



July 8, 2002

Mr. Ed Svec
FDEP-Division of Air Resources Management
Title V Section, Mail Station #5505
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

JUL 10 2002

BUREAU OF AIR REGULATION

RE: Payne Creek Generating Station
Draft Title V Air Permit No.: 0490340-002-AV

Dear Ed:

Attached are comments on the above referenced permit. The packet contains the following information:

- 1) List of comments by page number.
- 2) Revised application pages 8 and 9.
- 3) Emission inventory worksheets for the diesel fire pump and gas dew point heaters.
- 4) HAP calculation spreadsheets (oil, natural gas, and total).
- 5) Responsible Official and P.E. Certification.
- 6) A strike through / underline version of the draft permit indicating requested changes.

If you have any questions or require any additional information please call me at (813) 739-1224. Your assistance has been greatly appreciated.

Sincerely,

Mike Roddy
Senior Environmental Engineer

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station
Comments on Draft Title V Permit No: 0490340-002-AV

1. Page 2

Further evaluation of potential hazardous air pollutant (HAP) emissions indicates that the Payne Creek Generating Station should be classified as a synthetic minor source of HAPs. Revised Pages 8 and 9 of DEP Form No. 62-210.900(1) are attached as well as supporting estimates of HAPS.

2. Page 2, Unregulated Emission Units

The two, 5.0 MMBtu/hr natural gas-fired fuel gas heaters are listed on Page 2 and Appendix U-1 as unregulated emission units. These heaters meet the generic emission unit exemption criteria of Rule 62-210.300(3)(b), F.A.C. and the criteria of Rule 62-213.430(6)(b), F.A.C. and therefore are considered insignificant for Title V purposes pursuant to Rule 62-210.300(3), F.A.C. Accordingly, it is requested that the two, 5.0 MMBtu/hr natural gas-fired fuel gas heaters be shown as insignificant, rather than unregulated, emission units. Potential emission rates for these two heaters are attached.

Similarly, the 275 horsepower (hp) fire water pump diesel engine is listed on Page 2 and Appendix U-1 as an unregulated emission unit. This engine meets the categorical emission unit exemption criteria of Rule 62-210.300(3)(a)21., F.A.C. and the criteria of Rule 62-213.430(6)(b), F.A.C. and therefore is considered insignificant for Title V purposes pursuant to Rule 62-210.300(3), F.A.C. Accordingly, it is requested that the 275 hp fire water pump diesel engine be shown as an insignificant, rather than an unregulated, emission unit. Potential emission rates for this engine are attached.

With the designation of the two, 5.0 MMBtu/hr natural gas-fired fuel gas heaters and the 275 hp fire water pump diesel engine as insignificant emission units, deletion of the Page 2 section regarding unregulated emission units and Appendix U-1 is requested.

3. Page 5, Condition 5.

Request deletion of this condition per Comment 2. above.

4. Page 7, Condition A.1

Request additional language be added to clarify that maximum heat input rates will vary with gas turbine characteristics and ambient conditions and are used for emissions testing purposes.

"...while firing No. 2 fuel oil. Heat input rates will vary depending on gas turbine characteristics, ambient conditions, and alternate methods of operation.

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

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station
Comments on Draft Title V Permit No: 0490340-002-AV

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, 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."

5. Page 7, Condition A.2

Request the following regulatory language be added:

"If an emissions unit is tested at less than 95 percent of its maximum permitted capacity, subsequent emission unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the 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."

6. Page 13, Condition A.20(2)

Request deletion of sentence regarding the nitrogen content of fuel because this issue is also addressed in Condition A.20(1).

7. Page 14, Condition A.25

Request the NO_x CEMS span value be referenced to 40 CFR Part 75 since the draft Title V permit does not contain a span value for the NO_x CEMS:

"The applicable span value specified in 40 CFR Part 75 shall be used instead of that specified in this condition."

8. Page 19, Condition A.45, Page 20, Condition A.46

Delete references to continuous opacity monitoring (COM) as the Payne Creek Generating Station is not required to utilize COMS.

9. Page 20, New Condition

Request addition of a condition allowing the use of 40 CFR Part 75 monitoring procedures as an alternative to 40 CFR Part 60 requirements as follows:

Seminole Electric Cooperative, Inc.
Payne Creek Generating Station
Comments on Draft Title V Permit No: 0490340-002-AV

“A.49. The applicable continuous emissions monitoring procedures of 40 CFR Part 75 may also be used to satisfy the requirements of Conditions A.42 through A.48 above.”

