



# Florida Department of Environmental Protection

Central District  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## ELECTRONIC MAIL

[lmattern@kua.com](mailto:lmattern@kua.com)

## NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by:

Larry Mattern, Vice President of Power Supply  
Kissimmee Utility Authority  
P.O. Box 423219  
Kissimmee, FL 32742-3219

Re: **FINAL** Title V Permit No.: 0970001-007-AV  
Roy B. Hansel Power Facility

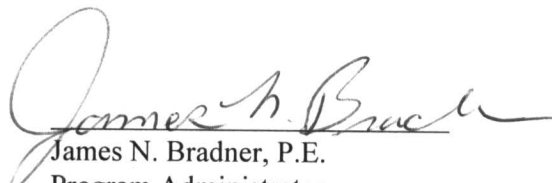
Dear Mr. Mattern:

Enclosed is **FINAL** Permit Number 0970001-007-AV for the operation of the Roy B. Hansel Power Facility located at 102 Lakeshore Blvd., Kissimmee, 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 with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000; 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 Orlando, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
James N. Bradner, P.E.  
Program Administrator  
Air Resources Management

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JNB/azt

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL Permit) and all copies were sent by certified mail or electronically (with Received Receipt) before the close of business on 5/7/07 to the person(s) listed:

Jerome J. Guidry, P.E. ([jerome.guidry@att.net](mailto:jerome.guidry@att.net))  
Caroline Shine, FDEP

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF FINAL PERMIT (including the FINAL Permit) were sent by certified mail or electronically (with Received Receipt) on the same date to the person(s) listed:

Barbara Friday, BAR [[Barbara.Friday@dep.state.fl.us](mailto:Barbara.Friday@dep.state.fl.us)] (for posting with Region 4, U.S. EPA)

Clerk Stamp

**FILED**, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Dina Jones  
(Clerk)

05/07/2007  
(Date)

## **FINAL Determination**

Title V Air Operation Permit

**FINAL** Permit No.: 0970001-007-AV

Kissimmee Utility Authority

Roy B. Hansel Power Facility

Page 1 of 1

### **I. Comment(s).**

No comments were received from the USEPA during their 45 day review period of the PROPOSED Permit.

### **II. Conclusion.**

In conclusion, the permitting authority hereby issues the FINAL Permit.

Kissimmee Utility Authority  
Roy B. Hansel Power Facility  
**Facility ID No.:** 0970006  
Osceola County

Title V Air Operation Permit Renewal  
**FINAL Renewal Permit No.:** 0970001-007-AV

**Permitting Authority:**  
Florida Department of Environmental Protection  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803  
Telephone: 407/893-3335  
Fax: 407/897-5963

Title V Air Operation Permit Renewal  
Kissimmee Utility Authority  
Roy B. Hansel Power Facility  
**FINAL** Renewal Permit No.: 0970001-007-AV

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# Florida Department of Environmental Protection

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Secretary

**Permittee:**

Kissimmee Utility Authority  
P. O. Box 423219  
Kissimmee, Florida 34742-3219  
Attn: Larry Mattern,  
Vice President of Power Supply

**FINAL Renewal Permit No.:** 0970001-007-AV

**Facility ID No.:** 0970001

**SIC Nos.:** 49

**Project:** Renewal Title V Air Operation Permit

This renewal permit is for the operation of the Roy B. Hansel Power Facility located at 102 Lakeshore Boulevard, Osceola County; UTM Coordinates: Zone 17, 460.1 km East and 3129.2 km North; Latitude: 28° 17' 20" North and Longitude: 81° 24' 20" West.

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

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

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

APPENDIX TV-6, TITLE V CONDITIONS

APPENDIX SS-1, STACK SAMPLING FACILITIES

Table 297.310-1, CALIBRATION SCHEDULE

Figure 1, Summary Report – Gaseous and Opacity Excess Emissions and Monitoring System Performance

**Effective Date:**

**May 1, 2007**

**Renewal Application Due Date:**

**July 30, 2011**

**Expiration Date:**

**January 30, 2012**

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

James N. Bradner, P.E.

