

**NOTICE OF FINAL TITLE V AIR OPERATION PERMIT**

In the Matter of an  
Application for Permit Renewal:

Mr. Scott D. Stone  
Plant General Manager and Responsible Official  
FPL  
Putnam Power Plant  
392 U.S. Highway 17 South  
East Palatka, Florida 32031

FINAL Permit Project No.: 1070014-005-AV  
Putnam Power Plant  
Putnam County

Enclosed is the FINAL Permit, No. 1070014-005AV. The purpose is for the renewal of the Title V Air Operation Permit. The facility is located at 392 U.S. Highway 17 South, East Palatka, Putnam County. This permit renewal is issued pursuant to Chapter 403, Florida Statutes (F.S.). There were no comments received from Region 4, U.S. EPA, regarding the PROPOSED Permit.

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 Department 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 Department.

Executed in Tallahassee, Florida.

Ms. Trina L. Vielhauer  
Chief  
Bureau of Air Regulation

TLV/sms/bm

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL TITLE V AIR OPERATION PERMIT (including the FINAL Determination and the FINAL Permit) was sent by certified mail before the close of business on 10/29/03 to the person(s) listed or as otherwise noted:

Mr. Scott D. Stone, Plant General Manager and Responsible Official

The undersigned duly designated deputy agency clerk hereby certifies that a copy of this NOTICE OF FINAL TITLE V AIR OPERATION PERMIT was sent by U.S. Mail before the close of business on 10/29/03 to the person(s) listed or as otherwise noted:

- Mr. Chris Kirts, FDEP, NED
- Mr. Kennard F. Kosky, P.E., GAI
- Mr. Hamilton Oven, P.E., FDEP-SCO
- Ms. Mary Archer, Application Contact, FPL Environmental Services Dept. (JES/JB)
- USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

*Barbara J. Sunday*  
(Clerk) 10/29/03  
(Date)

U.S. Postal Service  
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 Mr. Scott D. Stone

**Street, Apt. No.;  
 or PO Box No.** 392 U.S. Highway 17 South

**City, State, ZIP+4**  
 East Palatka, Florida 32031

PS Form 3800, January 2001 See Reverse for Instructions

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:  
 Mr. Scott D. Stone  
 Plant General Manager and  
 Responsible Official  
 FPL  
 Putnam Power Plant  
 392 U.S. Highway 17 South  
 East Palatka, Florida 32031

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee  
*Jane Champion*

B. Received by (Printed Name) C. Date of Delivery  
*Jane Champion 11/5/03*

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DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR RESOURCES MANAGEMENT  
BUREAU OF AIR REGULATION - TITLE V  
2600 BLAIR STONE ROAD  
TALLAHASSEE, FLORIDA 32399-2400

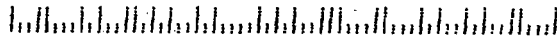
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BUREAU OF AIR REGULATION

NOV 07 2003

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32399-2400



## **FINAL Determination**

Title V Air Operation Permit Renewal  
FINAL Permit No.: 1070014-005-AV  
FPL  
Putnam Power Plant  
Page 1 of 1

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

No comments nor objections 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.

# STATEMENT OF BASIS

Title V Air Operation Permit Renewal  
FINAL Permit No.: 1070014-005-AV

Florida Power and Light Company  
Putnam Power Plant  
Putnam County

This Title V Air Operation Permit Renewal 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 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.

The subject of this permit is for the renewal of the Title V Air Operation Permit. The facility consists of two (2) combined-cycle combustion turbine (CT) units [each combined-cycle CT unit is composed of two (2) CTs and two (2) associated heat recovery steam generators (HRSGs) equipped with duct burners; and, inlet foggers are installed at the compressor inlet to each of the four (4) CTs], an auxiliary boiler, and unregulated emissions units. Each combined-cycle combustion turbine-electrical generator is a Westinghouse Model 501B5A unit rated at 70 MW generating capacity (at 85 degrees F ambient temperature), with a maximum heat input for natural gas and fuel oil of 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively; and, the inlet foggers reduce the turbine inlet air temperature, which improves the heat rate and increases power due to the cooler/denser inlet air. The duct burners for each HRSG are rated at a maximum heat input of 250 MMBtu/hr, and are fired with natural gas and No. 2 fuel oil. The auxiliary boiler is manufactured by VA-Power and has a maximum heat input for natural gas and No. 2 fuel oil of 16.275 MMBtu/hr and 14.28 MMBtu/hr, respectively.

The HRSGs's ductburners are subject to the NSPS regulations at 40 CFR 60, Subpart Db. The CTs are existing emissions units and are not subject to the NSPS regulations at 40 CFR 60, Subpart GG.

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

Compliance assurance monitoring (CAM) does not apply.

Based on the Title V Air Operation Permit Renewal application received June 1, 2003, this facility is a major source of hazardous air pollutants (HAPs).

FPL  
Putnam Power Plant  
**Facility ID No.:** 1070014  
Putnam County

Title V Air Operation Permit Renewal  
**FINAL Permit No.:** 1070014-005-AV

Permitting Authority:  
State of Florida  
Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation  
Title V Section

Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-0114  
Fax: 850/922-6979

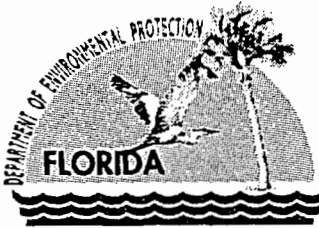
Compliance Authority:  
Department of Environmental Protection  
Northeast District Office  
Air Section  
7825 Baymeadows Way, Suite 200B  
Jacksonville, FL 32256-7590  
Telephone: 904/807-3300  
Fax: 904/448-4363

Title V Air Operation Permit Renewal

FINAL Permit No.: 1070014-005-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:**  
FPL  
Putnam Power Plant  
392 U.S. Highway 17 South  
East Palatka, FL 32031

**FINAL Permit No.:** 1070014-005-AV  
**Facility ID No.:** 1070014  
**SIC Nos.:** 49, 4911  
**Project:** Title V Air Operation Permit Renewal

This permit renewal is for the operation of the Putnam Power Plant. This facility is located at U.S. Highway 17 South, East Palatka, Putnam County; UTM Coordinates: Zone 17, 443368.85 km East and 3277807.32 km North; Latitude: 29° 37' 44" North and Longitude: 81° 35' 6" West.