10. Miscellaneous minor formatting revisions

A marked-up version of DRAFT Permit No.: 0490340-002-AV is attached.

11. Table 2-1, Summary of Compliance Requirements

Minimum compliance test duration should be 1-hour for CO and sulfuric acid mist instead of annual. Compliance method should be EPA Method 8.

**Payne Creek Generating Station
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Synthetically Limited
Oxidation Catalyst VOC Efficiency:	%	50
Number of CTs:		2
Hourly Heat Input:	10 ⁶ BTU/hr	1,962
Annual Operating Hours:	hr/yr	8,760
Annual Heat Input:	10 ⁶ BTU/yr	17,187,120

Pollutant	FDEP Pollutant Code	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Factor ^(b) (lb/10 ⁶ Btu)	Emission Rates	
				Syn. Limited (lb/yr)	Syn. Limited (ton/yr)
1,3-Butadiene	H026	4.30E-07	2.15E-07	7.4	0.004
Acetaldehyde	H001	4.00E-05	2.00E-05	687.5	0.344
Acrolein	H006	6.40E-06	3.20E-06	110.0	0.055
Arsenic	H015	N/A	N/A	N/A	N/A
Benzene	H017	1.20E-05	6.00E-06	206.2	0.103
Beryllium	H021	N/A	N/A	N/A	N/A
Cadmium	H027	N/A	N/A	N/A	N/A
Chromium	H046	N/A	N/A	N/A	N/A
Ethylbenzene	H085	3.20E-05	1.60E-05	550.0	0.275
Formaldehyde (c)	H095	1.14E-04	5.70E-05	1,959.3	0.980
Lead	PB	N/A	N/A	N/A	N/A
Manganese	H113	N/A	N/A	N/A	N/A
Mercury	H114	N/A	N/A	N/A	N/A
Naphthalene	H132	1.30E-06	6.50E-07	22.3	0.011
Nickel	H133	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	H151	2.20E-06	1.10E-06	37.8	0.019
Propylene Oxide	H157	2.90E-05	1.45E-05	498.4	0.249
Selenium	H162	N/A	N/A	N/A	N/A
Toluene	H169	1.30E-04	6.50E-05	2,234.3	1.117
Xylene	H186	6.40E-05	3.20E-05	1,100.0	0.550
Maximum Individual HAP				2,234.3	1.117
Total HAPs				7,413.3	3.707

^(a) - EPA AP-42, Table 3.1-3., April 2000.

^(b) - AP-42 factors adjusted for oxidation catalyst VOC control efficiency.

^(c) - Adjusted factors from EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2002.

**Payne Creek Generating Station
Natural Gas-Firing: Hazardous Air Pollutants**

Parameter	Units	Synthetically Limited
Oxidation Catalyst VOC Efficiency:	%	50
Number of CTs:		2
Hourly Heat Input:	10 ⁶ BTU/hr	1,962
Annual Operating Hours:	hr/yr	7,260
Annual Heat Input:	10 ⁹ BTU/yr	14,244,120

Pollutant	FDEP Pollutant Code	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Factor ^(b) (lb/10 ⁶ Btu)	Emission Rates	
				Syn. Limited (lb/yr)	Syn. Limited (ton/yr)
1,3-Butadiene	H026	4.30E-07	2.15E-07	6.1	0.003
Acetaldehyde	H001	4.00E-05	2.00E-05	569.8	0.285
Acrolein	H006	6.40E-06	3.20E-06	91.2	0.046
Arsenic	H015	N/A	N/A	N/A	N/A
Benzene	H017	1.20E-05	6.00E-06	170.9	0.085
Beryllium	H021	N/A	N/A	N/A	N/A
Cadmium	H027	N/A	N/A	N/A	N/A
Chromium	H046	N/A	N/A	N/A	N/A
Ethylbenzene	H085	3.20E-05	1.60E-05	455.8	0.228
Formaldehyde (c)	H095	1.14E-04	5.70E-05	1,623.8	0.812
Lead	PB	N/A	N/A	N/A	N/A
Manganese	H113	N/A	N/A	N/A	N/A
Mercury	H114	N/A	N/A	N/A	N/A
Naphthalene	H132	1.30E-06	6.50E-07	18.5	0.009
Nickel	H133	N/A	N/A	N/A	N/A
Polycyclic Aromatic Hydrocarbons	H151	2.20E-06	1.10E-06	31.3	0.016
Propylene Oxide	H157	2.90E-05	1.45E-05	413.1	0.207
Selenium	H162	N/A	N/A	N/A	N/A
Toluene	H169	1.30E-04	6.50E-05	1,851.7	0.926
Xylene	H186	6.40E-05	3.20E-05	911.6	0.456
Maximum Individual HAP				1,851.7	0.926
Total HAPs				6,143.9	3.072

^(a) - EPA AP-42, Table 3.1-3., April 2000.

