



Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

(Sent by Electronic Mail – Return Receipt Requested)

Mr. James Frauen, VP Technical Services and Development: [jffrauen@seminole-electric.com](mailto:jfrauen@seminole-electric.com)
Seminole Electric Cooperative, Inc. (SECI)
16313 North Dale Mabry Highway
Tampa, Florida 33618

Re: Title V Air Operation Permit Renewal
Proposed Permit No. 0490340-018-AV
Midulla Generating Station

Dear Mr. Frauen:

One copy of the proposed permit determination for the renewal of the Title V air operation permit for the Midulla Generating Station located in Hardee County at 6697 N. County Road 663, Bowling Green, Florida, is enclosed. This letter is only a courtesy to inform you that the draft permit has become a proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review.

Interested persons may view the proposed permit by visiting the following website: **Error! Hyperlink reference not valid.** <https://fldep.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the proposed Title V air operation 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permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.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 Jon Holtom, P.E., at 850/717-9079 or by email at jon.holtom@dep.state.fl.us.

Sincerely,

for:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr/jh

Copies sent by electronic mail to the following:

Ms. Mary Henderson, Seminole Electric: mhenderson@seminole-electric.com
Mr. Michael Ballenger, P.E., Trinity Consultants: mballenger@trinityconsultants.com
Mr. Scott Osbourn, P.E., Trinity Consultants: sosbourn@trinityconsultants.com
DEP Southwest District: swd_air@dep.state.fl.us
DEP Siting Office: SCO@dep.state.fl.us
EPA Region 4: R4TitleVFL@epa.gov
Ms. Lynn Searce, DEP OPC: lynn.searce@dep.state.fl.us
Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us

NOTICE OF PROPOSED PERMIT

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.

PROPOSED PERMIT DETERMINATION

Permit No. 0490340-018-AV

I. Public Notice.

An Intent to Issue Air Permit issued to Seminole Electric Cooperative, Inc., for the Midulla Generating Station located in Hardee County at 6697 N. County Road 663, Bowling Green, Florida, was clerked on August 2, 2017. The Public Notice of Intent to Issue Air Permit was published in The Herald Advocate on August 24, 2017. The draft Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent to Issue Air Permit was received on August 25, 2017.

II. Public Comment(s).

No Comments were received from the public during the 30-day public comment period; however, comments were received from the consulting engineer on behalf of the Permittee. The comments were not considered significant enough to reissue the draft Title V air operation permit and require another Public Notice; therefore, the draft Title V air operation permit was changed. Those comments are addressed below. Additions to the permit are indicated by a double underline. Deletions from the permit are indicated by a ~~strike-through~~.

Letter from Michael Ballenger, P.E., dated September 25, 2017.

Comment 1. Specific Condition A.5. – Requesting clarity of compliance tracking for mass emission limits based on actual ambient conditions. Based on the detailed information provided in the attachments to the submitted comments, SECI requests that DEP add the following permitting note to provide the clarity of compliance demonstration with the delineated numerical emissions limits, consistent with the underlying PSD permit:

Permitting Note: Compliance with the mass emissions limitations (in terms of lb/hour/unit and tpy) are based on comparing the actual observed emission rates at actual ambient conditions directly to the corresponding numerical limits listed in this permit.

Response 1. Upon review of the information submitted with this comment and the underlying PSD permit along with subsequent revisions, it appears that the NO_x limits with which to show continuous compliance are the concentration-based limits of 9 ppmvd for gas and 42 ppmvd for oil. Both limits are based on a correction to 15 percent O₂ on a 3-hour rolling average. The hourly mass-based NO_x limits appear to have been established during the modeling that was conducted as part of the original PSD permit when demonstrating that a violation of the 1-hour ambient standard for ozone would not occur. To verify this, the model inputs used a conservatively low temperature for the Midulla location of 32° F, the 100 percent operational load achievable at that temperature, and the proposed concentration-based BACT limit. These inputs calculated out to maximum “worst case” pound per hour limits that were then apparently used to provide assurances that the 1-hour ambient ozone standard would be protected. The concentration-based limits were subsequently reduced, which also resulted in a reduction to the worst-case hourly mass rate, further ensuring that the ambient standards would not be exceeded. At temperatures greater than 32° F, the maximum design heat input rates cannot be achieved without inlet air chilling, so the resulting hourly mass emissions will be less at the maximum concentration-based limits. The permit requires that manufacturer curves or equations of heat input and NO_x emission rate (lb/hour) corrections to other temperatures be provided to the Department and kept on-site. Continuous compliance with the concentration-based NO_x emissions limits is based on the data obtained by the CEMS. Since the removal of annual stack testing requirements through permit No. 0490340-008-AC/PSD-FL-214D, the Title V permit does not require a demonstration of compliance with the hourly mass-based emissions limits on any set frequency, so programming the data acquisition handling system to demonstrate compliance with the hourly mass-based limits is not necessary. To help clarify that continuous compliance with the 1-hour mass-based limits is not required, Specific Condition A.5.a. has been revised as shown and the following permitting note has been added after Specific Condition A.5.