This Title V Air Operation Permit Renewal 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  
Appendix T, Heat Input vs. Ambient Temperature Curves  
Appendix TV-4, Title V Conditions (version dated 02/12/02)  
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)  
Table 297.310-1, Calibration Schedule (version dated 10/07/96)  
Figure 1 - Summary Report-Gaseous and Opacity Excess Emission  
and Monitoring System Performance Report (version dated 7/96)  
Phase II Acid Rain Part Application/Compliance Plan dated 04/07/03, and received 06/01/03

**Title V/IV Permit Effective Date:** January 1, 2004  
**Renewal Application Due Date:** July 5, 2008  
**Expiration Date:** December 31, 2008

Michael G. Cooke, Director  
Division of Air Resource Management

MGC/sms/bm



**Section I. Facility Information.**

**Subsection A. Facility Description.**

The facility consists of four combustion turbines, each with an associated inlet fogger and heat recovery steam generator equipped with duct burners, an auxiliary boiler, and unregulated emissions units. Each combustion turbine is a Westinghouse unit rated at 70 MW generating capacity (at 85 degrees F ambient temperature), with a maximum heat input for natural gas and fuel oil of 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively. The duct burners for each HRSG are rated at a maximum heat input of 250 MMBtu/hr, and are fired with natural gas and number 2 fuel oil. The auxiliary boiler is manufactured by VA-Power and has a maximum heat input for natural gas and number 2 fuel oil of 16.275 MMBtu/hr and 14.28 MMBtu/hr, respectively.

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

Based on the Title V permit renewal application received June 1, 2003, this facility is a major source of hazardous air pollutants (HAPs).

**Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
003	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG11.
004	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG12.
005	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG21.
006	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG22.
007	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG11.
008	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG12.
009	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG21.
010	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG22.
011	Auxiliary Boiler.

{Note: The above emissions unit grouping accommodates the acid rain grouping.}

<b>Unregulated Emissions Units and/or Activities</b>	
012	Emergency Diesel Generator, Miscellaneous Mobile Equipment and Internal Combustion Engines
013	Painting of Plant Equipment and Non-halogenated Solvent Cleaning Operations

*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

Statement of Basis

These documents are on file with the permitting authority:

Title V Air Operation Permit Renewal Application received June 1, 2003.

## **Section II. Facility-wide Conditions.**

### **The following conditions apply facility-wide:**

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.  
{Permitting Note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided 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).**
  - 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 3346  
Merrifield, VA 22116-3346  
Telephone: 703/816-4434
  - and,
  - 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. **Unregulated Emissions Units and/or Activities.** Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. **Insignificant Emissions Units and/or Activities.** Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

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

The following requirements are "not federally enforceable":

- a. Tightly cover or close all VOC or OS containers when they are not in use.
- b. Tightly cover all open tanks which contain VOC or OS when they are not in use.
- c. Maintain all pipes, valves, fittings, etc., which handle VOC or OS in good operating condition.
- d. Immediately confine and clean up VOC or OS spills and make sure wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1)(a), F.A.C.; proposed by applicant in the initial Title V permit application received June 12, 1996; and, 1070014-001-AV]

**8. Emissions of Unconfined Particulate Matter.** Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS):

The following requirements are "not federally enforceable":

- a. The facility constructs temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.
- b. Maintenance of paved areas as needed.
- c. Regular mowing of grass and care of vegetation.
- d. Limiting access to plant property by unnecessary vehicles.
- e. Bagged chemical products are stored in weather-tight buildings until they are used.
- f. Spills of powdered chemical products are cleaned up as soon as practicable.
- g. Vehicles are restricted to slow speeds on the plant site.

[Rule 62-296.320(4)(c)2., F.A.C.; proposed by applicant in the initial Title V permit application received June 12, 1996; and, 1070014-001-AV]

**9.** When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which defines day one.

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

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

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

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

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

Department of Environmental Protection, Northeast District Office

Air Section

7825 Baymeadows Way, Suite 200B

Jacksonville, FL 32256-7590

Telephone: 904/807-3300 Fax: 904/448-4363

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

United States Environmental Protection Agency, Region 4

Air, Pesticides & Toxics Management Division

Air & EPCRA Enforcement Branch

Air Enforcement Section

61 Forsyth Street

Atlanta, GA 30303

Phone: 404/562-9155 Fax: 404/562-9163 or 404/562-9164

{Note: In this permit, citation of "PPSC PA 74-01" shall refer to Power Plant Siting Certification PA 74-01, ordered 10/16/74 and modified 5/20/80, 3/15/84, 7/16/91 and 5/28/92}

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

[Rule 62-213.420(4), F.A.C.]

**Section III. Emissions Units and Conditions.**

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

003	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG11. This emissions unit consists of a Westinghouse combustion turbine, rated at 70 MW generating capacity (at 85 degrees F ambient temperature). Heat input for this unit may vary at different ambient temperatures in accordance with the curves attached as Appendix T of this permit. (As an example, maximum heat input for natural gas or fuel oil at 85 degrees F ambient temperature is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.)
004	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG12. This emissions unit consists of a Westinghouse combustion turbine, rated at 70 MW generating capacity (at 85 degrees F ambient temperature). Heat input for this unit may vary at different ambient temperatures in accordance with the curves attached as Appendix T of this permit. (As an example, maximum heat input for natural gas or fuel oil at 85 degrees F ambient temperature is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.)
005	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG21. This emissions unit consists of a Westinghouse combustion turbine, rated at 70 MW generating capacity (at 85 degrees F ambient temperature). Heat input for this unit may vary at different ambient temperatures in accordance with the curves attached as Appendix T of this permit. (As an example, maximum heat input for natural gas or fuel oil at 85 degrees F ambient temperature is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.)
006	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG22. This emissions unit consists of a Westinghouse combustion turbine, rated at 70 MW generating capacity (at 85 degrees F ambient temperature). Heat input for this unit may vary at different ambient temperatures in accordance with the curves attached as Appendix T of this permit. (As an example, maximum heat input for natural gas or fuel oil at 85 degrees F ambient temperature is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.)