^(b) - AP-42 factors adjusted for oxidation catalyst VOC control efficiency.

^(c) - Adjusted factors from EPA AP-42, Table 3.1-3., April 2000.

Source: ECT, 2002.

**Payne Creek Generating Station
Fuel Oil-Firing: Hazardous Air Pollutants**

Parameter	Units	Synthetically Limited
Oxidation Catalyst VOC Efficiency:	%	50
Number of CTs:		2
Hourly Heat Input:	10 ⁶ BTU/hr	1,888
Annual Operating Hours:	hr/yr	1,500
Annual Heat Input:	10 ⁹ BTU/yr	2,832,000

Pollutant	FDEP Pollutant Code	Emission Factor ^(a) (lb/10 ⁶ Btu)	Emission Factor ^(b) (lb/10 ⁶ Btu)	Emission Rates	
				Syn. Limited (lb/yr)	Syn. Limited (ton/yr)
1,3-Butadiene	H026	1.60E-05	8.00E-06	45.31	2.27E-02
Acetaldehyde	H001	N/A	N/A	N/A	N/A
Acrolein	H006	N/A	N/A	N/A	N/A
Arsenic	H015	1.10E-05	1.10E-05	62.30	3.12E-02
Benzene	H017	5.50E-05	2.75E-05	155.76	7.79E-02
Beryllium	H021	3.10E-07	3.10E-07	1.76	8.78E-04
Cadmium	H027	4.80E-06	4.80E-06	27.19	1.36E-02
Chromium	H046	1.10E-05	1.10E-05	62.30	3.12E-02
Ethylbenzene	H085	N/A	N/A	N/A	N/A
Formaldehyde	H095	2.80E-04	1.40E-04	792.96	3.96E-01
Lead	PB	1.40E-05	1.40E-05	79.30	3.96E-02
Manganese	H113	7.90E-04	7.90E-04	4,474.56	2.24E+00
Mercury	H114	1.20E-06	1.20E-06	6.80	3.40E-03
Naphthalene	H132	3.50E-05	1.75E-05	99.12	4.96E-02
Nickel	H133	4.60E-06	4.60E-06	26.05	1.30E-02
Polycyclic Aromatic Hydrocarbons	H151	4.00E-05	2.00E-05	113.28	5.66E-02
Propylene Oxide	H157	N/A	N/A	N/A	N/A
Selenium	H162	2.50E-05	2.50E-05	141.60	7.08E-02
Toluene	H169	N/A	N/A	N/A	N/A
Xylene	H186	N/A	N/A	N/A	N/A
Maximum Individual HAP				4,474.6	2.237
Total HAPs				6,088.3	3.044

^(a) - EPA AP-42, Tables 3.1-4, and 3.1-5, April 2000

^(b) - AP-42 factors adjusted for oxidation catalyst VOC control efficiency.

Source: ECT, 2002

**Payne Creek Generating Station
Total Hazardous Air Pollutants**

Pollutant	FDEP Pollutant Codes	Syn. Limited Emissions Gas Only (ton/yr)	Syn. Limited Emissions Gas/Oil (ton/yr)	Syn. Limited Emissions Maximum (ton/yr)
1,3-Butadiene	H026	0.004	0.026	0.026
Acetaldehyde	H001	0.344	0.285	0.344
Acrolein	H006	0.055	0.046	0.055
Arsenic	H015	N/A	0.031	0.031
Benzene	H017	0.103	0.163	0.163
Beryllium	H021	N/A	0.001	0.001
Cadmium	H027	N/A	0.014	0.014
Chromium	H046	N/A	0.031	0.031
Ethylbenzene	H085	0.275	0.228	0.275
Formaldehyde	H095	0.980	0.812	0.980
Lead	PB	N/A	0.040	0.040
Manganese	H113	N/A	2.237	2.237
Mercury	H114	N/A	0.003	0.003
Naphthalene	H132	0.011	0.059	0.059
Nickel	H133	N/A	0.013	0.013
Polycyclic Aromatic Hydrocarbons	H151	0.019	0.072	0.072
Propylene Oxide	H157	0.249	0.207	0.249
Selenium	H162	N/A	0.071	0.071
Toluene	H169	1.117	0.926	1.117
Xylene	H186	0.550	0.456	0.550
Maximum Individual HAP		1.117	2.237	2.237
Total HAPs		3.707	5.720	5.720

