



*Scott Sheplak*  
Lennon  
Ara. fut  
also.

September 17, 1997

Mr. Scott M. Sheplak, P.E.  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Dear Mr. Sheplak:

RE: Florida Power Corporation, Intercession City Plant  
DRAFT Title V Permit No. 0970014-001-AV

On behalf of Florida Power Corporation (FPC), attached are comments regarding the DRAFT Title V permit for the Intercession City Plant as identified above. FPC appreciates the Department's efforts in processing this permit and understands the need to resolve these issues in as timely a manner as possible. In this regard, DEP agreed to grant FPC's Request for Extension of Time until September 19, 1997. If we are unable to reach a resolution of these comments within this time period, we would appreciate the opportunity to file a second Request for Extension of Time.

Please contact me at (813) 866-5158 as soon as you have had a chance to review these comments to set up either a telephone or in-person conference. Thank you for your consideration of our comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "Scott H. Osbourn".

Scott H. Osbourn  
Senior Environmental Engineer

cc: Clair Fancy, P.E., DEP  
Charles Logan, DEP  
Ken Kosky, P.E., Golder  
Robert Manning, HGSS

**RECEIVED**

SEP 22 1997

BUREAU OF  
AIR REGULATION

**FLORIDA POWER CORPORATION  
COMMENTS ON DRAFT TITLE V PERMIT  
INTERCESSION CITY PLANT**

**General Comments**

1. FPC understands that Appendix TV-1, Title V Conditions, may continue to be revised. FPC requests that its Title V permit reflect the most up-to-date version of this Appendix.
2. FPC understands that DEP will publish the Intent to Issue Title V Air Operation Permit. Because the applicant is ultimately responsible for the publication of the Intent to Issue, FPC requests that DEP provide a copy of the Notice intended to be published, as well as proof of publication.

**Section I., Facility Information, Subsection A.**

1. The description states that the FPC's Title V application for the Intercession City Plant was received on "June 18, 1996." The correct submittal date was "June 14, 1996."

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

1. Condition 2. The word "not" was apparently inadvertently added, and should be deleted from, the second line of this Condition.
2. Condition 3. For clarity and to make this Condition specific to FPC's Intercession City Plant, FPC requests that Condition 2. be edited as follows:

**~~Except as otherwise provided in this permit 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 . . . .~~**

Also, because the reference to Chapter 62-297 in the last sentence of Condition 2. appears to be misplaced, FPC requests Condition 2. be edited as follows: **"EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C."**

3. Condition 6. In the context of this permit, how does DEP intend to respond to EPA's comments regarding the need to change the phrase "exempt" to "insignificant"?
4. Condition 7. For clarity, FPC requests that the first sentence of this Condition be edited as follows: **"The permittee shall not allow no person to store, pump, . . . ."** Also, because this condition is not included in Florida's SIP (based on our research), and to be consistent with other permits issued by DEP, this condition should be marked as "Not Federally Enforceable."

**Section III. Subsection A.**

1. For clarity, FPC requests the following revision to the description: (fourth line) "These units are not subject to ~~any~~ the following federal requirements, NSPS - 40 CFR 60 . . . ."

2. Condition A.5. FPC requests that this Condition be deleted because it is redundant to Condition 3., and there is no other authority for making this a unit-specific applicable requirement.

3. Condition A.12. The ASTM methods should be updated as follows to reflect the current methods: ". . . ASTM D4292-90 (1995), or both ASTM D4057-88 and ASTM D 129-~~91~~ 95, or the latest edition(s)."

4. Condition A.13. For clarity, the first clause in this condition ("When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method") should be deleted because the permit specifies EPA Method 9, pursuant to Condition A.10.

5. Condition A.14. Because there is an applicable standard for visible emissions, paragraph (a)4.a. should be edited as follows: "**Visible emissions, ~~if there is an applicable standard.~~**"

### Section III. Subsection B.

1. FPC requests that the description be edited as follows: (second line) "of ~~92.9~~ 96.3 megawatts/CT and 171 megawatts/CT, respectively. . . ." Also, the description should be revised to clarify that the Siemens unit began commercial operation in 1996, instead of 1994.