Program Administrator

Air Resources Management

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JNB/az

"More Protection, Less Process"

## **Section I. Facility Information.**

### **Subsection A. Facility Description.**

This facility includes one 30.9 MW combined cycle combustion turbine with an unfired heat recovery steam generator and two 9.5 MW steam turbines which utilize steam produced by recovering waste heat from the combustion turbine exhaust gases. Emissions of nitrogen oxides (NO<sub>x</sub>) are controlled by using low nitrogen content fuels and water injection. An inlet air fogging system consisting of a high-pressure, direct water spray system provides evaporative cooling of the compressor inlet air decreasing the inlet air temperature and allowing a higher mass flow rate. This results in a slight increase in power production of two to five megawatts.

The facility also includes eight internal combustion engines that have been decommissioned and removed from the permit at the request of the applicant. The Title V permit must be revised before these units may operate again.

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

Based on the initial Title V permit application received June 14, 1996, the revised Title V application received October 13, 2000, and the Title V permit renewal application received July 26, 2006 this facility is **not** a major source of hazardous air pollutants (HAPs).

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

#### **E.U. ID No./Brief Description**

001 Combined Cycle Combustion Turbine

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, 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

These documents are on file with permitting authority:

Initial Title V Permit Application received June 14, 1996

Permit Application for a Modification received December 6, 1999

Revised Title V Permit Application received October 13, 2000

Renewal Title V Permit Application received July 30, 2001

Renewal Title V Permit Application received July 26, 2006

## Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS are a part of this permit.
2. 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).  
[Rule 62-296.320(4)(b)1., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA).
  - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:  
RMP Reporting Center  
Post Office Box 1515  
Lanham-Seabrook, Maryland 20703-1515  
Telephone: 301/429-5018
  - b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.  
[40 CFR 68]
5. 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.]
6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, VOC or OS without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:
  - a. Tightly cover or close all VOC containers when they are not in use;
  - b. Tightly cover, where possible, all open troughs, basins, baths, tanks, etc.;
  - c. Maintain all piping, valves, fittings, etc. in good operating condition;
  - d. Prevent excessive air turbulence across exposed VOC; and
  - e. Immediately confine and clean up spills of VOC containing materials.  
[Rule 62-296.320(1)(a), F.A.C.]



7. Emissions of Unconfined Particulate Matter. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. Chemical or water application to unpaved roads and unpaved yard areas;
- b. Paving and maintenance of roads, parking areas and yards;
- c. Landscaping or planting of vegetation; and
- d. Other techniques, as necessary.

[Rule 62-296.320(4)(c)2., F.A.C.]

8. When appropriate, any recordings, 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.]

9. The permittee shall submit all compliance related notifications and reports required of this permit to the air compliance section of this office:

Florida Department of Environmental Protection  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803  
Telephone: 407/893-3336  
Fax: 407/897-5963

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

United States Environmental Protection Agency  
Region 4  
Air, Pesticides & Toxics Management Division  
Air & EPCRA Enforcement Branch, Air Enforcement Section  
61 Forsyth Street  
Atlanta, Georgia 30303-8960  
Telephone: 404/562-9155  
Fax: 404/562-9163

11. Annual Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the air compliance section of this office and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.

[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting note: This condition implements the requirements of Rules 62-213.440(3)(a)2.&3., F.A.C. (see Condition 51 of APPENDIX TV-6, TITLE V CONDITIONS)}

**12. Certification by Responsible Official (RO).** In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62.213.420(4), F.A.C.]

**13. Annual Operating Report.** A DEP Form No. 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" including the Emissions Report, shall be completed for each calendar year **on or before March 1** of the following year and submitted to the air compliance section of this office.  
[Rule 62-210.370(3), F.A.C.]

**14.** At least 180 days prior to the expiration date of this operation permit, the permittee shall submit to this office four copies of the air permit application, DEP Form No. 62-210.900(1).  
[Rule 62-4.090(1), F.A.C.]

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

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

##### E.U. ID

##### No.

##### Brief Description

001 Combined Cycle Combustion Turbine with Inlet Air Fogging System

{Permitting note: This emission unit is regulated under NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT) Determination, dated October 5, 1981.}

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

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

**A1. Capacity.** The maximum heat input to the emission unit shall not exceed 441.7 MMbtu/hour (3,869,292 MMbtu per any consecutive 12-month period) for no. 2 fuel oil or 0.491 million cubic feet/hour (4301.2 million cubic feet per any consecutive 12-month period) for natural gas.