Source: ECT, 2002

POTENTIAL EMISSION INVENTORY WORKSHEET

SECI, Payne Creek Project

EMISSION SOURCE TYPE

DIESEL FUEL OIL; DIESEL INDUSTRIAL ENGINES - CRITERIA POLLUTANTS

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Diesel Internal Combustion (IC) Engine
 Emission Control Method(s)/ID No (s): None
 Emission Point Description: Fire Water Pump Diesel Engine

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Engine Power Output (hp) x Pollutant Emission Factor (lb/hp-hr)
 Emission (ton/yr) = Engine Power Output (hp) x Pollutant Emission Factor (lb/hp-hr) x Operating Period (hrs/yr) x (1 ton/ 2,000 lb)

Source: ECT, 2002.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 500 Hrs/Yr
 No. of Engines: 1
 Power Output: 275 hp

Criteria Pollutant	Pollutant Emission Factor (lb/hp-hr)	Potential Emission Rates	
		(lb/hr)	(tpy)
SO ₂	0.00205	0.56	0.14
NO _x	0.031	8.53	2.13
CO	0.00668	1.84	0.46
PM/PM ₁₀	0.00220	0.61	0.15
VOC	0.002514	0.69	0.17

SOURCES OF INPUT DATA

Parameter	Data Source
Operating Hours	ECT, 2002.
Engine Power Output	SECI, 2002.
Emission Factors	Table 3.3-1, AP-42, EPA, October 1996.

NOTES AND OBSERVATIONS

Annual potential hours set equal to 500 per EPA 9/6/95 memo regarding the calculation of PTE for emergency generators.

DATA CONTROL

Data Collected by: T.Davis Date: 7/02
 Data Entered by: T.Davis Date: 7/02
 Reviewed by: T. Davis Date: 7/02

POTENTIAL EMISSION INVENTORY WORKSHEET

SECI, Payne Creek Project

EMISSION SOURCE TYPE

NATURAL GAS COMBUSTION; $100 \times 10^6 \text{ BTU/HR}$ - CRITERIA POLLUTANTS

FACILITY AND SOURCE DESCRIPTION

Emission Source Description: Natural Gas Combustion
 Emission Control Method(s)/ID No.(s): None
 Emission Point Description: Natural Gas-Fired Fuel Gas Dew Point Heaters

EMISSION ESTIMATION EQUATIONS

Emission (lb/hr) = Heater Fuel Input ($10^6 \text{ ft}^3/\text{hr}$) x Pollutant Emission Factor ($\text{lb}/10^6 \text{ ft}^3$)
 Emission (ton/yr) = Heater Fuel Input ($10^6 \text{ ft}^3/\text{hr}$) x Pollutant Emission Factor ($\text{lb}/10^6 \text{ ft}^3$) x Operating Period (hrs/yr) x (1 ton/ 2,000 lb)

Source: ECT, 2002.

INPUT DATA AND EMISSIONS CALCULATIONS

Operating Hours: 24 Hrs/Day 7 Days/Wk 52 Wks/Yr
 Operating Hours: 8,760 Hrs/Yr Natural Gas Heat Content: 1,020 Btu/ft³
 No. of Heaters: 2 Fuel Consumption: 0.0049 $10^6 \text{ ft}^3/\text{hr}/\text{heater}$
 Heat Input (per heater): 5.00 10^6 Btu/hr Fuel Consumption: 42.9 $10^6 \text{ ft}^3/\text{yr}/\text{heater}$

Criteria Pollutant	Pollutant Emission Factor ($\text{lb}/10^6 \text{ ft}^3$)	Potential Emission Rates (Two Units)	
		(lb/hr)	(tpy)
SO ₂	0.60	0.0059	0.0258
NO _x	100.0	0.9804	4.2941
CO	84.0	0.8235	3.6071
PM/PM ₁₀	7.60	0.0745	0.3264
VOC	5.50	0.0539	0.2362

