


Florida Department of  
**Environmental Protection**

**Memorandum**

BAR

TO: Howard L. Rhodes  
FROM: Clair H. Fancy   
DATE: May 27, 1999  
SUBJECT: FINAL Permit No.: 0970043-002-AV  
Kissimmee Utility Authority  
Cane Island Power Park

This permit is for the initial Title V air operation permit for the subject facility. The facility consists of two (2) combustion turbines subject to NSPS Subpart GG, which were issued a PSD permit with a BACT determination. There are also insignificant and unregulated emissions units consisting of a cooling tower and fuel tanks. The combustion turbines are Acid Rain units.

We received comments from Kissimmee Utility Authority on the DRAFT permit.

We received comments from Region 4, U.S. EPA, via e-mail on May 20, 1999, regarding the PROPOSED permit. In a teleconference call on the 21st, resolution was achieved on all of the issues.

I recommend your signature.

Attachment

CHF/sms/mph

## STATEMENT OF BASIS

Kissimmee Utility Authority  
Cane Island Power Park  
**Facility ID No.:** 0970043  
Osceola County

Initial Title V Air Operation Permit  
**FINAL Permit No.:** 0970043-002-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 fossil fuel fired combustion turbine electric generating stations, E.U. ID No. -001 (Unit No. 1) and -002 (Unit No. 2). Unit No. 1 consists of a General Electric LM-6000PA combustion turbine which drives a generator with a nominal rating of 40 Megawatts. This is a simple cycle unit. Unit No. 2 consists of a General Electric PG7111(EA) combustion turbine and an unfired heat recovery steam generator (HRSG). The combustion turbine is rated at 80MW whereas the steam turbine/generator is rated at 40MW, providing for an overall unit nominal rating of 120 Megawatts. This combined cycle unit is routinely referred to as a GE-7EA. Each combustion turbine fires natural gas as the primary fuel with very low sulfur #2 oil (.05%) as a backup. Each unit has its individual stack.

Simple Cycle Combustion Turbine (Unit No. 1) is fired primarily on natural gas and secondarily on No. 2 fuel oil. Limitations exist on both the sulfur content of the oil and the annual hours for firing oil. This unit, as permitted herein, has a maximum heat input of 367 MMBtu per hour while firing natural gas and 372 MMBtu per hour while firing #2 fuel oil.

Combined Cycle Combustion Turbine (Unit No. 2) is fired primarily on natural gas and secondarily on No. 2 fuel oil. Limitations exist on both the sulfur content of the oil and the annual hours for firing oil. This unit, as permitted herein, has a maximum heat input of 869 MMBtu per hour while firing natural gas and 928 MMBtu per hour while firing #2 fuel oil.

Each unit has its own stack. Unit No. 1 has a 65-ft high stack whereas Unit No. 2 has a 75-ft high stack. Particulate matter, SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions generated during the operation of the units are controlled by combusting clean fuels. The control of NO<sub>x</sub> is achieved through the use of water injection and low-NO<sub>x</sub> combustion technology.

Each combustion turbine, units #1 and #2 are regulated under the federal Acid-Rain Program, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and NSPS-40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Combustion turbine no. 1 began commercial operation in 1994 and combustion turbine no. 2 began commercial operation in 1995.

The heat input limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 95 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 105 percent of the test load), to establish appropriate emissions limits and to aid in determining future rule applicability. A note below the permitted capacity condition clarifies this. Regular record keeping 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 emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emissions 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.

The Department has determined that the appropriate visible emissions (VE) testing frequency for the two combustion turbines is a VE test upon exceeding 400 hours of operation on fuel oil in any given federal fiscal year (October 1 through September 30). This frequency is justified by the low historical operational use of fuel oil for these units and the previous VE tests which documented compliance while firing fuel oil. The combined hours of operation on fuel oil for both combustion turbines at the Cane Island facility since 1994 (5 year cum. total) are 182 hours. Since 1994, Department records indicate that a combined total of less than 6000 gallons of oil have been combusted at the facility, with approximately 90% of that strictly to demonstrate permit compliance. Moreover, no Method 9 tests, since 1994, conducted on these emission units have resulted in an opacity measurement greater than 1%.

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**NOTICE OF FINAL PERMIT**

In the Matter of an  
Application for Permit by:

Mr. A.K. Sharma  
Director of Power Supply  
1701 West Carroll Street  
Kissimmee, Florida 34741

FINAL Permit No.: 0970043-002-AV  
Cane Island Power Park

Enclosed is FINAL Permit Number 0970043-002-AV for the operation of the Cane Island Power Park located at 6075 Old Tampa Hwy, Intercession City, Osceola County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

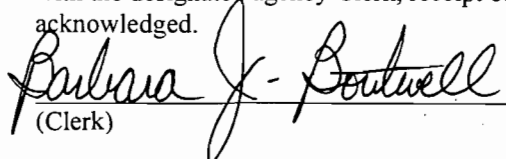
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 6/2/99 to the person(s) listed or as otherwise noted:

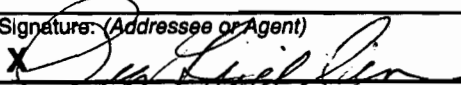
Mr. D. D. Schultz, P.E., Black & Veatch  
Mr. Timothy M. Hillman, Black & Veatch  
Mr. Jerome Guidry, P.E.  
Mr. Len Kozlov, CD  
Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)  
Ms. Gracy R. Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

 6/2/99  
(Clerk) (Date)

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> ■ Complete Items 1 and/or 2 for additional services. ■ Complete Items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Mr. A. K. Sharma Director of Power Supply 1701 West Carroll Street Kissimmee, Florida 34741	4a. Article Number P 263 585 221	4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
5. Received By: (Print Name)	7. Date of Delivery 6/4/99	
6. Signature: (Addressee or Agent) 	8. Addressee's Address (Only if requested and fee is paid)	

Thank you for using Return Receipt Service.

PS Form 3811, December 1994 102595-97-B-0179 Domestic Return Receipt

P 263 585 221

US Postal Service  
**Receipt for Certified Mail**  
 No Insurance Coverage Provided.  
 Do not use for International Mail (See reverse)

Sent to	
Mr. A. K. Sharma	
Street & Number	
1701 West Carroll Street	
Post Office, State, & ZIP Code	
Kissimmee, Florida 34741	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
Postmark or Date 6/2/99	
KUA - Cane Island Power Park Facility ID#0970043-002-AV	

PS Form 3800, April 1995

## FINAL PERMIT DETERMINATION

FINAL Permit No.: 0970043-002-AV

Page 1 of 3

### **I. Comments.**

Informal comments were received the USEPA and the PROPOSED Title V permit was changed. The comments were not considered significant enough to reissue a DRAFT Title V permit and require another public notice. The changes made are shown below.

1) a. Periodic Monitoring.

We will add the following proposed paragraph to the Statement of Basis to show that the combined total emissions units' historical annual hours of operation and the individual visible emissions test results while firing fuel oil provide justification for retaining the existing appropriate visible emissions testing frequency, which is required when an individual emissions unit exceeds 400 hours per federal fiscal year of operation while firing fuel oil, and to consider this approach as satisfying periodic monitoring.

The Department has determined that the appropriate visible emissions (VE) testing frequency for the two combustion turbines is a VE test upon exceeding 400 hours of operation on fuel oil in any given federal fiscal year (October 1 through September 30). This frequency is justified by the low historical operational use of fuel oil for these units and the previous VE tests which documented compliance while firing fuel oil. The combined hours of operation on fuel oil for both combustion turbines at the Cane Island facility since 1994 (5 year cum. total) are 182 hours. Since 1994, Department records indicate that a combined total of less than 6000 gallons of oil have been combusted at the facility, with approximately 90% of that strictly to demonstrate permit compliance. Moreover, no Method 9 tests, since 1994, conducted on these emission units have resulted in an opacity measurement greater than 1%.