2. Condition B.1. As reflected in comment 1. above, the generator nameplate rating should be 96.3, instead of 92.9.

3. Condition B.3. FPC requests that the second sentence of this Condition (which imposes a gallons per hour limit on fuel oil consumption) be deleted because the sulfur dioxide emissions are already sufficiently limited by the imposition of a maximum heat input limit, an hours of operation limit, and a fuel oil sulfur limit.

4. Condition B.4. This Condition incorrectly places a unit-specific limit on hours of operation, whereas the existing permit imposes an aggregate limit. Accordingly, FPC requests the first sentence of this Condition be deleted and the following sentence added: "Total hours of operation for all units contained in this Subsection B. shall not exceed 16,950 hours per year."

5. Condition B.5. This Condition does not contain any citation as to the authority for its inclusion in the permit. This citation should include AC 49-303114/PSD-FL-180(A).

6. Conditions B.7. and B.8. These units should not be subject to individual tons per year emission limitations. The tons per year number listed in Table 1 of the PSD permit was an "aggregate" number; individual units' annual emissions were limited only by the fact that they could not emit, in combination with the other three CT's, emissions in excess of the aggregate annual limits. Accordingly, the individual tpy limits for NO<sub>x</sub>, SO<sub>2</sub>, PM/PM<sub>10</sub>, VOC, CO, and SAM in Conditions B.7. - B.12. should be deleted and an aggregate limit for all four units for each of these pollutants should be inserted.

7. Condition B.7. The standard for the H<sub>2</sub>SO<sub>4</sub> (New No.2 F.O. - max. 0.2% by wt.) should be revised to be listed under oil usage, and not for gas.

8. Condition B.14. In accordance with FPC's letter to the Department dated September 10, 1997, FPC requests that this Condition be revised to include the following: "The permittee shall monitor sulfur content of the natural gas in accordance with the customized fuel monitoring schedule in Attachment \_\_. Monitoring of the natural gas sulfur content is not required."

9. Conditions B.16. through B.20. The citation to Rule 62-296.320(4)(b)4.a. is incorrect and should be deleted. Also, the citation to AC 49-20311/PSD-FL-180(A) should be included in each of these Conditions.

10. Condition B.20. and B.29. Based on a previous amendment to the construction permit, VOC testing is not required so long as compliance with the CO limit is demonstrated. These Conditions should be revised accordingly.

11. Condition B.24. The reference to sulfur dioxide in this Condition should be deleted because the equation for sulfur dioxide is not included. Also, paragraph (b) of this Condition should be deleted because it only applies to the initial performance test.

12. Condition B.25. For clarity, FPC requests the following revision: "The permittee shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D2880-96 or the latest edition shall be used . . . and ASTM D1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 or the latest edition(s) shall be used for the sulfur content of gaseous fuels [incorporated by reference in 40 CFR 60.17]."

13. Condition B.28. In accordance with PSD-FL-180(A), this Condition should be revised to include the heat input/temperature curves.

14. Condition B.29. Paragraph (a)4.a. of this Condition should be revised to reflect the additional limits beyond visible emissions applicable to this unit.

15. Condition B.30. For clarity, the first clause in paragraph (a)2. of this Condition ("When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method") should be deleted because the permit specifies EPA Method 9, pursuant to Condition B.17.

16. Condition B.38. FPC requests that this Condition clarify that, in accordance with 40 CFR § 60.332(a), the determination of periods of excess emissions for nitrogen oxides take into account the fuel-bound nitrogen content of the fuel being fired. Also, in paragraph b., the sulfur content was incorrectly listed as 0.05. FPC requests that this sulfur content be corrected to 0.2.