{Permitting Notes: These emissions units are regulated under Acid Rain, Phase II; Rule 62-210.300, F.A.C., Permits Required; Power Plant Siting Certification No. PA 74-01 ordered 10/16/74, and the modified conditions of PA 74-01 modified 05/20/80, 03/15/84, 07/16/91 and 05/28/92; and, Air Construction Permit No. 1070014-003-AC. Based on information submitted by the applicant in the Title V application, these emissions units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. Each combustion turbine is exhausted through a heat recovery steam generator. Inlet foggers installed at the compressor inlet to each of the four CTs reduce the turbine inlet air temperature. The temperature reduction improves the heat rate and increases power due to the cooler/denser inlet air. Emissions units 003 and 004 began commercial operation in 1978. Emissions units 005 and 006 began commercial operation in 1977.}

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
003, 004, 005 & 006	(a)	Natural Gas
	(a)	Fuel Oil

(a) Heat input is limited at any given ambient temperature in accordance with the curves attached as Appendix T of this permit.

{Note: As an example, maximum heat input for natural gas or fuel oil at 85 degrees F ambient temperature is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.}

{Permitting Note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 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.]

**A.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **D.9.** [Rule 62-297.310(2), F.A.C.]

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

a. **Fuels.** The combustion turbines shall only be fired with No. 2 or No. 6 fuel oil or with natural gas.

b. **Inlet Foggers.** The four inlet foggers installed at the compressor inlet to each of the four combined cycle combustion turbines may operate up to 40,960 degree F-hours per year in aggregate (average 10,240 degree F-hours per unit per year).

The permittee shall monitor both the hours of operation for the inlet foggers and the degrees of cooling afforded by the inlet foggers. Computation of the degree-hour will be performed as follows:

Degree-hours = # hours inlet fogger operating time X degrees F of cooling

Degrees of Cooling shall be calculated by subtracting the fogged compressor inlet air temperature from the unfogged compressor inlet temperature (upstream of the fogger). The above calculation shall be performed for each hour of fogger operation. Calculation records shall be maintained on the plant site and made available for inspection upon request.

For each hour of oil operation on any combustion turbine during a calendar year, the allowable aggregate total inlet fogger operating degree-hour shall be reduced by 1.27 degree F-hours. [Rule 62-213.410, F.A.C.; PPSC PA 74-01, condition 1.B.(i); and, 1070014-003-AC]

### **Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging time for specific condition A.5. is based on the specified averaging time of the applicable test method.}

**A.4. Sulfur Dioxide - Sulfur Content.** The fuel oil sulfur content shall not exceed 0.7 percent, by weight. See specific condition **A.6.**

[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, PPSC PA 74-01, condition 1.B.(i)]

**A.5. Visible Emissions.** Visible emissions shall not exceed 20% opacity, except for one 6-minute period per hour during which opacity shall not exceed 27%.

[Rules 62-4.070(3) and 62-213.440, F.A.C.; and, PPSC PA 74-01, condition 1.B.(ii)]

### **Test Methods and Procedures**

**A.6. Sulfur Dioxide - Sulfur Content.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. See specific conditions **A.4.** and **A.7.**

[Rules 62-213.440 and 62-296.406(3), F.A.C.]

**A.7. Fuel Sampling & Analysis - Sulfur.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions).

[Rules 62-4.070(3), 62-213.440 and 62-297.440, F.A.C.]

**A.8. Visible Emissions.** The permittee shall demonstrate compliance with the visible emissions limit by DEP Method 9. See specific condition **D.6.**

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

### **Monitoring of Operations**

**A.9. Annual Tests Required - VE.** Except as provided in specific conditions **D.4** through **D.5** of this permit, emission testing for visible emissions shall be performed annually, no later than September 30th of each year, except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service.

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

**A.10. Wind Restriction and Monitoring.** The owner or operator shall burn fuel oil containing no more than 0.50% sulfur content, by weight, when sustained winds exceed 20 miles per hour for any continuous period of three hours or longer. The owner or operator shall measure wind velocity and direction, using recognized methods and procedures, at hourly intervals in the plant vicinity, only for those hours during which any combustion turbine at the plant burns fuel oil containing more than 0.50% sulfur content, by weight. The owner or operator shall quarterly report wind data, or shall report that no fuel oil containing more than 0.50% sulfur content, by weight, was burned, no later than the thirtieth day following the end of each calendar quarter.

[PPSC PA 74-01, condition 2]



**Excess Emissions**

**A.11.** Excess emissions resulting from 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.]

**A.12.** Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

[Rule 62-210.700(2), F.A.C.]

**Common Conditions**

**A.13.** These emissions units are also subject to conditions **D.1** through **D.13** contained in **Subsection D. Common Conditions.**

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

007	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG11. This emissions unit consists of duct burners for one heat recovery steam generator. Each HRSG is associated with one combustion turbine. Each HRSG's duct burners have a maximum heat input for natural gas or No. 2 fuel oil of 250 MMBtu/hr.
008	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG12. This emissions unit consists of duct burners for one heat recovery steam generator. Each HRSG is associated with one combustion turbine. Each HRSG's duct burners have a maximum heat input for natural gas or No. 2 fuel oil of 250 MMBtu/hr.
009	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG21. This emissions unit consists of duct burners for one heat recovery steam generator. Each HRSG is associated with one combustion turbine. Each HRSG's duct burners have a maximum heat input for natural gas or No. 2 fuel oil of 250 MMBtu/hr.
010	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG22. This emissions unit consists of duct burners for one heat recovery steam generator. Each HRSG is associated with one combustion turbine. Each HRSG's duct burners have a maximum heat input for natural gas or No. 2 fuel oil of 250 MMBtu/hr.

{Permitting Notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required and Power Plant Siting Certification No. PA 74-01 ordered 10/16/74, and the modified conditions of PA 74-01 modified 5/20/80, 3/15/84, 7/16/91 and 5/28/92. These emissions units are subject to 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. Each heat recovery steam generator has two stacks that exhaust emissions from the associated combustion turbine and the duct burners. Emissions units 007 and 008 began commercial operation in 1978. Emissions units 009 and 010 began commercial operation in 1977.}

**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
007, 008, 009 & 010	250	Natural Gas
	250	Fuel Oil

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting Note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

**B.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **D.9.**  
 [Rule 62-297.310(2), F.A.C.]

**B.3. Methods of Operation - Fuels.** The duct burners shall only be fired with No. 2 fuel oil or with natural gas.

[Rule 62-213.410, F.A.C.; and, PPSC PA 74-01, condition 1.C.(i)]

### **Emission Limitations and Standards**

{Permitting Note: Unless otherwise specified, the averaging time for specific conditions B.5. and B.6 are based on the specified averaging time of the applicable test method.}

**B.4. Sulfur Dioxide - Sulfur Content.** The fuel oil sulfur content shall not exceed 0.5 percent, by weight. See specific condition **B.7.**

[Rules 62-4.070(3) and 62-213.440, F.A.C.; PPSC PA 74-01 condition 1.C.(i); and, 40 CFR 60.42b]

**B.5. Visible Emissions.** Visible emissions shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour during which opacity shall not exceed 27%. The opacity standards apply at all times, except during periods of startup, shutdown or malfunction.