1) b. Periodic Monitoring and Compliance Testing.

A permit modification dated August 12, 1997 eliminated the annual testing requirements for particulate matter, sulfuric acid mist and VOC, specified that the annual RATA testing will be used to demonstrate compliance with the nitrogen oxide emission limit and made other minor changes. This modification was discussed with Dave McNeal prior to issuance and copied to Mr. Brian Beals. Public Notice occurred on October 6, 1997. Also, Specific Conditions A.6. and B.6. address the requirement for annual NO<sub>x</sub>/O<sub>2</sub> RATA tests. Concerning related issues, the following language will be added to the permit:

C.14. 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 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 fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the Central District 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 DEP, 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 DEP.

(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

(d) 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.]

C.15. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

1) c. The permit will specify that the data collected from the NO<sub>x</sub> CEM will be used for periodic monitoring purposes. See Specific Conditions A.11. and B.11.

1) d. The facility will be required by permit to keep records of the hours of operation of each fuel being consumed. See Specific Conditions A.15 and B.15.

## **II. General Comments**

- a. Section II, Facility-wide Condition No. 11.:

We will replace “Air Compliance Section” with “Air Enforcement Section” and add the following phone and fax numbers: 404/562-9055 or 404/562-9164.

- b. Appendix I-1.

We will specify that the cooling tower listed does not use chromium for water treatment.

## **III. Conclusion.**

In conclusion, the changes that have been made are insignificant in nature and do not impose additional noticing requirements. The permitting authority hereby issues the FINAL Title V permit, with any changes noted above.



Kissimmee Utility Authority  
Cane Island Power Park  
**Facility ID No.:** 0970043  
Osceola County

Initial Title V Air Operation Permit  
**FINAL Permit No.:** 0970043-002-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: 850/488-1344  
Fax: 850/922-6979

Initial Title V Air Operation Permit  
FINAL Permit No.: 0970043-002-AV

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Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

**Permittee:**

Kissimmee Utility Authority  
1701 West Carroll Street  
Kissimmee, FL 34741-6804

**FINAL Permit No.:** 0970043-002-AV

**Facility ID No.:** 0970043

**SIC Nos.:** 49

**Project:** Initial Title V Air Operation Permit.

This permit is for the operation of the Kissimmee Utility Authority Cane Island Power Park. This facility is located at 6075 Old Tampa Hwy, Intercession City, Osceola County; UTM Coordinates: Zone 17; Latitude: 28 16' 40" North and Longitude: 81 31' 01" West.

**STATEMENT OF BASIS:** 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.

**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

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

Table 2-1, Summary of Compliance Requirements

Appendix TV-1, Title V Conditions (version dated 12/02/97)

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 7/96)

Alternate Sampling Procedure: ASP Number 97-B-01

BACT Determination dated April 7, 1993

Order extending permits dated March 18, 1999

**Effective Date:** January 1, 2000

**Renewal Application Due Date:** July 5, 2004

**Expiration Date:** December 31, 2004

Howard L. Rhodes, Director  
Division of Air Resource  
Management

HLR/sms/mpb

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility is an electric power generating plant and consists of:

Simple Cycle Combustion Turbine Unit 1 (Emissions Unit 001), rated at 40 MW;

Combined Cycle Combustion Turbine Unit 2 (Emissions Unit 002), rated at 120 MW;

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

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

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

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Simple Cycle Combustion Turbine Unit 1, rated at 40 MW, 367 MMBtu/hr for natural gas and 372 MMBtu/hr for number 2 fuel oil, capable of burning natural gas and number 2 fuel oil, with emissions exhausted through a 65 ft. stack .
002	Combined Cycle Combustion Turbine Unit 2, rated at 120 MW, 869 MMBtu/hr for natural gas and 928 MMBtu/hr for number 2 fuel oil, capable of burning natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack .

<b>Unregulated Emissions Units and/or Activities, See Appendix U-1</b>	
-XXX-	Fuel oil, gasoline and lube oil storage tanks.
-XXX-	Fuel oil, gasoline and lube oil storage tanks.

*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:

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

Appendix H-1, Permit History/ID Number Changes

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

Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996

Phase II Acid Rain Application/Compliance Plan received January 14, 1998.

## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit.  
{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
2. **Not Federally Enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.** The permittee shall not 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).** If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
  - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
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 Emissions or Organic Solvents Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents 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:

- a. Maintenance of paved areas as needed.
- b. Worker and site vehicle movements on paved roads.
- c. Delivery vehicle movements on paved roads.
- d. Fuel oil delivery by truck on paved roads.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

**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.** The permittee shall submit all compliance related notifications and reports required of this permit (other than Acid Rain Program Information) to the Department's Central District office:

Central District Office  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767  
Telephone: 407/894-7555  
Fax: 407/897-2966

Acid Rain Program Information shall be submitted, as necessary to:

Department of Environmental Protection  
2600 Blair Stone Road  
Mail Station #5510  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-6140  
Fax: 850/922-6979

and to:

United States Environmental Protection Agency, Region 4  
Air Pesticides & Toxics Management Division  
Acid Rain Section  
61 Forsyth Street  
Atlanta, Georgia 30303  
Telephone: 404/562-9102  
Fax: 404/562-9095

11. Any reports, data, notifications, certifications, and requests (other than Acid Rain Program Information) 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 Enforcement Section  
61 Forsyth Street  
Atlanta, Georgia 30303  
Telephone: 404/562-9055  
Fax: 404/562-9164

12. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. [Rule 62-214.420(11), F.A.C.]



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

**Subsection A. This section addresses the following emissions unit.**

001	Simple Cycle Combustion Turbine Unit 1, rated at 40 MW, 367 MMBtu/hr for natural gas and 372 MMBtu/hr for number 2 fuel oil, capable of burning natural gas and number 2 fuel oil, with emissions exhausted through a 65 ft. stack .
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{Permitting note(s): This emissions unit is regulated under Acid Rain, Phase II; Rule 62-210.300, F.A.C., Permits Required; and, is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. The affected facility to which this subpart applies is the simple cycle gas turbine, Unit 1. This unit underwent a BACT Determination dated April 7, 1993. BACT Limits were incorporated into the subsequent air construction/PSD permits including AC 49-205703 (PSD-FL-182). Exhaust is vented through a 65 ft. stack. NO<sub>x</sub> emissions are controlled by low-NO<sub>x</sub> combustors, and by water injection, whereas SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions are controlled by firing .05%S oil, for only limited time periods. Fossil fuel fired combustion turbine Unit 1 began commercial operation in 1994.}

**The following specific conditions apply to the emissions units listed above:**

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

**A.1. Permitted Capacity.** The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
001	367*	Natural Gas
	372*	Fuel Oil

\* Based on 101.3 kilopascals pressure, 288 Kelvin and 60% relative humidity (ISO standard day conditions), and lower heating value of the fuel fired.

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each emission unit for the purposes of confirming that emissions testing is conducted within 95 to 100 percent of the emission unit's rated capacity (or to limit future operation to 105 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability}

[Rules 62-4.160(2) and 62-210.200(PTE),F.A.C.; and, AC 49-205703 (PSD-FL-182)]

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition C.8. [Rule 62-297.310(2), F.A.C.]

**A.3. Methods of Operation - Fuels.** The only fuel(s) allowed to be burned are natural gas and number 2 fuel oil (0.05%), except that firing of number 2 fuel oil is limited to no more than 1000 hours per year if natural gas is unavailable, or no more than 800 hours per year if gas is available. The sulfur content of the fuel oil shall not exceed 0.05%, by weight.