- a. *Hourly emissions limitation for Gas or Oil.* These emissions in lb/hour/unit are based on a 1-hour average as determined by the applicable performance tests or CEMS data. These emission calculations are also based on a compressor inlet temperature of 32°F.

PROPOSED PERMIT DETERMINATION

Permitting Note: Continuous compliance with the hourly mass-based emissions limitations (in terms of lb/hour/unit and tpy) is not required. Upon request, the permittee shall be able to demonstrate compliance with these limits based on data obtained while performing either stack tests or the required CEMS RATA, including a temperature correction to 32° F, if necessary.

Comment 2. Specific Condition A.6. – requesting clarity of compliance methods and corresponding averaging periods to meet the lb/hr/unit emissions limitations.

Response 2. For the reasons discussed in Response 1, above, Specific Condition A.6.a. & b. is further clarified, as shown in green highlight:

- A.6. Nitrogen Oxides (NO_x).** As determined by CEMS and stack tests, the emissions of NO_x shall not exceed:
- Natural Gas:* 9 ppmvd, corrected to 15 percent O₂ (based on CEMS data, 3-hour rolling average); 68 lb/hr (based on stack tests 1-hour average based on CEMS data, if requested) and 596 tons/year (two units, based on CEMS data).
 - Fuel Oil:* 42 ppmvd, corrected to 15 percent O₂ (based on CEMS data, 3-hour rolling average); 336 lb/hr (based on stack tests 1-hour average based on CEMS data, if requested) and 504 tons/ year (two units, based on CEMS data).
 - Natural Gas and Fuel Oil:* 906 tons/year (both units), based on data collected by the CEMS (see Specific Condition A.14.b.4.).

[Rule 62-212.400(PSD), F.A.C., PSD-FL-214, PSD-FL-214A, and PSD-FL-214D (0490340-008-AC)]

Comment 3. Specific Condition A.16. – requesting a permitting note clarifying when water injection is required.

Response 3. Pursuant to the Technical Evaluation and Preliminary Determination for construction permit No. PSD-FL-214, water injection is only required while firing oil. To help clarify, the new permitting note after Specific Condition A.16. is revised, as shown in green highlight.

[Permitting Note: See 40 CFR 60.334 contained in Appendix NSPS, Subpart GG, Standards of Performance for Stationary Gas Turbines, for applicable requirements related to the use of a NO_x CEMS as an alternative to maintaining water-to-fuel monitoring equipment. Water-to-fuel monitoring is only required when water injection is being utilized to control NO_x emissions while firing oil. Neither water injection nor water-to-fuel monitoring are required while firing gas.]

Comment 4. Specific Condition B.9.a. – requesting a permitting note clarifying the mass emissions total is the enforceable limit.

Response 4. The enforceable limits while firing gas are the mass emissions total limits contained in paragraphs a., b. and c. of Specific Condition B.9. The enforceable limit while firing oil is the concentration based limit in paragraph d. The specific condition is quite detailed and clearly imposes the requirements of the underlying PSD permits; therefore, the addition of a permitting note that may inadvertently alter the intent of the original PSD permit is not appropriate.

Comment 5. Section I, Subsections B and C – incorporation of applicable 40 CFR 63, Subpart CCCCCC requirements. SECI requests DEP include the affected facility subject to 40 CFR 63 Subpart CCCCCC in Subsection B of Section I, as well as include 40 CFR 63, Subpart CCCCCC, as an applicable regulation in Subsection C. Note that Section III, Subsection D of the draft Title V Operation Permit identifies ID No. 006 as subject to this federal regulation; however, a Twin Pac is already designated as EU ID No. 006 in Section III, Subsection B.

Response 5. The requested additions to Section I, Subsections B. and C. have been added. The emissions unit ID number in Subsection D has been corrected from 006 to 010 and the following minor changes to the emissions unit description have been made:

This section addresses regulations requirements for on-site gasoline dispensing facilities vehicle fueling operations and storage tanks. These operations are subject to regulation pursuant to 40 CFR 63, Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline

PROPOSED PERMIT DETERMINATION

Dispensing Facilities. The affected source includes each gasoline cargo tank during the delivery of product to the facility and also includes each ~~The emission sources to which this section applies are~~ gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at this facility.

Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. Gasoline means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals (kpa) or greater, which is used as a fuel for internal combustion engines. Distillate fuel oil transfer and storage tanks are not subject to this subpart because of having a vapor pressure lower than 27.6 kpa.

In addition, Item 12, Vehicle refueling operations and associated fuel storage, has been deleted from the list of Insignificant Emissions Units/Activities in Appendix I of the Appendix Section of the permit and the remainder of the list has been renumbered accordingly.

III. Conclusion.

The enclosed proposed Title V air operation permit includes the aforementioned changes to the draft Title V air operation permit.

The permitting authority will issue the proposed permit No. 0490340-018-AV, with the changes noted above.