[Rules 62-4.070(3) and 62-213.440, F.A.C.; PPSC PA 74-01 condition 1.C.(ii)(a); and, 40 CFR 60.43b and 60.46b(a)]

**B.6. Nitrogen Oxides.** Nitrogen oxide emissions (expressed as NO<sub>2</sub>) shall not exceed 0.20 lb/MMBtu while burning natural gas and distillate oil. The nitrogen oxide standards apply at all times including periods of startup, shutdown, or malfunction.

[40 CFR 60.44b; and, PPSC PA 74-01 (modification of 5/28/92)]

### **Test Methods and Procedures**

**B.7. Sulfur Dioxide - Sulfur Content.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by maintaining fuel receipts as described in 40 CFR 60.49b(r). See specific conditions **B.4. and B.14.**

[Rules 62-213.440 and 62-296.406(3), F.A.C.; and, 40 CFR 60.42b]

**B.8. VE Test Methods.** To determine compliance with the opacity limits, the owner or operator shall conduct tests using EPA Method 9.

[40 CFR 60.46b(d)(7)]

**B.9. Test Methods For Nitrogen Oxides.** Compliance with the nitrogen oxides emission limit shall be determined through testing using EPA reference methods 7E and 3A, of 40 CFR Part 60, Appendix A.

[40 CFR 60.46b; and, PPSC PA 74-01 (modification of 5/28/92)]

{Note: PPSC PA 74-01 (modification of 5/28/92) allows use of EPA Methods 7E and 3A instead of EPA Method 20.}

### **Monitoring of Operations**

**B.10. Emission Tests Required - VE and NOx.** Except as provided in specific conditions **D.4** through **D.5** of this permit, emission testing shall be conducted as follows: Emission testing for visible emissions shall be performed annually. Emission testing for nitrogen oxides shall be performed prior to renewal, except that an annual test for nitrogen oxides shall be performed

each year that fuel oil is fired in these units for more than 400 hours. Testing shall be completed no later than September 30th of each year required, except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service.

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

**B.11. Emission Monitoring For VE.** Prior to burning fuel oil in these emissions units, the owner or operator shall install, calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. This system shall thenceforth be operated whenever fuel oil is burned in these emissions units.

[40 CFR 60.48b(a)]

**B.12. CEMS Required by Power Plant Siting.** The owner or operator shall maintain a continuous emission monitoring system (CEMS) for opacity and nitrogen oxides on one of the paired stacks for each combined cycle unit.

{The PPSC requires monitors on one stack each of CT/HRSG 1x and 2x, for a total of two stacks that must be monitored. The owner currently operates opacity monitors to satisfy the PPSC requirement to operate the CEMS for opacity. The NOx monitors installed and maintained pursuant to 40 CFR 75 satisfy the PPSC requirement to operate the CEMS for NOx.}

[Rule 62-213.440, F.A.C.; and, PPSC PA 74-01, condition 4]

### **Reporting and Recordkeeping Requirements**

#### **B.13. 40 CFR 60.49b: Reporting and Recordkeeping Requirements.**

The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for distillate oil and natural gas for each calendar quarter. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

The owner or operator shall maintain records of opacity [required by NSPS, whenever fuel oil is burned in these emissions units (see specific condition B.11.)].

The owner or operator shall maintain records of the following information for each steam generating unit operating day:

- (1) Calendar date.
- (2) The average hourly nitrogen oxides emission rates (expressed as NO<sub>2</sub>) (lb/MMBtu heat input) measured or predicted.
- (3) The 30-day average nitrogen oxides emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
- (4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

- (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

The owner or operator is required to submit excess emission reports for any calendar quarter during which there are excess emissions from the affected facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. For the purpose of the opacity limitation, excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards.

[40 CFR 60.49b(d), (f), (g)(1) - (7) and (h)]

**B.14. Fuel Receipts Required.** The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in 40 CFR 60.41b:

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil Nos. 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils (incorporated by reference-see 40 CFR 60.17).

Very low sulfur oil means an oil that contains no more than 0.5 weight percent sulfur or that, when combusted without sulfur dioxide emission control, has a sulfur dioxide emission rate equal to or less than 215 ng/J (0.5 lb/MMBtu) heat input.

For the purposes of this section, the oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Quarterly reports shall be submitted to the Department certifying that only very low sulfur oil meeting this definition was combusted in the affected facility during the preceding quarter.

[40 CFR 60.45b, 60.47b and 60.49b(r)]

#### **Common Conditions**

**B.15.** These emissions units are also subject to conditions **D.1** through **D.13** contained in **Subsection D. Common Conditions.**

**B.16.** These emissions units are also subject to conditions **E.1** through **E.5** contained in **Subsection E. NSPS Common Conditions**, except as specified in that section.

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

Unit No.	Description
011	This emissions unit consists of an auxiliary boiler, manufactured by VA-Power, with a maximum heat input for natural gas and No. 2 fuel oil of 16.275 MMBtu/hr and 14.28 MMBtu/hr, respectively.

{Permitting Notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required. This emissions unit is subject to 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. Emissions unit 011 began commercial operation in 1993. The unit was previously regulated under Power Plant Siting Certification No. PA 74-01 ordered 10/16/74, and the modified conditions of PA 74-01 modified 5/20/80, 3/15/84, 7/16/91 and 5/28/92. However, the only applicable condition was in conflict with the NSPS and has been superseded by this permit.}

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

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

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
011	16.275	Natural Gas
	14.28	No. 2 Fuel Oil

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

**C.2. Emissions Unit Operating Rate Limitation After Testing.** See specific condition **D.9.**  
 [Rule 62-297.310(2), F.A.C.]