#### **Section IV. Acid Rain Part**

1. Condition 1.a. should reference the actual application that FPC submitted rather than DEP's form number.

2. Condition 4. This Condition should be moved to the facility-wide section of this permit because it applies to every unit and every applicable requirement, not just to the Acid Rain requirements.

#### **Table 1-1, Air Pollutant Emission Allowables and Terms**

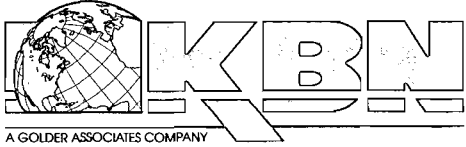
1. The citation to Rule 62-212.400(6), F.A.C. is incorrect because these limits are not BACT limits.

#### **Tables 1-2 and 1-3, Air Pollutant Emission Allowables and Terms**

1. This Table should be edited in accordance with the specific comments made above. For example, for Units 7-10, the hours of operation per year limitation (per unit) should be deleted, and the tons per year emission limits should be listed as an aggregate tons per year limit, and not an individual unit tons per year limit.

#### **Table 2-1, Compliance Testing Requirements**

1. This Table should be edited in accordance with the specific comments made above. For example, the specific requirements regarding PM and VOC testing should be included. Also, the citation to Condition B.4. does not make sense.



Letter of Transmittal

Date: 06/27/96

Project No.: 14419-1200

To: Scott Sheplak  
Florida Dept. of Environmental Prot.  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Re: Florida Power Corporation  
Title V: Intercession City Facility

RECEIVED

JUN 28 1996

BUREAU OF AIR REGULATION

6/14/96

The following items are being sent to you:  with this letter  under separate cover

<u>Copies</u>	<u>Description</u>
<u>1</u>	<u>Page 1 of Form hardcopy for verification</u>
<u>4</u>	<u>Air Operating Permit Application (Electronic Submittal ELSA 1.3b)</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

These are transmitted:

- As requested
- For review
- For review and comment
- For approval
- For your information
- For Electronic Submittal

Remarks: This is an electronic submittal of the permit application represented by page 1 of the form (attached). As indicated by the bulletin accompanying the previously submitted hard copy, original signature pages are not enclosed. They were provided with the hardcopy submittal. These disks were created using the submittal program included in ELSA 1.3b. If you have any questions, please contact Teresa Franklin or Jane Burnette.

Sender: Teresa Franklin for Bob McCann

cc: Scott Osbourn, File(2)

14419Y/F2/WP/2.LOT (06/27/96)

6241 Northwest 23rd Street  
Suite 500  
Gainesville, Florida 32653-1500  
352-336-5600 FAX 352-336-6603

5405 West Cypress Street  
Suite 215  
Tampa, Florida 33607  
813-287-1717 FAX 813-287-1716

1801 Clint Moore Road  
Suite 105  
Boca Raton, Florida 33487  
407-994-9910 FAX 407-994-9393

7785 Baymeadows Way  
Suite 105  
Jacksonville, Florida 32256  
904-739-5600 FAX 904-739-7777

1616 P Street NW  
Suite 350  
Washington, DC 20036  
202-462-1100 FAX 202-462-2270



Letter of Transmittal

Date: 06/14/96

Project No.: 14419-1200

To: Scott Sheplak
Florida Dept. of Environmental Prot.
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: FLORIDA POWER CORPORATION
Intercession City Facility

RECEIVED

JUN 14 1996

BUREAU OF AIR REGULATION

IDA
0970014

The following items are being sent to you: [x] with this letter [ ] under separate cover

Table with 2 columns: Copies, Description. Row 1: 4, Title V Air Operating Permit Application (Hard Copy)

These are transmitted:

- As requested, For approval, For review, For your information, For review and comment, [x] See Below

Remarks: As indicated on the enclosed bulletin, we will be submitting the above referenced application electronically after June 15, 1996

RECEIVED BY:

DATE: TIME:

14422Y/F1/WP/ALL-LOT-8 (06/14/96)