SOURCES OF INPUT DATA

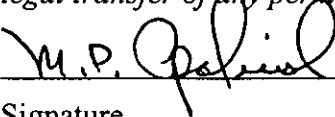
Parameter	Data Source
Operating Hours	SECI, 2002.
Natural Gas Heat Content	Estimated, ECT, 2002.
Heat Input	SECI, 2002.
Emission Factors (NO _x and CO)	Table 1.4-1, AP-42, EPA, July 1998.
Emission Factors (SO ₂ , PM/PM ₁₀ , and VOC)	Table 1.4-2, AP-42, EPA, July 1998.

NOTES AND OBSERVATIONS

DATA CONTROL

Data Collected by: T. Davis Date: 7/02
 Data Entered by: T. Davis Date: 7/02
 Reviewed by: T. Davis Date: 7/02

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Michael P. Opalinski, Director of Environmental Affairs
2. Application Contact Mailing Address: Organization/Firm: Seminole Electric Cooperative, Inc. Street Address: 16313 North Dale Mabry Highway City: Tampa State: FL Zip Code: 33688-2000
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (813) 963 - 0994 Fax: (813) 264 - 7906
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [✓], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>7/8/02</u>

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Thomas W. Davis Registration Number: 36777
2. Professional Engineer Mailing Address: Organization/Firm: Environmental Consulting & Technology, Inc. Street Address: 3701 Northwest 98th Street City: Gainesville State: FL Zip Code: 32606
3. Professional Engineer Telephone Numbers: Telephone: (352) 332-0444 Fax: (352) 332-6722

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.


Thomas W. Davis

Signature

7/3/02

Date

Thomas W. Davis, P.E.
(seal)

* Attach any exception to certification statement.

Certification is applicable to information submitted by Seminole Electric Cooperative, Inc. in July 2002 regarding Draft Title V Permit No: 0490340-002-AV.

Facility Regulatory Classifications

Check all that apply:

1. [] Small Business Stationary Source?	[] Unknown
2. [✓] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. [] Synthetic Minor Source of Pollutants Other than HAPs?	
4. [] Major Source of Hazardous Air Pollutants (HAPs)?	
5. [✓] Synthetic Minor Source of HAPs?	
6. [✓] One or More Emissions Units Subject to NSPS?	
7. [] One or More Emission Units Subject to NESHAP?	
8. [] Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	

List of Applicable Regulations

See Attachment I.	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
NOX	A	N/A	N/A	N/A	
SO2	A	N/A	N/A	N/A	
CO	A	N/A	N/A	N/A	
PM10	A	N/A	N/A	N/A	
PM	A	N/A	N/A	N/A	
SAM	B	N/A	N/A	N/A	
VOC	B	N/A	N/A	N/A	
PB	B	N/A	N/A	N/A	
H021	B	N/A	N/A	N/A	
H015	B	N/A	N/A	N/A	
HAPS	SM	N/A	N/A	N/A	Total HAPS

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

Initial Title V Air Operation Permit
DRAFT Permit No.: 0490340-002-AV

Permitting Authority:

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

Compliance Authority:

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

Initial Title V Air Operation Permit
DRAFT Permit No.: 0490340-002-AV

Table of Contents

<u>Section</u>	<u>Page</u>
<u>Number</u>	
Placard Page	
1	
I. Facility Information	2
- 3	
A. Facility Description.	
B. Summary of Emissions Unit ID No(s). and Brief Description(s).	
C. Relevant Documents.	
II. Facility-wide Conditions	4
- 6	
III. Emissions Units and Conditions	
A. Emissions Unit -001 Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 1	
Emissions Unit -002 Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator: Unit 2.....	7 - 26
IV. Acid Rain Part	
A. Acid Rain, Phase II	27 -
28	

Permittee:

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

DRAFT Permit No.: 0490340-002-AV**Facility ID No.:** 0490340**SIC Nos.:** 49, 4911**Project:** Initial 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.

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**Renewal Application Due Date:** July 5, 2007**Expiration Date:** December 31, 2007

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/sms/ejs

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 supplemental information submitted by the applicant the initial Title V permit application received December 5, 2004, this facility is a synthetic minor major 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~~

- ~~-xxx 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.~~
- ~~-xxx 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.~~
- ~~-xxx Two, 5.0 MMBtu/hr natural gas-fired fuel gas heaters~~
- ~~-xxx One, 275 BHP fire water pump diesel engine~~

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

Documents on file with USEPA

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

Subsection D. Miscellaneous.