[Rule 62-210.200, (PTE), F.A.C. and construction permit AC49-74856]

**A2. Methods of Operation - Fuels.** Only natural gas or distillate no. 2 fuel oil having a maximum sulfur content of 0.5 percent by weight shall be fired in the emission unit. Each combustor is allowed to use natural gas, no. 2 oil, or any combination of the two.

[Rule 62-210.200, (PTE), F.A.C. and Title V application received June 14, 1996]

**A3. Hours of Operation.** This combined cycle combustion turbine is allowed to operate continuously. The inlet air fogging system is allowed to operate no more than 1255 hours during any consecutive 12-month period.

[Rule 62-210.200, (PTE), F.A.C. and construction permits AC49-74856 and 0970001-003-AC]

**A4. Emissions Unit Operating Rate Limitation After Testing.** See specific condition no. A30.

[Rule 62-297.310(2), F.A.C.]

#### Emission Limitations and Standards

**A5.** Visible emissions from the turbine shall not exceed 20% opacity. Visible emissions from the boilers shall not exceed 20% opacity except that up to 40% opacity is permitted for not more than two minutes in any hour.

[Best Available Control Technology (BACT) Determination dated October 5, 1981, and construction permit AC49-74856]

**A6.** Particulate matter (PM) emissions from the turbine shall not exceed 22 pounds/hour.

[BACT Determination dated October 5, 1981, and construction permit AC49-74856]

**A7.** Sulfur dioxide (SO<sub>2</sub>) emissions from the turbine shall not exceed 255 pounds/hour and the sulfur content in the fuel oil shall not exceed 0.5% by weight for the turbine and for the boilers.

[BACT Determination dated October 5, 1981, NSPS, and construction permit AC49-74856]

**A8.** Nitrogen oxides emissions from the turbine shall not exceed 79 ppmvd at 15% oxygen (O<sub>2</sub>) ISO while firing natural gas. Nitrogen oxides emissions from the turbine shall not exceed 129 ppmvd at 15% O<sub>2</sub> ISO while firing distillate fuel oil or any combination of the two.  
[BACT Determination dated October 5, 1981 and construction permit AC49-74856]

**A9.** Volatile organic compound (VOC) emissions from the turbine shall not exceed 19 pounds/hour.  
[BACT Determination dated October 5, 1981 and construction permit AC49-74856]

**A10.** Carbon monoxide (CO) emissions from the turbine shall not exceed 80 pounds/hour.  
[BACT Determination dated October 5, 1981 and construction permit AC49-74856]

**A11.** Mercury emissions from the turbine shall not exceed 0.0004 pounds/hour.  
[Estimated by the applicant and construction permit AC49-74856]

**A12.** Beryllium emissions from the turbine shall not exceed 0.00004 pounds/hour.  
[EPA 600/57-81-003b and construction permit AC49-74856]

#### **Excess Emissions**

**A13.** Excess emissions from this emissions unit resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

**A14.** 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.]

**A15.** In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.  
[Rule 62-210.700(6), F.A.C.]

#### **Monitoring of Operations**

**A16.** At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
[40 CFR 60.11(d)]

**A17.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO<sub>x</sub> emissions shall install and operate a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within  $\pm 5.0$  percent and shall be approved by the Administrator.

[40 CFR 60.334(a)]

**A18.** The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:

(a) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

(b) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b).

[40 CFR 60.334(b)(1) and (2)]

**A19. Determination of Process Variables.**

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

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

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

**Test Methods and Procedures**

**A20. Visible Emissions.** The test method for VE shall be EPA Method 9, incorporated by reference in Chapter 62-297, F.A.C.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC49-74856]

**A21. Particulate matter.** The test methods for PM emissions shall be EPA Method 5, incorporated by reference in Chapter 62-297, F.A.C. A VE test using EPA Method 9 will be acceptable and stack testing for PM is waived if the opacity is less than 10%.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC49-74856]

**A22.** To compute the NO<sub>x</sub> emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Department to determine the nitrogen content of the fuel being fired.