6241 Northwest 23rd Street Suite 500 Gainesville, Florida 32653-1500 352-336-5600 FAX 352-336-6603

5405 West Cypress Street Suite 215 Tampa, Florida 33607 813-287-1717 FAX 813-287-1716

1801 Clint Moore Road Suite 105 Boca Raton, Florida 33487 407-994-9910 FAX 407-994-9393

7785 Baymeadows Way Suite 105 Jacksonville, Florida 32256 904-739-5600 FAX 904-739-7777

1616 P Street NW Suite 350 Washington, DC 20036 202-462-1100 FAX 202-462-2270

# Department of Environmental Protection

## DIVISION OF AIR RESOURCES MANAGEMENT

### APPLICATION FOR AIR PERMIT - LONG FORM

See Instructions for Form No. 62-210.900(1)

**RECEIVED**

JUN 28 1996

### I. APPLICATION INFORMATION

BUREAU OF  
AIR REGULATION

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy.

#### Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: <b>Florida Power Corporation</b>	
2. Site Name: <b>Intercession City Plant</b>	
3. Facility Identification Number: <b>0970014</b> [ ] Unknown	
4. Facility Location Information: Street Address or Other Locator: <b>6525 Osceola Polk Cnty Line Rd</b> City: <b>Intercession City</b> County: <b>Osceola</b> Zip Code: <b>33848</b>	
5. Relocatable Facility? [ ] Yes [x] No	6. Existing Permitted Facility? [x] Yes [ ] No

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	



*Scott Sheplak* P.2  
Lemon

FMI.



September 19, 1997

Ms. Kathy Carter  
Office of General Counsel  
Florida Department of Environmental Protection  
2600 Blair Stone Rd.  
Tallahassee, FL 32399-2400

Dear Ms. Carter:

RE: Florida Power Corporation, DeBary Plant  
REQUEST FOR EXTENSION OF TIME on Intent to Issue Title V Air Operation Permit  
Draft Permit No. 1270028-001-AV

On July 28, 1997, Florida Power Corporation (FPC) received the above-referenced Intent to Issue Title V Air Operation Permit. A review of the permit conditions has revealed that several issues remain to be resolved. Department representatives previously agreed to an extension of time to file a petition until September 19, 1997. Mr. Robert Manning (attorney for FPC) has had discussions with Scott Sheplak of the Department who agreed that an extension of time for 14 more days to discuss these issues is appropriate. Therefore, based upon the Department's concurrence and pursuant to Rules 62-103.050 and 28-106.111, Fla. Admin. Code, FPC respectfully requests an extension of time in which to file a petition for an administrative hearing on the draft Title V permit under Sections 120.569 and 120.57, Fla. Stat., up to and including October 3, 1997.

If you should have any questions, please contact Mr. Scott Osbourn at (813) 866-5158.

Sincerely,

W. Jeffrey Pardue, C.E.P.  
Director, Environmental Services Department  
Title V Responsible Official

Robert A. Manning, Esq.  
Hopping Green Sams & Smith

cc: Scott Sheplak, DEP

**RECEIVED**

SEP 22 1997

BUREAU OF  
AIR REGULATION

Florida Power Corporation  
Intercession City Plant  
**Facility ID No.:** 0970014  
Osceola County

Initial Title V Air Operation Permit  
**DRAFT Permit No.:** 0970014-001-AV

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

Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Telephone: 850/488-1344  
Fax: 850/922-6979