**C.3. Methods of Operation - Fuels.** The auxiliary boiler shall only be fired with No. 2 fuel oil or with natural gas.  
 [Rule 62-213.410, F.A.C.]

**Emission Limitations and Standards**

**C.4. 40 CFR 60.42c: Standard for Sulfur Dioxide.**

The owner or operator shall not combust fuel oil in the affected emissions unit that contains greater than 0.5 weight percent sulfur. Compliance with the fuel oil sulfur limit shall be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1) (see specific condition C.7.). The fuel oil sulfur limit applies at all times, including periods of startup, shutdown, and malfunction.  
 [40 CFR 60.42c(d), (h), (i) and (j)]

## **Monitoring of Operations**

### **C.5. Emission Monitoring for Sulfur Dioxide.**

As an alternative to operating a CEMS at the outlet of the steam generating unit, the owner or operator shall determine the average SO<sub>2</sub> emission rate by sampling the fuel prior to combustion. Fuel sampling shall be conducted as follows:

As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

[40 CFR 60.46c(d)(2)]

## **Reporting and Recordkeeping Requirements**

### **C.6. 40 CFR 60.48c: Reporting and Recordkeeping Requirements.**

For any period in which fuel oil is combusted, the owner or operator shall submit quarterly reports to the Department. Each subsequent quarterly report shall be postmarked by the 30th day following the end of the reporting period.

The owner or operator shall keep records and submit quarterly reports including the following information related to the combustion of fuel oil, as applicable.

- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO<sub>2</sub> emission rate (lb/million Btu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential SO<sub>2</sub> emission rate calculated during the reporting period, ending with the last 30-day period in the quarter; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (oxygen or carbon dioxide) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which oil was not combusted in the steam generating unit.

- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1) of this section, as applicable. In addition to records of fuel supplier certifications, the quarterly report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the quarter.

[40 CFR 60.48c(d), (e)(1) thru (7) & (11)]

**C.7. Fuel Supplier Certification and Fuel Records.** The owner or operator shall maintain records of fuel supplier certification. Fuel supplier certification shall include the following information:

- (i) The name of the oil supplier; and,
- (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil:

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils" (incorporated by reference-see 40 CFR 60.17).

The owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

[40 CFR 60.48c(f)(1) and (g)]

### **Common Conditions**

**C.8.** These emissions units are also subject to conditions **D.1** through **D.13** contained in **Subsection D. Common Conditions**.

**C.9.** These emissions units are also subject to conditions **E.1** through **E.5** contained in **Subsection E. NSPS Common Conditions**, except as specified in that section.



**Subsection D. Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
003, 004, 005, 006	Combustion turbines for combined cycle heat recovery steam generators, HRSG11 through HRSG22.
007, 008, 009, 010	Duct burners for combined cycle heat recovery steam generators, HRSG11 through HRSG22.
011	Auxiliary boiler manufactured by VA-Power.

The following conditions apply to the emissions units listed above:

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

**D.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.}

**D.2. 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**

**D.3. 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.]

**D.4. 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. {Note: The provisions of this condition are numbered according to the rule. Provisions of the rule which are not applicable to this facility have been omitted, but the numbering of the rule has been preserved.}

(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
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.  
[Rule 62-297.310(7), F.A.C.; and, SIP Approved]

**D.5. When VE Tests Not Required.** 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 62-4.070(3), F.A.C.]

### **Test Methods and Procedures**

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

**D.6. DEP Method 9.** The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
  - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
  - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.

[Rule 62-297.401, F.A.C.]

**D.7. 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.]

**D.8. 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.]

**D.9. Operating Rate During Testing.** Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. For emissions units 003, 004, 005 and 006, the maximum heat input (permitted capacity) at any given ambient temperature shall be as described by the curves attached as Appendix T of this 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 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

**D.10. 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.

(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.

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

**D.11. 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.]

### **Reporting and Recordkeeping Requirements**

**D.12. Malfunctions - Notification.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Northeast District's Air Section 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 DEP Northeast District's Air Section.  
[Rule 62-210.700(6), F.A.C.]

### **D.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 DEP Northeast District's Air Section on the results of each such test.
- (b) The required test report shall be filed with the DEP Northeast District's 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 DEP Northeast District's 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.]

**Subsection E. NSPS Common Conditions.**

<b>E.U. ID No.</b>	<b>Brief Description</b>
007, 008, 009 & 010	Duct burners for combined cycle heat recovery steam generators, HRSG11 through HRSG22.
011	Auxiliary boiler manufactured by VA-Power.

{Permitting Notes: The emissions units, above, are subject to the following conditions from 40 CFR 60, Subpart A, General Provisions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator", when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. The 40 CFR 60 term "owner and operator" means "permittee" in this permit.}

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

**E.1. 40 CFR 60.7: Notification and Recordkeeping.**

(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) **(This section applies to emissions units 007, 008, 009 and 010, only, in the event they are fired with fuel oil. This section does not apply to emissions unit 011.)** The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form (see 40 CFR 60.7(d)) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(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]*

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

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

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and

(iii) The Administrator does not object to reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

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



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

(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.]

#### **E.2. 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, except as otherwise authorized by an approved alternative method.

(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]

**E.3. 40 CFR 60.11: Compliance with Standards and Maintenance Requirements.**

(a) Compliance with standards in this part, other than opacity standards, shall be determined 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).

(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.

**(5) (This paragraph applies to emissions units 007, 008, 009 and 010, only, in the event they are fired with fuel oil. This paragraph does not apply to emissions unit 011.)** 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]

**E.4. 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]

**E.5. 40 CFR 60.13: Monitoring Requirements. (This condition applies to emissions units 007, 008, 009 and 010, only, in the event they are fired with fuel oil. This condition does not apply to emissions unit 011.)**

(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]

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

**Operated by:** Florida Power and Light Company (FPL)  
**ORIS code:** 6246

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

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

<b>E.U. ID No.</b>	<b>Brief Description</b>
003 & 007	Combined Cycle Heat Recovery Steam Generator, HRSG11
004 & 008	Combined Cycle Heat Recovery Steam Generator, HRSG12
005 & 009	Combined Cycle Heat Recovery Steam Generator, HRSG21
006 & 010	Combined Cycle Heat Recovery Steam Generator, HRSG22

**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), effective 04/16/01, signed 04/07/03 and received 06/01/03. [Chapter 62-213 and Rule 62-214.320, F.A.C.]