{Note: The limitations of specific conditions A.3 and A.6 are more stringent than the NSPS sulfur dioxide limitation and thus assure compliance with 40 CFR 60.333 and 60.334}  
 [Rule 62-213.410, F.A.C., AC 49-205703 (PSD-FL-182)]

**Emission Limitations and Standards**

**A.4. Visible Emissions.** Visible emissions shall not exceed 10 percent opacity, except for during startup, shutdown or periods of part load operation, at which time visible emissions shall not exceed 20 percent opacity.

[AC 49-205703 (PSD-FL-182)]

**A.5.** The maximum allowable emissions from Unit 1 shall not exceed the emission limitations listed below.

Pollutant	Emission Limits			Basis
	Gas	Number 2 Fuel Oil	Equivalent Emissions Tons/Year <sup>a, b</sup>	
NO <sub>x</sub> <sup>c</sup>	25/15 ppmvd at 15% oxygen on a dry basis	42 ppmvd at 15% oxygen on a dry basis	116.9	BACT
SO <sub>2</sub>	nil	20 lb/hr	10.0	BACT
PM	0.0245lb/mmBtu	0.0323 lb/MMBtu	40.9	BACT
H <sub>2</sub> SO <sub>4</sub>	nil	2.2 lb/hr	1.1	BACT
VOC	1.4 lb/hr	3 lb/hr	6.9	BACT
CO	30 ppmvd	63 ppmvd	193.2	BACT
Opacity	10% (see A.4.)	10% (see A.4.)		BACT
Be <sup>d</sup>	nil	2.5e-6 lb/MMBtu	< 1	BACT
As <sup>d</sup>	nil	4.2e-6 lb/MMBtu	< 1	AC 49-205703
Hg <sup>d</sup>	nil	3.1e-6 lb/MMBtu	< 1	AC 49-205703
Pb <sup>d</sup>	nil	2.8e-5 lb/MMBtu	< 1	AC 49-205703

- a. Tons per year based on 7760 hrs/yr for natural gas firing, 1000 hrs/yr for number 2 fuel oil firing.
- b. Based on 372 MMBtu/hr for number 2 fuel oil and 367 MMBtu/hr for natural gas.
- c. NO<sub>x</sub> emission limits were permitted to be 25 ppmvd while firing natural gas until 1/1/98 via original application. An amendment to permit (AC0970043-003) was made on 5/19/97 extending the date for the reduced NO<sub>x</sub> emission limit of 15 ppmvd until 1/1/99. An additional extension was granted on December 15, 1998 via amendment AC0970043-005 further extending this date until 1/1/00.
- d. Limits based upon an approved emission factor, which is subject to change in the future.

### **Test Methods and Procedures**

**A.6. Annual Compliance Tests.** Emission testing for visible emissions and NO<sub>x</sub> shall be performed annually, in accordance with specific condition A.8., with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using the following EPA reference methods in accordance with 40 CFR 60, Appendix A:

- a. Method 9 for VE;
- b. Method 20 for NO<sub>x</sub>.

Annual compliance with the NO<sub>x</sub> standard may be determined by using data collected as part of the annual Relative Accuracy Test Audit (RATA) testing as described in 40 CFR 60 Appendix B. Performance Specification 2. Section 7.1.2. instead of performing Methods 7E and 20 as separate tests. EPA Method 10 will be conducted simultaneously with the NO<sub>x</sub>/ O<sub>2</sub> RATA tests. The 20-30 minute tests conducted for the RATA testing will be strung together in a manner that fulfills additional requirements of EPA Methods 10 and 20 as to test run time (3 one hour runs) and O<sub>2</sub> stratification investigation. The collected data will be bias corrected to comply with the RATA test requirements, but will not be bias corrected for compliance with NSPS so as to meet the requirements of methods 10 and 20 (the NSPS test methods). No less than eight test points will be used for the RATA testing which will comply with both the RATA test requirements and the NSPS test requirements. The NO<sub>x</sub> span for methods 20 and 7E should not exceed 50 ppm instead of a span of 300 ppm as required by Subpart GG. Mass emissions of NO<sub>x</sub> and CO shall be determined pursuant to the procedures in 40 CFR 60, Appendix A. Method 19 or 40 CFR 75, Appendix F. If the unit is not operating because of scheduled maintenance outages and emergency repairs, it will be tested within thirty days of returning to service.

Note: Measured NO<sub>x</sub> emissions will be ISO corrected for comparison with NSPS, but will not be ISO corrected for comparison with the BACT standard.

[Rules 62-297.401 and 62-213.440, F.A.C., and AC 49-205703 (PSD-FL-182)]

**A.7. Testing for PM, CO, VOC.** Particulate matter tests shall be conducted using EPA test methods 5 or 17. Alternatively, the opacity emissions test may be used unless the 10% opacity limit is exceeded. Carbon monoxide tests shall be conducted using EPA test method 10. VOC tests shall be conducted using EPA test method 25A.

[Rule 62-297.401, F.A.C., and AC 49-205703 (PSD-FL-182)]

**A.8. Additional Test Requirements.** Test results shall be the average of three valid runs. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 95-100 percent of the maximum heat input rate allowed by this permit, achievable for the average ambient air temperature during the test. If it is impracticable to test at permitted capacity, the emissions unit may be tested at less than permitted capacity. In such cases, subsequent operation is limited by adjusting downward the entire heat input vs. inlet temperature curve by the increment equal to the difference between the maximum permitted heat input value and 105 percent of the value reached during the test. 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. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. [AC 49-205703 (PSD-FL-182)]

**A.9. Sulfur Dioxide - Sulfur Content.** The permittee elected to use fuel sampling and analysis in lieu of installing a continuous monitoring system for SO<sub>2</sub> as required by the NSPS. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. The permittee shall demonstrate compliance with the SO<sub>2</sub> limit by EPA test method 8 or fuel sampling and analysis. The permittee shall demonstrate compliance with the gaseous fuel sulfur limit via record keeping. Excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05% sulfur, by weight.  
[AC 49-205703 (PSD-FL-182)]

**A.10. Fuel Sampling & Analysis - Sulfur/Nitrogen and Lower Heating Value.** The following fuel sampling and analysis program shall be used to demonstrate compliance with the sulfur dioxide standard:

- a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest editions, to analyze a representative sample of the blended fuel following each fuel delivery. ASTM D3246-81, or its latest edition, shall be used for sulfur content of gaseous fuel.
- b. Record daily the amount of each fuel fired, density of each fuel, heating value, nitrogen content and the percent sulfur content by weight of fuel oil as specified in 40 CFR 60.334.  
[Rule 62-213.440, F.A.C., and AC 49-205703 (PSD-FL-182)]

### **Monitoring of Operations**

**A.11 Continuous Monitoring Required.** A continuous monitoring system shall be maintained to record fuel consumption. A continuous monitoring system shall be maintained to record emissions of nitrogen oxides in accordance with the requirements of 40 CFR 75. Data collected from this system shall be used for periodic monitoring purposes. While water injection is being utilized for NO<sub>x</sub> control, water to fuel ratio and fuel bound nitrogen is not required to be continuously monitored as long as the permittee will report excess emissions using the data collected by the continuous monitoring system in accordance with the following conditions:

1. Each NO<sub>x</sub> CEMS must be capable of calculating NO<sub>x</sub> emissions concentrations corrected to 15% O<sub>2</sub> and ISO conditions.
2. Monitor data availability shall be no less than 95 percent on a quarterly basis.
3. NO<sub>x</sub> CEMS should provide at least 4 data points for each hour and calculate a one-hour average.

