



Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

June 27, 2005

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

Re: Payne Creek Generating Station  
PROPOSED Title V Air Operation Permit Revision Project No. **0490340-005-AV**  
{Revision to Title V Air Operation Permit No. 0490340-002-AV}

Dear Mr. Opalinski:

One copy of the PROPOSED Title V Air Operation Permit Revision for the Payne Creek Generating Station located at 6697 County Road 663, Bowling Green, Hardee County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit renewal has become a PROPOSED permit renewal.

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 (U.S. EPA) Region 4 office's review. The web site address is:

<http://www.dep.state.fl.us/air/permitting.htm>

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit renewal is made by the USEPA within 45 days, the PROPOSED permit renewal will become a FINAL permit renewal no later than 55 days after the date on which the PROPOSED permit renewal was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit renewal, the FINAL permit renewal will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn. If you have any questions, please contact Syed Arif at 850/921-9528.

Sincerely,

Trina L. Vielhauer, Chief  
Bureau of Air Regulation

Enclosures

Copy furnished to:  
Mr. Joel Smolen, DEP-SWD  
Mr. Tom Davis, P.E., ECT, Inc. (tdavis@ectinc.com)  
USEPA, Region 4 (INTERNET E-mail Memorandum)

"More Protection, Less Process"

Printed on recycled paper.

PROPOSED Permit Revision Determination  
Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station  
Title V Permit Revision No. 0490340-005-AV

**I. Public Notice.**

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" to the Seminole Electric Cooperative, Inc. for the Payne Creek Generating Station, located at 6697 County Road 663, Bowling Green, Florida, Hardee County, was clerked on April 21, 2005. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was published in The Herald-Advocate on Thursday May 12, 2005. The DRAFT Title V Air Operation Permit Revision was available for public inspection at the Department's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT REVISION" was received on May 23, 2005.

**II. Public Comment(s).**

No comments were received from the applicant, citizens, environmental groups, municipalities or other agencies.

**III. Conclusion.**

Since there were no comments received during the Public Notice period, no changes were made to the DRAFT Permit and the permitting authority hereby issues the PROPOSED Permit.

**STATEMENT OF BASIS**

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

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

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

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

These emissions units are two nominal 157.5 megawatts (MW) combined-cycle Siemens Westinghouse 501F(D) combustion turbines equipped with dry low-NO<sub>x</sub> (DLN) combustors. The combined-cycle turbines each include one unfired heat recovery steam generator (HRSG) equipped with selective catalytic reduction (SCR) for NO<sub>x</sub> control and oxidation catalyst control systems for CO control. The turbines will also utilize water injection to control NO<sub>x</sub> emissions when firing distillate fuel oil. The emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated September 27, 1995. The combined cycle combustion turbines began operation in December, 2001.

The proposed changes will affect the following emission units:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Referenced attachments made a part of this permit:**

Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Appendix I-1, List of Insignificant Emissions Units and/or Activities  
APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02  
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96  
TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96  
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND  
MONITORING SYSTEM PERFORMANCE REPORT version dated 07/96  
PHASE II ACID RAIN APPLICATION/COMPLIANCE PLAN (received June 14, 2000)

**Effective Date:** January 1, 2003

**Revised Date:** Draft

**Renewal Application Due Date:** July 5, 2007

**Expiration Date:** December 31, 2007

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Michael G. Cooke, Director  
Division of Air Resource  
Management

MGC/sa

## Section I. Facility Information.

### Subsection A. Facility Description.

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

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

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

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

#### E.U.

#### ID No.    Brief Description

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

#### Unregulated Emissions Units and/or Activities

#### E.U.

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

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

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



**Subsection C. Relevant Documents.**

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

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1: Permit History/ID Number Changes

Statement of Basis

These documents are on file with permitting authority:

Initial Title V Permit Application received December 5, 2001

Additional Information Request dated January 29, 2002

Additional Information Response received March 20, 2002

Additional Information received July 10, 2002

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

DRAFT Title V Permit Revision clerked on April 21, 2005

Documents on file with USEPA

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

## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. **Not federally enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.

Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

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

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

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center  
Post Office Box 1515  
Lanham-Seabrook, Maryland 20703-1515  
Telephone: 301/429-5018

Any required reports to be sent to the National Response Center, should be sent to:

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

Send the required annual registration fee using approved forms made payable to:

Cashier  
Department of Community Affairs  
State Emergency Response Commission  
2555 Shumard Oak Boulevard  
Tallahassee, FL 32399-2149

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **Section III. Emissions Unit(s) and Conditions.**

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

##### **E.U.**

##### **ID No.    Brief Description**

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

The emissions units addressed in this subsection are two nominal 157.5 megawatts (MW) combined-cycle Siemens Westinghouse 501F(D) combustion turbines equipped with dry low-NO<sub>x</sub> (DLN) combustors. The combined-cycle turbines each include one unfired heat recovery steam generator (HRSG) equipped with selective catalytic reduction (SCR) for NO<sub>x</sub> control and oxidation catalyst control systems for CO control. The turbines will also utilize water injection to control NO<sub>x</sub> emissions when firing distillate fuel oil. The combustion turbines only operate in combined-cycle mode (i.e., the HRSGs are not equipped with bypass stacks). Steam generated by the two HRSGs is sent to one common nominal 173 MW steam turbine. The facility utilizes pipeline natural gas as its primary fuel source with distillate fuel oil serving as a backup fuel.

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

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

##### **Essential Potential to Emit (PTE) Parameters**

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

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

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

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

**A.3. Methods of Operation. Fuels.**

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

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

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

**Emission Limitations and Standards**

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

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

**MAXIMUM ALLOWABLE EMISSION LIMITATIONS**

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

- (a) The emission limitations in lbs/hr/CT are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Specific Conditions A.22. to A.33., below.
- (b) The annual emission limitations (TPY) for natural gas are based on two CTs operating at full load for 8,760 hours per year. The annual emission limitations (TPY) for fuel oil are based on the equivalent of full-load operation for a maximum of 1500 hours per year for each of the two CTs (not to exceed 3,000 hrs/yr between the two CTs). The emission calculations are also based at a worst case ambient temperature of 32°F.
- (c) Maximum allowable emissions from two CTs if any fuel oil is burned at the facility during the year. The emission calculations are also based at an ambient temperature of 59°F.
- (d) The natural gas NO<sub>x</sub> allowable emission limitation of 9 ppmvd is corrected to 15 percent O<sub>2</sub>. An interim limit of 12 ppmvd (91 lbs/hr/CT, 797 TPY) corrected to 15 percent O<sub>2</sub> shall be allowed for a period of one year from the startup date. Compliance shall be determined through the initial and annual compliance tests.
- (e) The fuel oil NO<sub>x</sub> allowable emission limitation of 42 ppmvd is corrected to 15 percent oxygen. Compliance shall be determined through the initial and annual compliance tests. The annual compliance test will be required if the fuel oil is fired for more than 400 hours in the preceding 12-months.

For fuel oil firing, NO<sub>x</sub> emissions of 42 ppmvd @ 15 percent O<sub>2</sub> are based on fuel bound nitrogen (FBN) content of 0.015 percent by weight or less. When FBN levels are above this percentage, the CTs may produce higher NO<sub>x</sub> concentrations due to increased fuel NO<sub>x</sub> formation. When FBN levels are above 0.015 percent, the operator shall employ all reasonable measures to maintain the NO<sub>x</sub> concentrations below 42 ppmvd. However, NO<sub>x</sub> emissions (ppmvd and lb/hr), as calculated from the formula below, shall be allowed if the permittee submits data (FBN levels from most recent fuel shipment or as fired fuel sampling and hourly averages of: fuel rate, heat rate, ambient conditions, and NO<sub>x</sub> control system parameters) which demonstrates that emissions (hourly averages) above 42 ppmvd are due solely to FBN levels above 0.015 percent.

The emission level for NO<sub>x</sub> is adjusted for higher fuel nitrogen contents up to a maximum of 0.030 percent by weight as follows:

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

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

For intermediate values of FBN use the formula:

$$STD = 0.0042 + F$$

where,

STD = allowable NO<sub>x</sub> emissions (ppmvd @ 15% O<sub>2</sub>)

F = NO<sub>x</sub> emission allowance for fuel bound nitrogen

and

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

N (% by weight)	F (NO <sub>x</sub> % by volume)
0 < N ≤ 0.015	0
0.015 < N ≤ 0.030	0.04 (N - 0.015)
0.030 < N	0.0006

[PSD-FL-214A]

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

**ESTIMATED EMISSIONS**

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

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

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

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

[PSD-FL-214B]

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

[PSD-FL-214A]

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

[PSD-FL-214A]

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

[PSD-FL-214A]



**Excess Emissions**

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

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

All quality-assured hourly NO<sub>x</sub> emissions data shall be used when demonstrating compliance with the emissions cap. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75).

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

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

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

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

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

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

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

[PSD-FL-214A]

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

[PSD-FL-214A]

A.15. Excess emissions due to fuel bound nitrogen levels above 0.015 percent are allowed pursuant to foot note (e) of Specific Condition A.5.