[40 CFR 60.335(a)]

**A23.** For purposes of demonstrating compliance with NSPS - 40 CFR 60, Subpart GG, the monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the permitted NO<sub>x</sub> standard at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

[40 CFR 60.335(c)(2)]

**A24. Nitrogen Oxides and Sulfur Dioxide.** The owner or operator shall determine compliance with the NO<sub>x</sub> and SO<sub>2</sub> standards in 40 CFR 60.332 as follows: U.S. EPA. Method 20 (40 CFR 60, Appendix A) shall be used to determine the NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub> concentrations. The span values shall be 300 ppm of NO<sub>x</sub> and 21 percent O<sub>2</sub>. The NO<sub>x</sub> emissions shall be determined at each of the load conditions specified in 40 CFR 60.335(c)(2). The sampling site shall be located between the turbine and the boiler.

[40 CFR 60.335(c)(3) and construction permit AC49-74856]

**A25.** The owner or operator shall determine compliance with the sulfur content standard of 0.5 percent, by weight, as follows: ASTM D 2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator. Compliance with the sulfur content in the fuel shows compliance with the emission limit for sulfur dioxide.

[40 CFR 60.335(d)]

**A26.** To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(a) and 40 CFR 60.335(d) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[40 CFR 60.335(e)]

**A27. Volatile organic compound.** Compliance with the VOC standard shall be assumed provided the CO allowable emission rate is achieved.

[Construction permit AC49-74856]

**A28. Carbon monoxide.** Compliance with the CO standard shall be demonstrated using EPA Method 10.

[Rules 62-213.440, 62-297.310, and 62-297.401, F.A.C.; and construction permit AC49-74856]

**A29. 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.]

**A30. Operating Rate During Testing.**

Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Capacity is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. 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.

**A31. 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:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a FINAL surrogate standard and an existing mass emission limiting standard.

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, CALIBRATION SCHEDULE (attached).

(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.]

**A32.** 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.]

**A33. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10. An annual compliance test conducted for VE shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant



emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a baghouse 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.]

**A34. Frequency of Compliance Tests.** General Compliance Testing. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a VE compliance test once per each five-year period, coinciding with the term of its air operation permit.  
[Rule 62-297.310(7)(a)8., F.A.C.]

**A35. Frequency of Compliance Tests.** Compliance testing for PM, SO<sub>2</sub>, NO<sub>x</sub>, and CO emissions from this combustion turbine is required at yearly intervals on or within 90 days prior to the date of September 30.  
[Rules 62-297.310(7)(a)3., 4., and 5., F.A.C. and construction permit AC49-74856]

**A36.** At least 15 days prior to the date on which each formal compliance test is due to begin, the permittee shall provide written notification of the test to the air compliance section of this office. The notification must include the following information: the date, time and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and telephone number of the person conducting the test.  
[Rule 62-297.310(7)(a)9, F.A.C.]

**A37. Test Reports.**

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

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

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

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  8. The date, starting time and duration of each sampling run.
  9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  10. The number of points sampled and configuration and location of the sampling plane.
  11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  12. The type, manufacturer and configuration of the sampling equipment used.
  13. Data related to the required calibration of the test equipment.
  14. Data on the identification, processing and weights of all filters used.
  15. Data on the types and amounts of any chemical solutions used.
  16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  18. All measured and calculated data required to be determined by each applicable test procedure for each run.
  19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
  20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
  21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.
- [Rule 62-297.310(8), F.A.C.]

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

**A38.** For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows: Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

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

**A39.** The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(a) 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.

(b) 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.

(c) 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.

(d) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.  
[40 CFR 60.7(c)(1), (2), (3), and (4)]

**A40.** The summary report form shall contain the information and be in the format shown in FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(a) 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.

(b) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.  
[40 CFR 60.7(d)(1) and (2)]

**A41.** (a) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

1. For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

2. The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

3. The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

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

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

**A42.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.  
[Rule 62-210.700(6), F.A.C.]

**A43.** In order to demonstrate compliance with conditions no. A1, A2, and A3, the permittee shall maintain a log at the facility. The log at a minimum shall contain the following:

Monthly

a) month

b) consecutive 12-month total of fuel usage and heat input rates, and fuel sulfur content by weight

c) consecutive 12-month hours of operation of the inlet air fogging system

[Rules 62-4.070(3), and 62-213.440(1)(b)2., F.A.C.]