To implement condition 1, KUA shall use ambient data (temperature, relative humidity, pressure) to correct excess emissions data to ISO conditions if requested by the Department. If monitor availability drops below 95% on a quarterly basis as prescribed in condition 2, KUA shall use water to fuel ratio and fuel-bound nitrogen data to monitor excess emissions in subsequent quarters until the minimum CEMS monitor availability is above 95%. The use of CEMS to monitor excess emissions is more stringent than the surrogate parameter monitoring in 40 CFR 60.334 since the CEMS directly measures NO<sub>x</sub> emissions. The CEMS also provides monitoring when no water injection is used to control NO<sub>x</sub> emissions (i.e., when firing natural gas, dry low NO<sub>x</sub> burners are used).  
[AC 49-205703 (PSD-FL-182)]

**A.12 Excess Emissions by CEMS.** The CEMS shall be used to determine periods of excess emissions as per 40 CFR 60.334. Excess emissions are defined for this emissions unit as any 60-

minute period during which the average emissions exceed the emission limits of specific condition **A.5.** of this permit. Periods of startup, shutdown and malfunction shall be monitored, recorded and reported with excess emissions following the format and requirements of 40 CFR 60.7.

[AC 49-205703 (PSD-FL-182)]

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

**A.13. Excess Emission Reports.** Semi-annual excess emission reports shall be submitted to the DEP's Central District Office. These reports shall be postmarked by the 30th day following the end of each calendar half. Each excess emission report shall include the information required in 40 CFR 60.7(c) and 60.334.

[AC 49-205703 (PSD-FL-182)]

**A.14. Natural Gas Sulfur Content Records Required.** The owner or operator shall receive and maintain records of sulfur content of natural gas provided by the natural gas supplier, as per 40 CFR 60.334. The records shall report total sulfur content in terms of grains of sulfur per hundred cubic feet (standard conditions).

[AC 49-205703 (PSD-FL-182)]

**A.15. Additional Reports Required.** The owner or operator shall report the following with the Annual Operating Report (AOR) by March 1 of each calendar year: sulfur and nitrogen contents, by weight, and lower heating value of the fuel oil being fired, annual fuel consumption of number 2 fuel oil and natural gas, hours of operation per fuel usage and air emission limits.

[Rule 62-210.370(3), F.A.C., and AC 49-205703 (PSD-FL-182)]

### **Other Conditions**

**A.16. Maintain Capability to install an SCR.** This emissions unit is permitted for maximum NO<sub>x</sub> emission levels of 15 (gas)/42 (oil) ppmv. The Department will revise permitted emission levels for NO<sub>x</sub> if the manufacturer achieves an even lower NO<sub>x</sub> emission, pursuant to F.A.C. Rule 62-4.080. The permittee shall maintain capability for future installation of a selective catalytic reduction (SCR) system. This is required in the event that the permittee is unable to comply with the permitted NO<sub>x</sub> levels and the Department requires an SCR to be installed. In the event an SCR system is required to be installed, the emission limitations shall be established at the time of installation by stack test results and through a revised determination of BACT.

[AC 49-205703 (PSD-FL-182)]

**A.17.** This emissions unit is also subject to conditions **C.1.** through **C.13.** contained in **Subsection C. Common Conditions.**

**A.18.** This emissions unit is also subject to conditions **D.1.** through **D.6.** contained in **Subsection D. NSPS Common Conditions.**

**Subsection B. This section addresses the following emissions unit.**

002	Combined Cycle Combustion Turbine Unit 2, rated at 120 MW, 869 MMBtu/hr for natural gas and 928 MMBtu/hr for number 2 fuel oil, capable of burning any combination of natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack .
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{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II; Rule 62-210.300, F.A.C., Permits Required; and, is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. The affected facility to which this subpart applies is the combined cycle gas turbine, Unit 2. This unit underwent a BACT Determination dated April 7, 1993. BACT Limits were incorporated into the subsequent air construction/PSD permits including AC 49-205703 (PSD-FL-182). Exhaust is vented through the heat recovery steam generator that is not equipped with duct burners and then through a 75 ft. stack. NO<sub>x</sub> emissions are controlled by low-NO<sub>x</sub> combustors, and by water injection, whereas SO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> emissions are controlled by firing 0.05%S oil for only limited time periods. The turbine exhaust may also be vented through a bypass stack for simple cycle operation when the HRSG or steam turbine is down for maintenance and/or repair. The turbine began commercial operation in 1995.}

**The following specific conditions apply to the emissions units listed above:**

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

**B.1. Permitted Capacity.** The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
002	869*	Natural Gas
	928*	No. 2 Fuel Oil

\* Based on 101.3 kilopascals pressure, 288 Kelvin and 60% relative humidity (ISO standard day conditions), and lower heating value of the fuel fired.

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 95 to 100 percent of the emission unit's rated capacity (or to limit future operation to 105 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability}

[Rules 62-4.160(2), 62-210.200(PTE),F.A.C. and AC 49-205703 (PSD-FL-182)]

**B.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition C.8. [Rule 62-297.310(2), F.A.C.]

**B.3. Methods of Operation - Fuels.** The only fuel(s) allowed to be burned are natural gas and number 2 fuel oil (0.05%), except that firing of number 2 fuel oil is limited to no more than 1000 hours per year if natural gas is unavailable, or no more than 800 hours per year if gas is available. The sulfur content of the fuel oil shall not exceed 0.05%, by weight.

{Note: The limitations of specific conditions A.3 and A.6 are more stringent than the NSPS sulfur dioxide limitation and thus assure compliance with 40 CFR 60.333 and 60.334}

[Rule 62-213.410, F.A.C., AC 49-205703 (PSD-FL-182)]

**Emission Limitations and Standards**

**B.4. Visible Emissions.** Visible emissions shall not exceed 10 percent opacity, except for during startup, shutdown or periods of part load operation, at which time visible emissions shall not exceed 20 percent opacity.

[AC 49-205703 (PSD-FL-182)]

**B.5.** The maximum allowable emissions from Unit 2 shall not exceed the emission limitations listed below.

Pollutant	Emission Limits			Basis
	Gas	Number 2 Fuel Oil	Equivalent Emissions Tons/Year <sup>a, b</sup>	
NO <sub>x</sub> <sup>c</sup>	15 ppmvd at 15% oxygen on a dry basis	42 ppmvd at 15% oxygen on a dry basis	290.6	BACT
SO <sub>2</sub>	nil	52 lb/hr	26	BACT
PM	0.010 lb/MMBtu	0.0162 lb/MMBtu	41.2	BACT
H <sub>2</sub> SO <sub>4</sub>	nil	5.72 lb/hr	2.86	BACT
VOC	2 lb/hr	5 lb/hr	10.26	BACT
CO	20 ppmvd	20 ppmvd	242	BACT
Opacity	10% (see B.4.)	10% (see B.4.)		BACT
Be <sup>d</sup>	nil	2.5e-6 lb/MMBtu	< 1	BACT
As <sup>d</sup>	nil	4.2e-6 lb/MMBtu	< 1	AC 49-205703
Hg <sup>d</sup>	nil	3.0e-6 lb/MMBtu	< 1	AC 49-205703
Pb <sup>d</sup>	nil	2.8e-5 lb/MMBtu	< 1	AC 49-205703

- a. Tons per year based on 7760 hrs/yr for natural gas firing, 1000 hrs/yr for number 2 fuel oil firing.
- b. Based on 928 MMBtu/hr for number 2 fuel oil and 869 MMBtu/hr for natural gas.
- c. NO<sub>x</sub> emission limits were permitted to be 25 ppmvd while firing natural gas until 1/1/98 via original application.
- d. Limits based upon an approved emission factor, which is subject to change in the future.