[PSD-FL-214A]

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

[PSD-FL-214A]

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

[PSD-FL-214A]

### **Monitoring of Operations**

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

[40 CFR 60.11(d)]

A.19. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO<sub>x</sub> emissions shall operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within  $\pm 5.0$  percent and shall be approved by the Administrator. **Nitrogen oxide continuous emissions monitors may be used to determine compliance with this requirement.**

[40 CFR 60.334(a); and , PSD-FL-214B]

A.20. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

- (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. **Nitrogen oxide continuous emissions monitors may be used to determine compliance with this requirement. The owner or operator is allowed to use vendor analyses of the fuel as received to satisfy the sulfur content monitoring requirements of this rule for fuel oil.**

**Alternatively, if the fuel oil storage tank is isolated from the combustion turbines while being filled, the owner or operator is allowed to determine the sulfur content of the tank after completion of filling of the tank, before it is placed back into service.**

(2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b). **The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. For purposes of complying with the sulfur content monitoring requirements of this rule, the owner or operator shall obtain a monthly report from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation.**

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

**A.21. Determination of Process Variables.**

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

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

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

**Test Methods and Procedures**

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

**A.22.** To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired. **Nitrogen oxide continuous emissions monitors may be used to determine compliance with this requirement.**

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

**A.23.** During performance tests to determine compliance, measured NO<sub>x</sub> emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_x = [NO_x \text{ obs}] [(P_{ref})^{0.5} / P_{obs}] e^{19 [H_{obs} - 0.00633]} [288^\circ K / T_{amb}] 1.53$$

where:

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

$NO_x$  obs = Measured  $NO_x$  emission at 15 percent oxygen, ppmv.

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

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

$e$  = Transcendental constant ( 2.718 )

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

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

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

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

**A.24.** When determining compliance with 40 CFR 60.332, Subpart GG - Standards of Performance for Stationary Gas Turbines, the monitoring device of 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted  $NO_x$  standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. **The owner or operator is allowed to conduct performance tests at a single load because a  $NO_x$  monitor shall be used to demonstrate compliance with the BACT  $NO_x$  limits of this permit.**

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

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

c. U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $NO_x$  emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2). **The owner or operator is allowed to make compliance demonstrations for  $NO_x$  emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the  $NO_x$  monitor. The applicable span value specified in 40 CFR Part 75 shall be used instead of that specified in this condition.**

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

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

[PSD-FL-214A]

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

[PSD-FL-214A]

**A.28. PM/PM<sub>10</sub>.** The initial and annual test method for PM/PM<sub>10</sub> when firing oil shall be EPA Method 5B, incorporated by reference in Chapter 62-297, F.A.C. It is assumed all PM is PM<sub>10</sub>.  
[PSD-FL-214A]

**A.29. Nitrogen Oxides.** The initial and annual test method for NO<sub>x</sub> shall be EPA Method 20 or EPA Method 7E if sampling downstream of the heat recovery steam generator, incorporated by reference in Chapter 62-297, F.A.C.  
[PSD-FL-214A]

**A.30.** The owner or operator shall determine compliance with the liquid fuel sulfur content standard of 0.05 percent, by weight, and the gaseous fuel sulfur dioxide standard as follows: ASTM D 2880-96, or the latest edition shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92, or the latest edition, shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. **The permit specifies sulfur testing methods and allows the owner or operator to follow the requirements of 40 CFR 75 Appendix D to determine the sulfur content of liquid fuels.**  
[40 CFR 60.335(d); and, PSD-FL-214B]

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

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

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

**A.34.** Other USEPA or DEP approved test methods for the permitted facilities may be used for compliance testing after departmental approval. Unless the permittee requests to modify a reference method, or to use a method for which a method was not designed, such approval shall not constitute an alternative test procedure under Rule 62-297.620, F.A.C., or otherwise require modification of the permit.  
[PSD-FL-214A]

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

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

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

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

**A.39. Applicable Test Procedures.**

**(a) Required Sampling Time.**

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

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

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

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

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

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

**(e) Allowed Modification to EPA Method 5.** When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

**A.40.** The permittee shall comply with the requirements contained in APPENDIX SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

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

**(a) General Compliance Testing.**

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

- a Did not operate; or
  - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
- a. Visible emissions, if there is an applicable standard;
  - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
  - c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
- [Rule 62-297.310(7), F.A.C.; and, SIP approved]



**Continuous Monitoring Requirements**

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

[PSD-FL-214A]

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

[40 CFR 60.13(c)]