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

<b>E.U. ID No.</b>	<b>EPA ID No.</b>	<b>Year</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
003 & 007	HRSG11	<b>SO<sub>2</sub> allowances, under Table 2 of 40 CFR Part 73</b>	1643*	1643*	1643*	1643*	1643*
004 & 008	HRSG12	<b>SO<sub>2</sub> allowances, under Table 2 of 40 CFR Part 73</b>	1643*	1643*	1643*	1643*	1643*

E.U. ID No.	EPA ID No.	Year	2004	2005	2006	2007	2008
005 & 009	HRSG21	SO2 allowances, under Table 2 of 40 CFR Part 73	1568*	1568*	1568*	1568*	1568*
006 & 010	HRSG22	SO2 allowances, under Table 2 of 40 CFR Part 73	1568*	1568*	1568*	1568*	1568*

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

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

1. No permit revision shall be required for increase in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
3. Allowances shall be accounted for under the Federal Acid Rain Program.

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

**A.4. 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, Fast-Track Revisions of Acid Rain Parts.  
[Rule 62-213.413, F.A.C.]

**A.5. Comments, notes, and justifications:** None

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

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

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

<b>E.U. ID No.</b>	<b>Brief Description of Emissions Units and/or Activity</b>
012	Emergency Diesel Generator, Miscellaneous Mobile Equipment and Internal Combustion Engines
013	Painting of Plant Equipment and Non-halogenated Solvent Cleaning Operations

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

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

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

<b>Brief Description of Emissions Units and/or Activities</b>
1. Gas metering area relief valves.
2. Hydrazine mixing tank and relief valves.
3. Fuel oil storage tanks and related equipment.
4. Lube oil tank vents and extraction vents.
5. Oil/water separators and related equipment.
6. Sandblasting facility.
7. Fire protection equipment.
8. Miscellaneous Mobile Vehicle Operations (cars, light trucks, heavy-duty trucks, backhoes, tractors, forklifts, cranes, etc.)



FPL  
Putnam Power Plant

FINAL Permit No.: 1070014-005-AV  
Facility ID No.: 1070014

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

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E.U. ID	Description	Permit No.	Effective Date	Expiration Date	Project Type <sup>1</sup>
003 - 011	All	1070014-001-AV	01/01/1999	12/31/2003	Initial
		PPS PA74-01	10/16/1974	Not Applicable	Construction
003 - 011	All	1070014-002-AV	07/27/1998	12/31/2003	Administrative Correction
003 - 010	CTs & HRSGs	1070014-003-AC	07/20/1999	07/20/2004	Construction (mod.)
003 - 010	CTs & HRSGs	1070014-004-AV	06/20/2000	06/20/2005	Revision
003 - 011	All	1070014-005-AV	10/21/2003	12/31/2008	Renewal

Notes:

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

<sup>2</sup> ARMS day 55 from the date of posting the PROPOSED Permit for EPA review (see confirmation e-mail from Tallahassee) or the date that EPA confirms resolution of any objections.

**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.

Emissions Unit	Brief Description
003	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG11. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.
004	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG12. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.
005	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG21. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.
006	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG22. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lbs/hr	TPY	lbs/hr	TPY		
SO <sub>2</sub>	Oil	8760	0.7 % sulfur (S), by wt.			699	3060	PPSC PA 74-01 condition 1.B.(i)	A.4.
VE	Oil or Natural Gas	8760	20% opacity, except ≤ 27% for one 6-minute period per hour					PPSC PA 74-01 condition 1.B.(ii)	A.5.
SO <sub>2</sub>	Oil	8760	0.50% sulfur, by weight, when sustained winds exceed 20 miles per hour for any continuous period of three hours or longer			see above	see above	PPSC PA 74-01, condition 2	A.10.

**Table 1-1, Summary of Air Pollutant Emission Standards Continued**

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
007	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG11. The maximum heat input is 250 MMBtu/hr.
008	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG12. The maximum heat input is 250 MMBtu/hr.
009	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG21. The maximum heat input is 250 MMBtu/hr.
010	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG22. The maximum heat input is 250 MMBtu/hr.

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lbs/hr	TPY	lbs/hr	TPY		
SO <sub>2</sub>	Oil	8760	0.5 % S, by wt.			126	550	PPSC PA 74-01 condition 1.C.(i), and 40 CFR 60.42b	B.4.
VE	Oil or Natural Gas	8760	20% opacity, except ≤ 27% for one 6-minute period per hour					PPSC PA 74-01 condition 1.C.(ii)(a), and 40 CFR 60.43b and 60.46b(a)	B.5.
NO <sub>x</sub>	Oil or Natural Gas	8760	0.20 lb/MMBtu			50	219	40 CFR 60.44b, PPSC PA 74-01 (modification of 5/28/92)	B.6.

**Table 1-1, Summary of Air Pollutant Emission Standards Continued**

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
011	Auxiliary boiler with a maximum heat input for natural gas and No. 2 fuel oil of 16.275 MMBtu/hr and 14.28 MMBtu/hr, respectively.

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions <sup>1</sup>		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lbs/hr	TPY	lbs/hr	TPY		
SO <sub>2</sub>	Oil	8760	0.5 % S, by wt.			126	550	40 CFR 60.42c(d), (h), (i) and (j)	C.4.

Notes:

<sup>1</sup> The "Equivalent Emissions" listed are for informational purposes only.

**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
003	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG11. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.
004	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG12. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.
005	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG21. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively.
006	Combustion Turbine for Combined Cycle Heat Recovery Steam Generator, HRSG22. The maximum heat input at 85 degrees F ambient temperature for natural gas and fuel oil is 968.3 MMBtu/hr and 910.6 MMBtu/hr, respectively..

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)
SO <sub>2</sub>	Oil	Fuel analysis, the fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest edition)	Upon each fuel delivery	Upon each fuel delivery		No	A.6. & A.7.
VE	Oil or Natural Gas	DEP Method 9	Annual	September 30	One hour	No	A.8. & A.9.
SO <sub>2</sub>	Oil	Measure wind velocity and direction, at hourly intervals in the plant vicinity, only for those hours during which any combustion turbine at the plant burns fuel oil containing more than 0.50% S, by wt.	As required			No	A.10.