**B.6. Annual Compliance Tests.** Emission testing for visible emissions and NO<sub>x</sub> shall be performed annually, in accordance with specific condition **B.8.**, with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using the following EPA reference methods in accordance with 40 CFR 60, Appendix A:

- a. Method 9 for VE;
- b. Method 20 for NO<sub>x</sub>.

Annual compliance with the NO<sub>x</sub> standard may be determined by using data collected as part of the annual Relative Accuracy Test Audit (RATA) testing as described in 40 CFR 60 Appendix B. Performance Specification 2. Section 7.1.2. instead of performing Methods 7E and 20 as separate tests. EPA Method 10 will be conducted simultaneously with the NO<sub>x</sub>/ O<sub>2</sub> RATA tests. The 20-30 minute tests conducted for the RATA testing will be strung together in a manner that fulfills additional requirements of EPA Methods 10 and 20 as to test run time (3 one hour runs) and O<sub>2</sub> stratification investigation. The collected data will be bias corrected to comply with the RATA test requirements, but will not be bias corrected for compliance with NSPS so as to meet the requirements of methods 10 and 20 (the NSPS test methods). No less than eight test points will be used for the RATA testing which will comply with both the RATA test requirements and the NSPS test requirements. The NO<sub>x</sub> span for methods 20 and 7E should not exceed 50 ppm instead of a span of 300 ppm as required by Subpart GG. Mass emissions of NO<sub>x</sub> and CO shall be determined pursuant to the procedures in 40 CFR 60, Appendix A. Method 19 or 40 CFR 75, Appendix F. If the unit is not operating because of scheduled maintenance outages and emergency repairs, it will be tested within thirty days of returning to service.

Note: Measured NO<sub>x</sub> emissions will be ISO corrected for comparison with NSPS, but will not be ISO corrected for comparison with the BACT standard.

[Rules 62-297.401 and 62-213.440, F.A.C., and AC 49-205703 (PSD-FL-182)]

**B.7. Testing for PM, CO, VOC.** Particulate matter tests shall be conducted using EPA test methods 5 or 17. Alternatively, the opacity emissions test may be used unless the 10% opacity limit is exceeded. Carbon monoxide tests shall be conducted using EPA test method 10. VOC tests shall be conducted using EPA test method 25A.

[Rule 62-297.401, F.A.C., and AC 49-205703 (PSD-FL-182)]

**B.8. Additional Test Requirements.** Test results shall be the average of three valid runs. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 95-100 percent of the maximum heat input rate allowed by this permit, achievable for the average ambient air temperature during the test. If it is impracticable to test at permitted capacity, the emissions unit may be tested at less than permitted capacity. In such cases, subsequent operation is limited by adjusting downward the entire heat input vs. inlet temperature curve by the increment equal to the difference between the maximum permitted heat input value and 105 percent of the value reached during the test. 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. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Dept. with the compliance test report.

[AC 49-205703 (PSD-FL-182)]



**B.9. Sulfur Dioxide - Sulfur Content.** The permittee elected to use fuel sampling and analysis in lieu of installing a continuous monitoring system for SO<sub>2</sub> as required by the NSPS. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. The permittee shall demonstrate compliance with the SO<sub>2</sub> limit by EPA test method 8 or fuel sampling and analysis. The permittee shall demonstrate compliance with the gaseous fuel sulfur limit via record keeping. Excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.05% sulfur by weight.  
[AC 49-205703 (PSD-FL-182)]

**B.10. Fuel Sampling & Analysis - Sulfur/Nitrogen and Lower Heating Value.** The following fuel sampling and analysis program shall be used to demonstrate compliance with the sulfur dioxide standard:

- a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest editions, to analyze a representative sample of the blended fuel following each fuel delivery. ASTM D3246-81, or its latest edition, shall be used for sulfur content of gaseous fuel.
- b. Record daily the amount of each fuel fired, density of each fuel, heating value, nitrogen content and the percent sulfur content by weight of fuel oil as specified in 40 CFR 60.334.  
[Rule 62-213.440, F.A.C., and AC 49-205703 (PSD-FL-182)]

### **Monitoring of Operations**

**B.11 Continuous Monitoring Required.** A continuous monitoring system shall be maintained to record fuel consumption. A continuous monitoring system shall be maintained to record emissions of nitrogen oxides in accordance with the requirements of 40 CFR 75. Data collected from this system shall be used for periodic monitoring purposes. While water injection is being utilized for NO<sub>x</sub> control, water to fuel ratio and fuel bound nitrogen is not required to be continuously monitored as long as the permittee will report excess emissions using the data collected by the continuous monitoring system in accordance with the following conditions:

1. Each NO<sub>x</sub> CEMS must be capable of calculating NO<sub>x</sub> emissions concentrations corrected to 15% O<sub>2</sub> and ISO conditions.
2. Monitor data availability shall be no less than 95 percent on a quarterly basis.
3. NO<sub>x</sub> CEMS should provide at least 4 data points for each hour and calculate a one-hour average.

To implement condition 1, KUA shall use ambient data (temperature, relative humidity, pressure) to correct excess emissions data to ISO conditions if requested by the Department. If monitor availability drops below 95% on a quarterly basis as prescribed in condition 2, KUA shall use water to fuel ratio and fuel-bound nitrogen data to monitor excess emissions in subsequent quarters until the minimum CEMS monitor availability is above 95%. The use of CEMS to monitor excess emissions is more stringent than the surrogate parameter monitoring in 40 CFR 60.334 since the CEMS directly measures NO<sub>x</sub> emissions. The CEMS also provides monitoring when no water injection is used to control NO<sub>x</sub> emissions (i.e., when firing natural gas, dry low NO<sub>x</sub> burners are used).  
[AC 49-205703 (PSD-FL-182)]

**B.12. Excess Emissions by CEMS.** The CEMS shall be used to determine periods of excess emissions as per 40 CFR 60.334. Excess emissions are defined for this emissions unit as any 60-

minute period during which the average emissions exceed the emission limits of specific condition **B.5.** of this permit. Periods of startup, shutdown and malfunction shall be monitored, recorded and reported with excess emissions following the format and requirements of 40 CFR 60.7.

[AC 49-205703 (PSD-FL-182)]

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

**B.13. Excess Emission Reports.** Semi-annual excess emission reports shall be submitted to the DEP's Central District Office. These reports shall be postmarked by the 30th day following the last day of June and the last day of December. Each excess emission report shall include the information required in 40 CFR 60.7(c) and 60.334.

[AC 49-205703 (PSD-FL-182)]

**B.14. Natural Gas Sulfur Content Records Required.** The owner or operator shall receive and maintain records of sulfur content of natural gas provided by the natural gas supplier, as per 40 CFR 60.334. The records shall report total sulfur content in terms of grains of sulfur per hundred cubic feet (standard conditions).

[AC 49-205703 (PSD-FL-182)]

**B.15. Additional Reports Required.** The owner or operator shall report the following with the Annual Operating Report (AOR) by March 1 of each calendar year: sulfur and nitrogen contents, by weight, and lower heating value of the fuel oil being fired, annual fuel consumption of number 2 fuel oil and natural gas, hours of operation per fuel usage and air emission limits.