August 13, 1997

Initial Title V Air Operation Permit  
DRAFT Permit No.: 0970014-001-AV

**Table of Contents**

<b>Section</b>	<b>Page Number(s)</b>
<b><u>Placard Page</u></b> .....	1
<b><u>I. Facility Information</u></b> .....	2
A. Facility Description.	
B. Summary of Emissions unit(s) with ID No(s).	
C. Relevant Documents	
<b><u>II. Facility-wide Conditions</u></b> .....	3,4
<b><u>III. Emissions Unit(s) and Conditions</u></b>	
A. Combustion Turbine Peaking Units (Pre-NSPS Sources).....	5 - 9
B. Combustion Turbines (NSPS Sources).....	10 - 24
<b><u>IV. Acid Rain Part</u></b>	
A. Acid Rain, Phase II.....	25 - 26
<b>Table 1-1, 1-2, &amp; 1-3</b> Air Pollutant Emission Allowables and Terms.....	27 - 29
<b>Table 2-1</b> , Compliance Testing Requirements.....	30
<b>Appendix E-1</b> , List of Exempt Emissions unit(s) and/or Activities.....	31
<b>Appendix U-1</b> , List of Unregulated Emissions unit(s) and/or Activities.....	32
<b>APPENDIX SS-1</b> , STACK SAMPLING FACILITIES.....	33
<b>APPENDIX TV-1</b> , TITLE V CONDITIONS.....	34
<b>APPENDIX H-1</b> , Permit History/ID Number Changes.....	35
<b>FIGURE 1 - Summary Report-Gaseous and Opacity Excess Emissions and Monitoring System Performance</b> .....	36

**Permittee:**  
Florida Power Corporation  
3201 34th Street South  
St. Petersburg, Florida 33711

**DRAFT Permit No.:** 0970014-001-AV  
**Facility ID No.:** 0970014  
**SIC Nos.:** 49  
**Project:** Initial Title V Air Operation Permit

This permit is for the operation of the Intercession City Plant. This facility is located at 6525 Osceola Polk County Line Road, Intercession City, Osceola County; UTM Coordinates: Zone 17, 446.3 km East and 3126 km North; Latitude: 28° 15' 38" North and Longitude: 81° 32' 51" West.

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

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

Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Appendix E-1, List of Exempt Emissions Units and/or Activities  
APPENDIX TV-1, TITLE V CONDITIONS (version dated 08/11/97)  
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)  
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS  
EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July, 1996)

Phase II Acid Rain Application/Compliance Plan received December 14, 1995.

**Effective Date:** January 1, 1998  
**Renewal Application Due Date:** July 5, 2002  
**Expiration Date:** December 31, 2002

---

Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sms/initials

**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of eleven simple cycle combustion turbines (CT), 6 are pre-NSPS and 5 are NSPS Subpart GG sources. Each CT exhausts through a separate stack. Also included in this permit are miscellaneous unregulated/exempt emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

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

<b>E.U. ID No.</b>	<b>Brief Description</b>
-001	6 - Combustion Turbine Peaking Units (Pre-NSPS)
-002 & -003	5 - Combustion Turbines (NSPS)

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

**Subsection C. Relevant Documents.**

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

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

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

Table 2-1, Summary of Compliance Requirements

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

Appendix H-1, Permit History/ID Number Changes

These documents are on file with the permitting authority:

Initial Title V Permit Application received June 14, 1996.

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

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

- 1.** APPENDIX TV-1, TITLE V CONDITIONS (version dated 08/11/97), is a part of this permit. {Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}
- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.** No person 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.  
[Rule 62-296.320(4)(b)1. & 4., F.A.C.]
- 4. Prevention of Accidental Releases (Section 112(r) of CAA).** If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable;
  - and
  - b. certification forms and/or RMPs according to the promulgated rule schedule.[40 CFR 68]
- 5. Unregulated Emissions Units and/or Activities.** Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
- 6. Exempt Emissions Units and/or Activities.** Appendix E-1, List of Exempt Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]
- 7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying

known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

[Rule 62-296.320(1)(a), F.A.C.]

**8. Not federally enforceable.** Reasonable precautions should be taken to prevent emissions of unconfined particulate matter at this facility. Steps presently taken at the facility to minimize particulate emissions are as follows:

- ◆ Maintenance of paved areas as needed,
  - ◆ Regular mowing of grass and care of vegetation,
  - ◆ Limiting access to plant property by unnecessary vehicles, and
  - ◆ Additional or alternative activities may be utilized to minimize unconfined particulate emissions.
- [Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in the initial Title V permit application received June 14, 1996.]