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

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
007	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG11. The maximum heat input is 250 MMBtu/hr.
008	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG12. The maximum heat input is 250 MMBtu/hr..
009	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG21. The maximum heat input is 250 MMBtu/hr.
010	Duct burners for Combined Cycle Heat Recovery Steam Generator, HRSG22. The maximum heat input is 250 MMBtu/hr.

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>SO<sub>2</sub></b>	Oil	Maintain fuel receipts as described in 40 CFR 60.49b(r).	Fuel supplier certification			No	<b>B.7. &amp; B.14.</b>
<b>VE</b>	Oil or Natural Gas	EPA Method 9	Annual	September 30	One hour	Yes, when burning fuel oil	<b>B.8, B.10. &amp; B.11.</b>
<b>NO<sub>x</sub></b>	Oil or Natural Gas	EPA Methods 7E and 3A, of 40 CFR 60, Appendix A	Annual	September 30	3 hours	No	<b>B.9. &amp; B.10.</b>

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

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
011	Auxiliary boiler with a maximum heat input for natural gas and No. 2 fuel oil of 16.275 MMBtu/hr and 14.28 MMBtu/hr, respectively.

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)
SO <sub>2</sub>	Oil	Certification from the fuel supplier, as described under 40 CFR 60.48c(f)(1).	Fuel supplier certification			No	C.4. & C.7.

Notes:

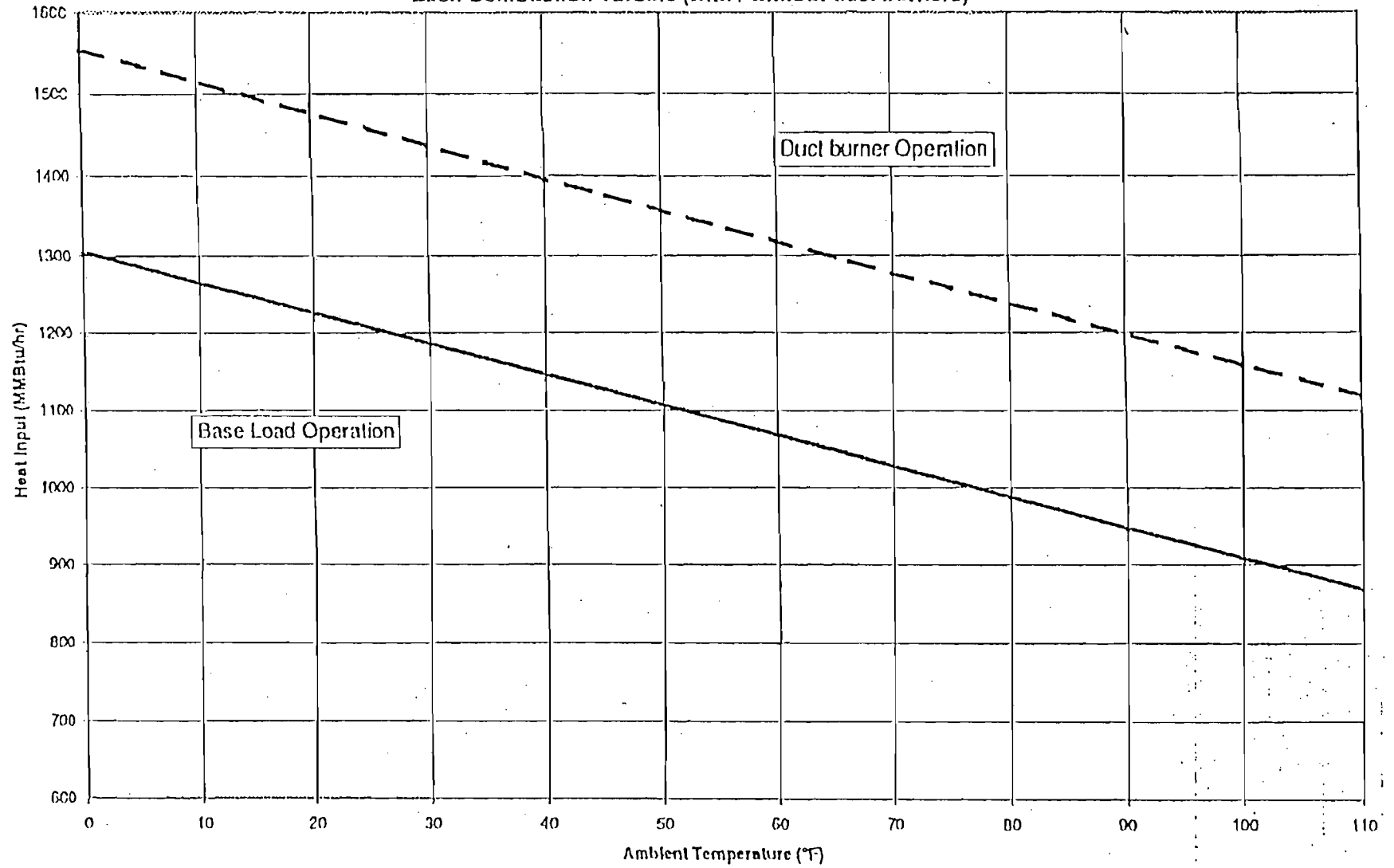
<sup>1</sup> Frequency base date established for planning purposes only: see Rule 62-297.310, F.A.C.