[Rule 62-210.370(3), F.A.C., and AC 49-205703 (PSD-FL-182)]

### **Other Conditions**

**B.16. Maintain Capability to install an SCR.** This emissions unit is permitted for maximum NO<sub>x</sub> emission levels of 15 (gas)/42 (oil) ppmv. The Department will revise permitted emission levels for NO<sub>x</sub> if the manufacturer achieves an even lower NO<sub>x</sub> emission, pursuant to F.A.C. Rule 62-4.080. The permittee shall maintain capability for future installation of a selective catalytic reduction (SCR) system. This is required in the event that the permittee is unable to comply with the permitted NO<sub>x</sub> levels and the Department requires an SCR to be installed. In the event an SCR system is required to be installed, the emission limitations shall be established at the time of installation by stack test results and through a revised determination of BACT.

[AC 49-205703 (PSD-FL-182)]

**B.17.** This emissions unit is also subject to conditions **C.1.** through **C.13.** contained in **Subsection C. Common Conditions.**

**B.18.** This emissions unit is also subject to conditions **D.1.** through **D.6.** contained in **Subsection D. NSPS Common Conditions.**

**Subsection C. Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Simple Cycle Combustion Turbine Unit 1, rated at 40 MW, 367 MMBtu/hr for natural gas and 372 MMBtu/hr for number 2 fuel oil, capable of burning any combination of natural gas and number 2 fuel oil, with emissions exhausted through a 65 ft. stack .
002	Combined Cycle Combustion Turbine Unit 2, rated at 120 MW, 869 MMBtu/hr for natural gas and 928 MMBtu/hr for number 2 fuel oil, capable of burning natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack .

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

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

**C.1. Hours of Operation.** The 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.}

**Excess Emissions**

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

**C.2. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted 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 longer duration.

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

**C.3. 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.]

### **Monitoring of Operations**

#### **C.4. 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.]

**C.5. Visible Emissions.** The test method for visible emissions for emissions units 001 (Unit 1) and 002 (Unit 2) shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800 and 62-297.401, F.A.C.]

**C.6. 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.]

**C.7. 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 separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

**C.8. Operating Rate During Testing.** Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 95 to 100 percent of the maximum operation rate allowed by the permit. 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 105 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.]

**C.9. 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.

**(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.]

**C.10. Required Stack Sampling Facilities.** When a mass emissions stack test is required, 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.]

**Record Keeping and Reporting Requirements**

**C.11. Excess Emissions - Notification.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Central District Air Section in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a semi-annual report, if requested by the Central District Air Section.

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

**C.12. Excess Emissions - Report.** Submit to the Central District Air Section a written report of emissions in excess of emission limiting standards as set forth in this permit, for each semi-

annual period. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations.  
[Rule 62-213.440, F.A.C., and AC 49-205703 (PSD-FL-182)]

**C.13. Test Reports.**

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

(b) The required test report shall be filed with the Central District Air Section 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 Central District Air Section 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.]

**C.14. 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 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 fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the Central District 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 DEP, 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 DEP.

**(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 (d) 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.]

**C.15.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]



**Subsection D. NSPS Common Conditions.**

<u>E.U. ID</u> <u>No.</u>	<u>Brief Description</u>
001	Simple Cycle Combustion Turbine Unit 1, rated at 40 MW, 367 MMBtu/hr for natural gas and 372 MMBtu/hr for number 2 fuel oil, capable of burning natural gas and number 2 fuel oil, with emissions exhausted through a 65 ft. stack .
002	Combined Cycle Combustion Turbine Unit 2, rated at 120 MW, 869 MMBtu/hr for natural gas and 928 MMBtu/hr for number 2 fuel oil, capable of burning any combination of natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack .

{Permitting Note: The emissions units above are subject to the following conditions from 40 CFR 60 Subpart A, General Provisions. The affected facilities to which this subpart applies are simple cycle combustion turbine, Unit 1 and the combined cycle combustion turbine, Unit 2.}

**The following conditions apply to the NSPS emissions units listed above:**

**D.1. Pursuant to 40 CFR 60.7 Notification And Record Keeping.**

(a) Any owner or operator subject to the provisions of this part 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.

(b) The owner or operator subject to the provisions of this part 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.

(c) 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 semi-annual 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.

(d) The summary report form shall contain the information and be in the format shown in Figure 1 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.

*[See Attached Figure 1-Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance]*

(f) The owner or operator subject to the provisions of this part 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 this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.

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

#### **D.2. Pursuant to 40 CFR 60.8 Performance Tests.**

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart.

(c) 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.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining

compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.  
[40 CFR 60.8]

**D.3. Pursuant to 40 CFR 60.11 Compliance With Standards And Maintenance Requirements.**

- (a) Compliance with standards in this part, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
- (b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
- (c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
- (d) 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 air 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.
- (e)(5) The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance.  
[40 CFR 60.11]

**D.4. Pursuant to 40 CFR 60.12 Circumvention.**

No owner or operator subject to the provisions of this part 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]

**D.5. Pursuant to 40 CFR 60.13 Monitoring Requirements.**

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he/she shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 40 CFR 60.8 and as described in 40 CFR 60.11(e)(5), shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 40 CFR 60.8 is conducted.

(2) Except as provided in 40 CFR 60.13(c)(1), the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Owners and operators of all continuous emission monitoring systems 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.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems 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(c) 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.

(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.

(f) All continuous monitoring systems 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.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. 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 recorder during periods of continuous monitoring system breakdowns, 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 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]

**D.6. Pursuant to 40 CFR 60.17 Incorporations by Reference.**

The materials listed below are incorporated by reference in the corresponding sections noted.

[Note: The remainder of this section has not been reproduced in this permit for brevity. See 40 CFR 60.17 for materials incorporated by reference.]

[40 CFR 60.17]

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

**Operated by:** Kissimmee Utility Authority  
**ORIS code:** 7238

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

The emissions unit(s) listed below are regulated under Acid Rain, Phase II.

<b>E.U. ID No.</b>	<b>Brief Description</b>
001	Simple Cycle Combustion Turbine, Unit 1
002	Combined Cycle Combustion Turbine, Unit 2

**A.1.** The Phase II permit application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) 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 for each Acid Rain unit is as follows:

<b><u>E.U. ID No.</u></b>	<b><u>EPA ID</u></b>	<b><u>Year</u></b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
001	1	<b>SO<sub>2</sub> allowances, under Table 2 or 3 of 40 CFR Part 73</b>	0*	0*	0*	0*	0*
002	2	<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. Fast-Track Revisions of Acid Rain Parts.** Those Acid Rain sources making a change described at Rule 62- 214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C., Fast-Track Revisions of Acid Rain Parts.  
 [Rules 62-213.413 and 62-214.370(4), F.A.C.]

**A.4. Comments, notes, and justifications.**  
 None.

**Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers  
(version dated 02/05/97)**

**Abbreviations and Acronyms:**

°F: Degrees Fahrenheit  
**BACT:** Best Available Control Technology  
**CFR:** Code of Federal Regulations  
**DEP:** State of Florida, Department of Environmental Protection  
**DARM:** Division of Air Resource Management  
**EPA:** United States Environmental Protection Agency  
**F.A.C.:** Florida Administrative Code  
**F.S.:** Florida Statute  
**ISO:** International Standards Organization  
**LAT:** Latitude  
**LONG:** Longitude  
**MMBtu:** million British thermal units  
**MW:** Megawatt  
**ORIS:** Office of Regulatory Information Systems  
**SOA:** Specific Operating Agreement  
**UTM:** Universal Transverse Mercator

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**Citations:**

*The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.*

Code of Federal Regulations:

*Example:* [40 CFR 60.334]

Where:	40	reference to	Title 40
	CFR	reference to	Code of Federal Regulations
	60	reference to	Part 60
	60.334	reference to	Regulation 60.334

Florida Administrative Code (F.A.C.) Rules:

*Example:* [Rule 62-213, F.A.C.]