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

[40 CFR 60.13(d)(1)]

**A.45.** Reserved.

**A.46.** Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(2)]

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

**A.48.** For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdown, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g. ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit. (e.g. rounded to the nearest 1 percent opacity).  
[40 CFR 60.13(h)]

### **Record Keeping and Reporting Requirements**

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

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

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

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

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

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.  
[40 CFR 60.7(a)(4)]

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

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

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

**NOx emissions monitoring by CEM system shall substitute for the requirements of this condition because a NOx monitor is required to demonstrate compliance with the standards of this permit. Data from the NOx monitor shall be used to determine “excess emissions” for purposes of 40 CFR 60.7 subject to the conditions of the permit.**

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

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

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

Written reports of excess emissions shall include the following information:

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

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

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

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

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

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

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

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

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

[40 CFR 60.7(e)]

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

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

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

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

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

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

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

[PSD-FL-214A]

**A.59. Test Reports.**

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

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

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

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

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

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

### **Miscellaneous Requirements.**

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

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

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

[40 CFR 60.12]

**A.62. Heat Input Curves.** Manufacturer's curves or equations of heat input and NO<sub>x</sub> emission rate (lbs/hr) corrections to other temperatures shall be provided to the Department. Manufacturer's curves were supplied to the Department's Southwest District office on May 11, 2001.

[PSD-FL-214A]

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

[PSD-FL-214A]

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

[PSD-FL-214A]



**Section IV. This section is the Acid Rain Part.**

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

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

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

**E.U. ID**

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

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

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

**A.2.** Sulfur dioxide (SO<sub>2</sub>) allowance allocations requirements for each Acid Rain unit are as follows:

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

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

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

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

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

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

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

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

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

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

Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station

**PROPOSED Permit No.:** 0490340-005-AV  
**Facility ID No.:** 0490340

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

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

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

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

Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station

**PROPOSED Permit No.:** 0490340-005-AV  
**Facility ID No.:** 0490340

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

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

### Brief Description of Emissions Units and/or Activities

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

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## Appendix H-1: Permit History

Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station

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

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

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

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

Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station

**PROPOSED Permit No.:** 0490340-005-AV  
**Facility ID No.:** 0490340

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

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

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

Notes:

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

[electronic file name: 04903401.xls]

## Table 2-1, Summary of Compliance Requirements

Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station

**PROPOSED Permit No.:** 0490340-005-AV  
**Facility ID No.:** 0490340

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

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

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
SO <sub>2</sub>	Gas	ASTM Methods		12/10/01			III.A.30.
SO <sub>2</sub> % Sulfur	Oil	ASTM Methods	Fuel Transfer				III.A.30. & III.A.31.
VOC	All	EPA Method 18 or 25A	Annual	12/10/01	1-hour		III.A.26.
CO	All	EPA Method 10	Annual	12/10/01	1-hour		III.A.27.
PM / PM <sub>10</sub>	All	EPA Method 5B	Annual	12/10/01	1-hour		III.A.28.
VE	All	EPA Method 9	Annual	12/10/01	30-minutes		III.A.32.
Sulfuric Acid Mist	All	EPA Method 8	Annual	12/10/01	1-hour		III.A.33.

**Notes:**

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

\*\*CMS [=] continuous monitoring system

[electronic file name: 04903402.xls]

## Memorandum

## Florida Department of Environmental Protection

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TO: Trina L. Vielhauer  
THRU: Jeff Koerner  
FROM: Syed Arif *Syed Arif* 6/27  
DATE: June 27, 2005  
SUBJECT: PROPOSED Permit Revision Project No.: 0490340-005-AV  
Seminole Electric Cooperative, Inc.  
Payne Creek Generating Station  
Hardee County

Attached is the proposed permit package for the Title V Permit Revision for this facility. The Public Notice was published on May 12, 2005 in the Herald-Advocate. No comments were received during the public notice period.

We recommend your approval of the attached proposed Title V Permit Revision.

JK/sa

Attachments



**Friday, Barbara**

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**To:** Smolen, Joel; 'tdavis@ectinc.com'  
**Cc:** Arif, Syed  
**Subject:** PROPOSED Title V Permit Revision No.: 0490340-005-AV - Seminole Electric Cooperative, Inc. - Payne Creek Generating Station  
**Attachments:** 0490340-005-AV-P.zip

Attached for your records is a zip file for the subject PROPOSED Title V Permit Revision.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday  
Planner II  
Bureau of Air Regulation  
(850)921-9524  
[Barbara.Friday@dep.state.fl.us](mailto:Barbara.Friday@dep.state.fl.us)

7/7/2005