The use of 'Permitting Notes' throughout this permit are for informational purposes only and are not permit conditions.

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 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

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.]~~

56. 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.]

67. 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.]

78. [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.)}

89. 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.]

940. 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.)}

104. 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

112. 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

123. 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.]

Section III. Emissions Unit(s) and Conditions.

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

E.U.

ID No. Brief Description

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

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

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

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

Essential Potential to Emit (PTE) Parameters

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

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. If an emissions unit is tested at less than 95 percent of its maximum permitted capacity, subsequent emission unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the 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. 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

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

(a) The emission limitations in lbs/hr/CT are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Specific Conditions **A.22. to A.41.A.33.**, below.

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

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

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

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

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

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

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

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

For intermediate values of FBN use the formula:

$$STD = 0.0042 + F$$

where,

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

F = NO_x emission allowance for fuel bound nitrogen
 and

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

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

[PSD-FL-214A]

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

ESTIMATED EMISSIONS

<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
[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 start up, shutdown, malfunction, fuel switch or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. The permittee shall provide a general description of the procedures to be followed during periods of start up, shutdown, malfunction, fuel switch or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.
[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 (c) of Specific Condition A.5.
[PSD-FL-214A]

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

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

Monitoring of Operations

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

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

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

- (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source. **Nitrogen oxide continuous emissions monitors may be used to determine compliance with this requirement. The owner or operator is allowed to use vendor analyses of the fuel as received to satisfy the sulfur content monitoring requirements of this rule for fuel oil. Alternatively, if the fuel oil storage tank is isolated from the combustion turbines while being filled, the owner or operator is allowed to determine the sulfur content of the tank after completion of filling of the tank, before it is placed back into service.**

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

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

A.21. Determination of Process Variables.

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

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

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

Test Methods and Procedures

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

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

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

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

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

where:

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

$NO_x\text{ obs}$ = 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 75the permit shall be used instead of that specified in this condition paragraph (c)(3) above.**

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

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

[PSD-FL-214A]

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

[PSD-FL-214A]

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

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

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

[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 compliance 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).

[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. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check 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 at least once daily in accordance with a written procedure. The zero and span shall, as 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 in 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, whenever specified. ~~For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.~~

~~(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.~~

[40 CFR 60.13(d)(1) and (2)] see A.44.

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:

~~(1) All continuous monitoring systems referenced by 40 CFR 60.13(e) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6 minute period.~~

(12) 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)(1) and (2)]

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

[40 CFR 60.13(f)]

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

[40 CFR 60.13(h)]

A.49. The applicable continuous emissions monitoring procedures of 40 CFR Part 75 may also be used to satisfy the requirements of Conditions A.42 through A.48 above.

Record Keeping and Reporting Requirements

~~A.50.~~**A.49.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

(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.510. 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.524. 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).

NO_x emissions monitoring by CEM system shall substitute for the requirements of this condition ~~paragraph (e)(1)~~ because a NO_x monitor is required to demonstrate compliance with the standards of this permit. Data from the NO_x 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 NO_x 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 NO_x 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.532. 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.534. 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.554. (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(c)]

A.565. 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.576. 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.587. 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); Rule 62-213.440(1)(b)2.b., F.A.C.]

A.598. 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.6059. 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.610. 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.612. 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.632. Heat Input Curves. Manufacturer's curves or equations of heat input and NO_x emission rate (lbs/hr) corrections to other temperatures shall be provided to the Department.
[PSD-FL-214A]

A.643. 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.654. Modifications. The permittee shall give written notification to the Department when there is any modification to this facility pursuant to Rule 62-212.200, F.A.C., Definitions - Modifications. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and, the anticipated completion date of the change.

[PSD-FL-214A]

Section IV. This section is the Acid Rain Part.

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

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

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

E.U. ID

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

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

- a. DEP Form No. 62-210.900(1)(a), dated 7-1-95
 [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

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

<u>E.U. ID</u> <u>No.</u>	<u>EPA ID</u>	<u>Year</u>	2003	2004	2005	2006	2007
-001	**1A	SO₂ allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*
-002	**1B	SO₂ allowances, under Table 2 or 3 of 40 CFR Part 73	0*	0*	0*	0*	0*

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

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

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

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

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

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

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

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