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

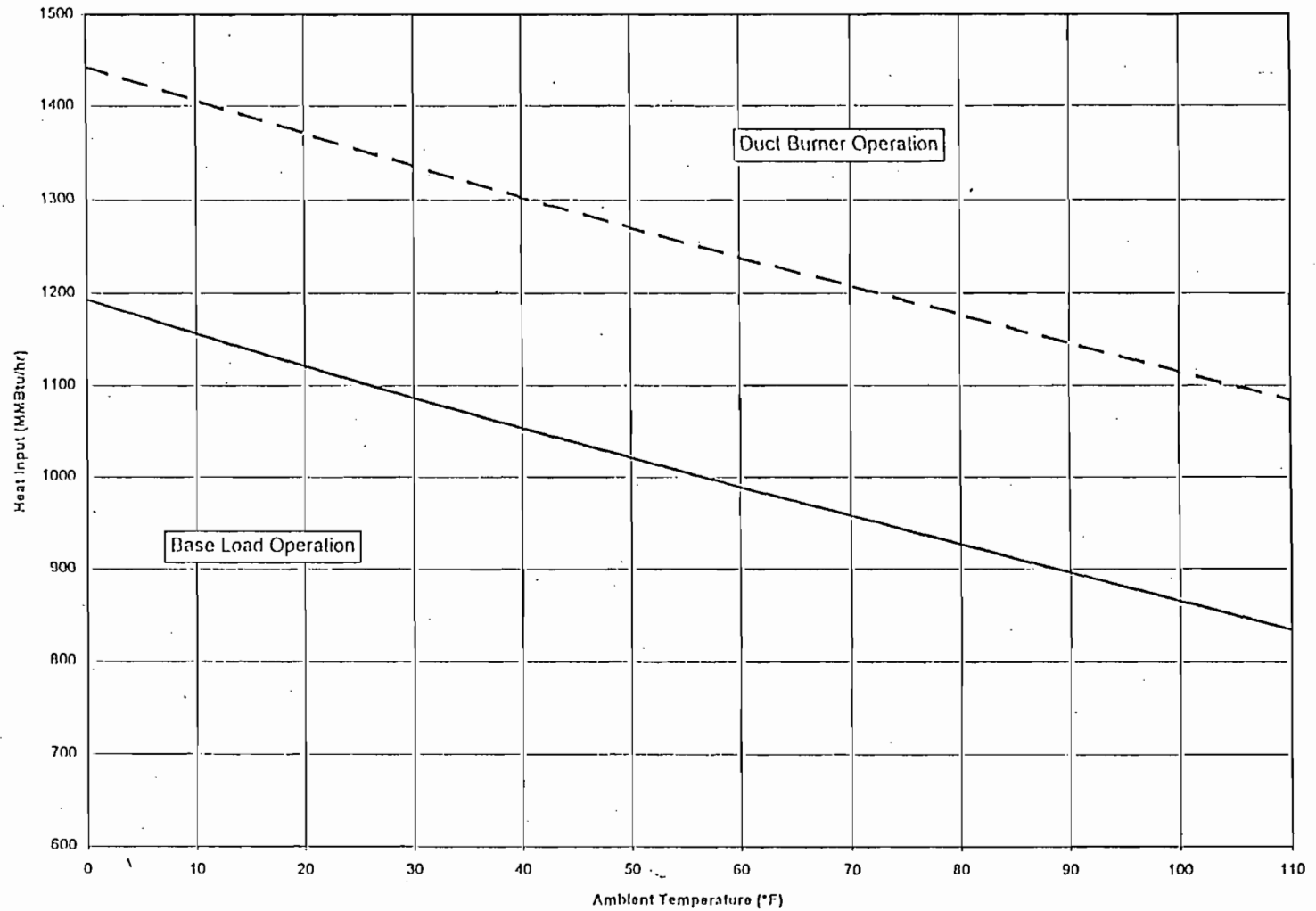
Appendix T.  
Heat Input vs. Ambient Temperature Curves for  
Natural Gas and Distillate Oil Firing



Pulnam Plant Unit 1 or 2  
Heat Input Variation With Ambient Temperature  
Each Combustion Turbine (with / without duct burners)



Putnam Plant Unit 1 or 2  
Heat Input Variation With Ambient Temperature (Oil)  
Each Combustion Turbine (with / without duct burners)



# INTEROFFICE MEMORANDUM

TO: Michael Cooke

THRU: Scott Sheplak *SS*  
Trina Vielhauer

FROM: Bruce Mitchell *BM*

DATE: October 27, 2003

SUBJECT: FPL  
Putnam Power Plant  
FINAL Title V Air Operation Permit Renewal  
Permit Project No.: 1070014-005-AV

Attached is the FINAL Title V Air Operation Permit Renewal, Project No. 1070014-005-AV, for the FPL's Putnam Power Plant located at 392 U.S. Highway 17 South, East Palatka, Putnam County.

There were no comments nor objections received from the U.S. EPA, Region 4 office during their 45-Day review period. Since no comments nor objections were received, the PROPOSED Permit becomes the FINAL Permit.

Attachments

TLV/sms/bm

**Mitchell, Bruce**

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**From:** Zhu, Yi  
**Sent:** Monday, March 15, 2004 11:02 AM  
**To:** Mitchell, Bruce  
**Cc:** Sheplak, Scott  
**Subject:** RE: ARMS data entry for FPL's Putnam Power Plant: Project No.: 1070014-005-AV: Renewal action.

The data checking and updates are complete. Please update the ARMS Data Entry event. Thank you.

-----Original Message-----

**From:** Mitchell, Bruce  
**Sent:** Thursday, October 30, 2003 10:01 AM  
**To:** Zhu, Yi  
**Cc:** Sheplak, Scott  
**Subject:** ARMS data entry for FPL's Putnam Power Plant: Project No.: 1070014-005-AV: Renewal action.

10/30/03

Dear Yi,

The ARMS data entry update has been completed. Please check it for accuracy and advise. Many thanks.

Bruce

10/30/03

Dear Yi,

The ARMS data entry update has been completed. Please check it for accuracy and advise.  
Many thanks.

Bruce

The EU's have been linked to the permit.

FPL's Putnam Power Plant

1070014-005-AV

Renewal

**Mitchell, Bruce**

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**From:** Friday, Barbara  
**Sent:** Wednesday, October 29, 2003 8:06 AM  
**To:** Walker, Elizabeth (AIR); Gracy Danois; Joel Huey; Kathleen Forney  
**Cc:** Mitchell, Bruce  
**Subject:** New Posting #1070014

There is a new posting on Florida's website.

1070014005AV  
FP&L - PUTNAM POWER PLANT

Final Permit Renewal

If you have any questions, feel free to contact me.

Thanks,  
Barbara

10/28/03

Dear Barbara,

Please post the above referenced T-5 Permit Renewal package located at:  
o:Bar/Title V/Bruce/Permits/1070014.005.AV.FPLPutnam.Renewal:

1070014.005.AV.App H  
1070014.005.AV.App I  
1070014.005.AV.App U  
1070014.005.AV.Renewal.FD  
1070014.005.AV.SOB  
1070014f.005.AV

Many thanks.

Bruce