Where:	62	reference to	Title 62
	62-213	reference to	Chapter 62-213
	62-213.205	reference to	Rule 62-213.205, F.A.C.

**ISO:** International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.



**Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers  
(continued)**

**Identification Numbers:**

Facility Identification (ID) Number:

*Example:* Facility ID No.: 1050221

*Where:*

105 = 3-digit number code identifying the facility is located in Polk County  
0221 = 4-digit number assigned by state database.

Permit Numbers:

*Example:* 1050221-002-AV, or  
1050221-001-AC

*Where:*

AC = Air Construction Permit  
AV = Air Operation Permit (Title V Source)  
105 = 3-digit number code identifying the facility is located in Polk County  
0221 = 4-digit number assigned by permit tracking database  
001 or 002 = 3-digit sequential project number assigned by permit tracking database

*Example:* PSD-FL-185  
PA95-01  
AC53-208321

*Where:*

PSD = Prevention of Significant Deterioration Permit  
PA = Power Plant Siting Act Permit  
AC = old Air Construction Permit numbering

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

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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 ‘exempt emissions units’.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
	Fuel oil, gasoline and lube oil storage tanks. Tanks are:
-XXX-	Tank 1 (300,000 gal. capacity) distillate fuel oil;
-XXX-	Tank 2 (700,000 gal. capacity) distillate fuel oil;

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

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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 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**

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E.U. 006 - Cooling tower; This source does not use chromium for water treatment.

**Appendix H-1, Permit History/ID Number Changes**

**Permit History (for tracking purposes):**

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date <sup>1,2</sup>	Revised Date(s)
Unit 1	Simple Cycle Comb. Turbine, Unit 1	AC49-205703 PSD-FL-182	4/9/93	11/1/96	9/16/94, 5/8/95	
		AC0970043-004				5/19/97
		AC0970043-003				8/15/97
Unit 2	Combined Cycle Gas Turbine, Unit 2	AC49-205703 PSD-FL-182	4/9/93	11/1/96	9/16/94, 5/8/95	
		AC0970043-004				5/19/97
		AC0970043-003				8/15/97

**ID Number Changes (for tracking purposes):**

From: **Facility ID No.:** 30ORL490043

To: **Facility ID No.:** 0970043

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Appendix S  
Permit Summary Tables

Table 1-1, Summary of Air Pollutant Emission Standards

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

Emiss Unit	Brief Description
001	Simple Cycle Gas Turbine, Unit 1, rated at 40 MW.

Pollutant	Fuel(s)	Hours	Allowable Emissions <sup>a</sup>			Equivalent		Regulatory	See Permit	
			Standard(s)	lb/hr	TPY	lb/hr	TPY			
VE	No 2 Oil Nat Gas	8760	10 % opacity					AC 49-205703	A.4.	
SO <sub>2</sub>	No 2 Oil Nat Gas	1000	0.05% S by weight, fuel oil	20			10 <sup>1</sup>	AC 49-205703	A.9., A.10., A.13.	
NO <sub>x</sub>	No. 2 Fuel Oil	1000	42 ppmvd at 15% oxygen on a dry	63			31.5	AC 49-205703	A.15.	
NO <sub>x</sub>	Natural Gas	8760	25/15 ppmvd at 15% oxygen dry	22			85.4	AC 49-205703	A.15.	
PM	No. 2 Fuel Oil	1000	0.0323 lb/MMBtu				12.0	6.0	AC 49-205703	A.5., A.7.
PM	Natural Gas	8760	0.0245 lb/MMBtu				9	34.9	AC 49-205703	A.5., A.7.
VOC	No. 2 Fuel Oil	1000	3 lb/hour	3				1.5	AC 49-205703	A.5., A.7.
VOC	Natural Gas	8760	1.4 lb/hour	1.4				5.4	AC 49-205703	A.5., A.7.
CO	No. 2 Fuel Oil	1000	63 ppmvd at 15% oxygen on a dry	76				38	AC 49-205703	A.5., A.7.
CO	Natural Gas	8760	30 ppmvd at 15% oxygen on a dry	40				155.2	AC 49-205703	A.5., A.7.
Hg	No. 2 Fuel Oil	1000	3.1e-6 lb/MMBtu				<1	<1	AC 49-205703	A.5.
As	No. 2 Fuel Oil	1000	4.2e-6 lb/MMBtu				<1	<1	AC 49-205703	A.5.
Be	No. 2 Fuel Oil	1000	2.5e-6 lb/MMBtu				<1	<1	AC 49-205703	A.5.
Pb	No. 2 Fuel Oil	1000	2.8e-5 lb/MMBtu				<1	<1	AC 49-205703	A.5.

Notes for EU 001:

a lb/hour and TPY values based on using number 2 fuel oil for 1000 hours per year; for natural gas using 7760 hours per year.

<sup>1</sup> The "Equivalent Emissions" listed are for informational purposes only. They are based upon 7760 hours per year of gas operation and 1000 hours per year of #2 oil operation. [Rule 62-213.205, F.A.C.]

\* Firing of number 2 fuel oil is limited to no more than 1000 hours per year to the unit for any reason.

Appendix S  
Permit Summary Tables

Emiss Unit	Brief Description
002	Combined Cycle Gas Turbine, Unit 2, rated at 120 MW.

Pollutant	Fuel(s)	Hours	Allowable Emissions <sup>a</sup>			Equivalent		Regulatory	See Permit
			Standard(s)	lb/hr	TPY	lb/hr	TPY		
VE	No 2 Oil Nat Gas	8760	10 % opacity					AC 49-205703	A.4.
SO <sub>2</sub>	No 2 Oil Nat Gas	1000	0.05% S by weight, fuel oil	52			26	AC 49-205703	A.9., A.10., A.13.
NO <sub>x</sub>	No. 2 Fuel Oil	1000	42 ppmvd at 15% oxygen on a dry	170			85.0	AC 49-205703	A.15.
NO <sub>x</sub>	Natural Gas	8760	15 ppmvd at 15% oxygen on a dry	53			205.6	AC 49-205703	A.15.
PM	No. 2 Fuel Oil	1000	0.0162 lb/MMBtu				15.0	AC 49-205703	A.5., A.7.
PM	Natural Gas	8760	0.0100 lb/MMBtu				8.7	AC 49-205703	A.5., A.7.
VOC	No. 2 Fuel Oil	1000	5.0 lb/hour	5			2.5	AC 49-205703	A.5., A.7.
VOC	Natural Gas	8760	2.0 lb/hour	2			7.76	AC 49-205703	A.5., A.7.
CO	No. 2 Fuel Oil	1000	20 ppmvd at 15% oxygen on a dry	65			32.5	AC 49-205703	A.5., A.7.
CO	Natural Gas	8760	20 ppmvd at 15% oxygen on a dry	54			209.5	AC 49-205703	A.5., A.7.
Hg	No. 2 Fuel Oil	1000	3.0e-6 lb/MMBtu				<1	AC 49-205703	A.5.
As	No. 2 Fuel Oil	1000	4.2e-6 lb/MMBtu				<1	AC 49-205703	A.5.
Be	No. 2 Fuel Oil	1000	2.5e-6 lb/MMBtu				<1	AC 49-205703	A.5.
Pb	No. 2 Fuel Oil	1000	2.8e-5 lb/MMBtu				<1	AC 49-205703	A.5.

Notes for EU 002:

a lb/hour and TPY values based on using number 2 fuel oil for 1000 hours per year; for natural gas using 7760 hours per year.

<sup>1</sup> The "Equivalent Emissions" listed are for informational purposes only. They are based upon 7760 hours per year of gas operation and 1000 hours per year of #2 oil operation. [Rule 62-213.205, F.A.C.]

