions (version dated 03/28/05).

2. To reflect the authorized removal of the ambient monitoring station and it's associated reporting requirements, Specific Conditions A.72. and A.73. have been changed:

FROM:

Ambient Monitoring.

A.72. Not Federally Enforceable Air Monitoring Program. The permittee shall operate an ambient monitoring device for sulfur dioxide in accordance with EPA reference methods in 40 CFR, Part 53 an ambient monitoring device for total suspended particulate as shown in Figure 1, previously submitted as a part of the Power Plant Site Certification. The monitoring device shall be specifically located at a location approved by the Department. The frequency of operation shall be every six days commencing as specified by the Department. The ambient monitoring program may be reviewed annually by the Department and the permittee.

[PA 78-10, Revised August 10, 1989]

A.73. Not Federally Enforceable Air Monitoring Program Reporting. Ambient air monitoring data shall be reported to the Department quarterly commencing on the date of certification by the last day of the month following the quarterly reporting period utilizing the SAROAD or other format approved by the Department in writing.

[PA 78-10, Revised August 10, 1989]

TO:

Ambient Monitoring.

A.72. Reserved.

[PA 78-10, Revised July 5, 2005]

A.73. Reserved.

[PA 78-10, Revised July 5, 2005]

The remainder of the Title V permit remains unchanged and is as described below:

Steam Electric Generator Nos. 1 and 2 are coal fired utility, dry bottom wall-fired boilers, each having a maximum generator rating of 714.6 megawatts, electric. The maximum heat input to

each emissions unit is 7,172 million Btu per hour. Steam Electric Generator Nos. 1 and 2 are each equipped with an electrostatic precipitator (ESP) to control particulate matter, a wet limestone flue gas desulfurization (FGD) unit to control sulfur dioxide, and low NO_x burners and low excess-air firing to control nitrogen oxides. The emissions units are regulated under Acid Rain, Phase II and Phase I; NSPS - 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated August 9, 1979. Steam Electric Generator No. 2 began commercial operation in 1984 and Steam Electric Generator No. 1 began commercial operation in 1985. These units are subject to a PM emission limit of 0.03 pound per million Btu heat input, which was established through BACT. The applicant has presented historical PM test results which show the average results of the annual tests for the past eleven years to be 0.0151 pound per million Btu for Unit #1 and 0.0146 pound per million Btu for Unit #2. The Department has determined that the appropriate test frequency is annual, as justified by the low emission rate documented in previous emissions tests. Units 1 and 2 are subject to CAM for monitoring controlled emissions of particulate matter. Units 1 and 2 are not subject to CAM for controlled emissions of SO₂ because CEMS are used for continuous compliance. Units 1 and 2 are not subject to CAM for NO_x because there are no add-on control devices.

The coal receiving, storage and transfer systems at the coal storage yard support the operation of the two power boilers. Particulate matter emissions are controlled at the "as-received transfer tower", the "as-fired transfer tower", and the conveyors to the silos by fabric filter systems. Water sprays, full enclosures or partial enclosures are also utilized, where appropriate. The emissions unit is regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 15, 1979. The coal storage yard began commercial operation in 1985.

The limestone handling and storage system consists of a limestone unloading facility where particulate matter emissions are controlled by a panel filter, a limestone handling and storage system which utilizes a partial enclosure to control particulate matter emissions. In the FGD sludge processing system particulate emissions, which originate from the transfer of quicklime and fly ash from both truck and rail delivery, are controlled by the use of bag house filters. Scrubbers are also utilized to control particulate emissions in the FGD sludge processing building. The emissions unit is regulated under Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated June 15, 1979.

For purposes of periodic monitoring for the pollutants SO₂, NO_x, and opacity, the permittee will utilize continuous emission monitors, which are otherwise required by the Acid Rain program and/or 40 CFR Part 60.

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

Based on the Title V permit renewal application received July 2, 2004, this facility is a major source of hazardous air pollutants (HAPs).

Seminole Electric Cooperative, Inc.
Seminole Generating Station
Facility ID No.: 1070025
Putnam County

Title V Air Operation Permit REVISION

PROPOSED Permit Project No.: 1070025-003-AV
(1st Revision to Renewed Title V Permit No.: 1070025-002-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting North 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
Northeast District Office
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590
Telephone: 904/807-3300
Fax: 904/448-4319

Permittee:
Seminole Electric Cooperative, Inc.
16313 North Dale Mabry Highway
Tampa, Florida 33618

PROPOSED Permit No.: 1070025-003-AV
Facility ID No.: 1070025
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit REVISION

The purpose of this permit is to revise Title V Air Operation Permit, No. **1070025-002-AV**, for the operation of the Seminole Generating Station, to reflect the authorized removal of the ambient monitoring station and to replace Appendix TV-4, Title V Conditions (version dated 02/12/02) with Appendix TV-5, Title V Conditions (version dated 03/28/05). This facility is located east of U.S. Highway 17, approximately seven miles north of Palatka, Putnam County.

This Title V air operation permit REVISION 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.

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-5, Title V Conditions (version dated 03/28/05)
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 (40 CFR 60; July 1996)
Appendix 40 CFR 60 Subpart A - General Provisions (version dated 07/01/03)
Phase II Acid Rain Application/Compliance Plan received 06/08/04
Phase II NO_x Compliance Plan dated 06/29/04.
Attachment Seminole Electric Cooperative: Protocol for Startup and Shutdown
Appendix CAM
Seminole Electric Cooperative, Inc.: Support Systems Operation Manual Plant Practice Section

Effective Date: January 1, 2005
Renewal Application Due Date: July 5, 2009
1st Revision Effective date: (Day 55)
Expiration Date: December 31, 2009

Michael G. Cooke, Director
Division of Air Resource Management

MGC/jk/jh

The following conditions supersede the corresponding conditions of permit No. 1070225-002-AV. No other changes have been made as a result of this permitting project. The changed conditions listed below are the only portions of the Title V permit that are open to Public Comment as a result of this permitting action.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-5, TITLE V CONDITIONS):

The following requirements are “not federally enforceable”:

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and plant grounds;
- c. Landscaping or planting of vegetation;
- d. Confining abrasive blasting where possible; and,
- e. Other techniques as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the renewal Title V permit application received July 2, 2004.]

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-5, TITLE V CONDITIONS.)}

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

Ambient Monitoring.

A.72. Reserved.

[PA 78-10, Revised July 5, 2005]

A.73. Reserved.

[PA 78-10, Revised July 5, 2005]