\* Firing of number 2 fuel oil is limited to no more than 1000 hours per year to the unit for any reason.

**Appendix S**  
**Permit Summary Tables**

**Table 2-1, Summary of Compliance Requirements**

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

Emissions Unit	Brief Description
001	Simple Cycle Combustion Turbine, Unit 1, rated at 40 MW.

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
<b>VE</b>	No 2 Fuel Oil, Nat. Gas	EPA Method 9	Annual	August 1st	1 hour	No	A.6.
<b>SO<sub>2</sub></b>	"	Method 8 for Fuel oil firing only; Fuel Sampling & Analysis	As Fired			Yes*	A.9, A.10.
<b>NO<sub>x</sub></b>	"	EPA Test Method 20	Annual	August 1st	3 hours	Yes	A.6.
<b>PM</b>	"	EPA Test Methods 5 or 17	Only if 10% Opacity is exceeded		3 hours	No	A.7.
<b>VOC</b>	"	EPA Test Method 25A	Initial Compliance			No	A.7.
<b>CO</b>	"	EPA Test Method 10	Annual			No	A.7.
<b>Hg</b>	No.2 oil	EPA Method 101 or fuel sampling	Initial Compliance			No	A.5.
<b>As</b>	No.2 oil	Fuel sampling	Initial Compliance			No	A.5.
<b>Be</b>	No.2 oil	EPA Method 104 or fuel sampling	Initial Compliance			No	A.5.
<b>Pb</b>	No.2 oil	Fuel sampling	Initial Compliance			No	A.5.

Notes for EU 001:

\* Continuous monitoring of fuel consumption required.

<sup>1</sup> Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>2</sup> CMS = continuous monitoring system

See also Section C for general testing requirements

**Appendix S**  
**Permit Summary Tables**

Emissions Unit	Brief Description
002	Combined Cycle Combustion Turbine, Unit 2, rated at 120 MW.

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)
<b>VE</b>	No 2 Fuel Oil, Nat. Gas	EPA Method 9	Annual	August 1st	1 hour	No	B.6.
<b>SO<sub>2</sub></b>	"	Method 8 for Fuel oil firing only; Fuel Sampling & Analysis	As Fired			Yes*	B.9, B.10.
<b>NO<sub>x</sub></b>	"	EPA Test Method 20	Annual	August 1st	3 hours	Yes	B.6.
<b>PM</b>	"	EPA Test Methods 5 or 17	Only if 10% Opacity is exceeded		3 hours	No	B.7.
<b>VOC</b>	"	EPA Test Method 25 A	Initial Compliance			No	B.7.
<b>CO</b>	"	EPA Test Method 10	Annual			No	B.7.
<b>Hg</b>	No.2 oil	EPA Method 101 or fuel sampling	Initial Compliance			No	B.5.
<b>As</b>	No.2 oil	Fuel sampling	Initial Compliance			No	B.5.
<b>Be</b>	No.2 oil	EPA Method 104 or fuel sampling	Initial Compliance			No	B.5.
<b>Pb</b>	No.2 oil	Fuel sampling	Initial Compliance			No	B.5.

Notes for EU 002:

\* Continuous monitoring of fuel consumption required.

Notes:

<sup>1</sup> Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

<sup>2</sup> CMS = continuous monitoring system

See also Section F for general testing requirements.



Appendix TV-1, the Title V Core Conditions, has been provided only to the applicant. The most recent version of these conditions may be obtained from the Department's Internet Web site at:

<http://www2.dep.state.fl.us/air/>

If you do not have access to the Internet and would like a copy of Appendix TV, please contact Michael P. Halpin, Department of Environmental Protection, Division of Air Resources Management, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, 850/921-9530

## APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

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Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)  
(continued)

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1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

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

TABLE 297.310-1  
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter	2%
		Comparison check	5%

**FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)**

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (*Circle One*):    SO<sub>2</sub>    NO<sub>x</sub>    TRS    H<sub>2</sub>S    CO    Opacity

Reporting period dates: From \_\_\_\_\_ to \_\_\_\_\_

Company: \_\_\_\_\_

Emission Limitation: \_\_\_\_\_

Address: \_\_\_\_\_

Monitor Manufacturer: \_\_\_\_\_

Model No.: \_\_\_\_\_

Date of Latest CMS Certification or Audit: \_\_\_\_\_

Process Unit(s) Description: \_\_\_\_\_

Total source operating time in reporting period <sup>1</sup>: \_\_\_\_\_

Emission data summary <sup>1</sup>	CMS performance summary <sup>1</sup>
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown .....	a. Monitor equipment malfunctions .....
b. Control equipment problems .....	b. Non-Monitor equipment malfunctions .....
c. Process problems .....	c. Quality assurance calibration .....
d. Other known causes .....	d. Other known causes .....
e. Unknown causes .....	e. Unknown causes .....
2. Total duration of excess emissions .....	2. Total CMS Downtime .....
3. Total duration of excess emissions x (100) / [Total source operating time] ..... % <sup>2</sup>	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... % <sup>2</sup>

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

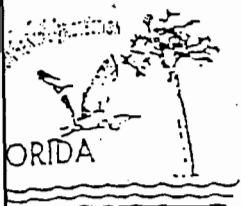
*Note: On a separate page, describe any changes since last quarter in CMS, process or controls.*

I certify that the information contained in this report is true, accurate, and complete.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_



Best Available Copy

Department of  
Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Werthere!!  
Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

Mr. Rich Piper, Chair  
Florida Power Coordinating Group, Inc.  
405, Reo Street, Suite 100  
Tampa, Florida 33609-1004

Dear Mr. Piper:

Enclosed is a copy of a Scrivener's Order correcting an error in the Order concerning particulate matter testing of natural gas fired boilers.

If you have any questions concerning the above, please call Yogesh Manocha at 904/488-6140, or write to me.

Sincerely,

M. D. Harley, P.E., DEE  
P.E. Administrator  
Emissions Monitoring Section  
Bureau of Air Monitoring and  
Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP  
Pat Comer, FDEP

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of: )  
Florida Electric Power Coordinating Group, Inc., ) ASP No. 97-B-01  
Petitioner. )

ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. 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 particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director  
Division of Air Resources Management  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 10<sup>th</sup> day of July 1997.

Clerk Stamp

FILED AND ACKNOWLEDGMENT  
FILED, on this date, pursuant to  
§120.52(7), Florida Statutes, with the  
designated Department Clerk, receipt of  
which is hereby acknowledged.

Martha Annell Wise 7/10/97  
Clerk Date



# Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is:  New  Revised

**STEP 1**  
Identify the source by plant name, State, and ORIS code from NADB

Plant Name	Cane Island Power Park	State	FL	ORIS Code	7238
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**STEP 2**  
Enter the boiler ID# from NADB for each affected unit, and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e

Compliance Plan				
a	b	c	d	e
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units  Commence Operation Date	New Units  Monitor Certification Deadline
Unit 1	Yes		8/12/94	1/1/95
Unit 2	Yes		1/29/95	4/8/95
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

**STEP 3**  
Check the box if the response in column c of Step 2 is "Yes" for any unit

For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

Plant Name (from Step 1)

## Cane Island Power Park

**STEP 4**  
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard RequirementsPermit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, Rules 62-214.320 and 330, F.A.C. in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the permitting authority; and
  - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Plant Name (from Step 1)

Cane Island Power Park

Recordkeeping and Reporting Requirements (cont.)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Mr. Abani Kumar (A.K.) Sharma, Director of Power Supply	
Signature <i>AK Sharma</i>	Date 1/7/98

**STEP 5 (optional)**  
**Enter the source AIRS**  
**and FINDS Identification**  
**numbers, if known**

AIRS
FINDS