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

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

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

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

**11.** 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  
Operating Permits Section  
61 Forsyth Street  
Atlanta, Georgia 32303  
Telephone: 404/562-9099  
Fax: 404/562-9095

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

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

<b>E. U. ID No.</b>	<b>Brief Description</b>
-001	Combustion Turbine Peaking Units CTP 1, CTP 2, CTP 3, CTP 4, CTP 5, & CTP 6

The above referenced turbines may fire new No. 2 fuel oil having a maximum sulfur content of 0.5 percent, by weight. Each turbine has a maximum heat input of 708 MMBtu/hour and power a generator rated at 56.7 MW (megawatts of electricity). Emissions are not controlled and each turbine exhausts through a separate stack. These units are not subject to any federal requirements, NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines or Acid Rain. The above units began commercial service in 1974.

{Permitting Note: The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required.}

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

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

**A.1. Permitted Capacity.** The maximum heat input rate shall not exceed 708 MMBtu/hour/CT while firing new No. 2 fuel oil.

[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 A.13.

**A.3. Methods of Operation - Fuels.** Only new No. 2 fuel oil having a maximum sulfur content of 0.5 percent, by weight, shall be fired in the turbines at a maximum consumption rate of 123 bbls/hr/turbine.

[Rules 62-4.160(2) and 62-213.440(1), F.A.C.; and, AO 49-176549.]

**A.4. Hours of Operation.** Each emissions unit may operate continuously, i.e., 8,760 hours/year/CT.

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



### **Emission Limitations and Standards**

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

**A.5. Visible Emissions.** Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO 49-176549.]

**A.6. Sulfur Content.** The sulfur content of the new No. 2 fuel oil shall not exceed 0.5 percent, by weight. [Requested in initial Title V permit application received on June 14, 1996.]

### **Excess Emissions**

**A.7.** Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

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

**A.8.** 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**

**A.9.** The permittee shall demonstrate compliance with the sulfur content limit with a fuel analysis provided by the vendor upon each fuel delivery. See specific condition A.12.

[Rule 62-213.440, F.A.C.; and, AO 49-176549.]

**A.10. Determination of Process Variables.**

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

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.  
[Rule 62-297.310(5), F.A.C.]

### Test Methods and Procedures

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

**A.11.** The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.  
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

**A.12.** The fuel sulfur content, percent by weight, provided by the vendor for each delivery of liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the latest edition(s).  
[Rules 62-213.440 and 62-297.440, F.A.C.]

**A.13.** Operating Rate During Testing.

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.  
[Rule 62-297.310(2), F.A.C.]

**A.14.** Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When EPA 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.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

**A.15. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

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

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

- a. Visible emissions, if there is an applicable standard;

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.; SIP approved]

**A.16. Visible Emissions Testing - Annual**. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning only liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. and 8., F.A.C.]

### **Record keeping and Reporting Requirements**

**A.17. Malfunction Reporting**. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

**A.18. Test Reports**.

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

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

[Rule 62-297.310(8), F.A.C.]

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

<b>E.U. ID No.</b>	<b>BRIEF DESCRIPTION</b>
-002	Combustion Turbine Units CT 7, CT 8, CT 9, & CT 10
-003	Combustion Turbine CT 11

CT's. 7 through 10 are GE PG7111(EA) units and CT 11 is a Siemens V84.3 unit with generator ratings of 92.9 megawatts/CT and 171 megawatts/CT, respectively. The GE CT's and the Siemens CT have a maximum heat input rating at 59° Fahrenheit (F) of 1048 and 1477 MMBtu/hour, respectively. NO<sub>x</sub> and SO<sub>2</sub> emissions are controlled with water injection and burning new No. 2 low sulfur fuel oil, respectively. The combustion turbines exhaust through individual stacks. The GE units began commercial service in 1993 and the Siemens unit began commercial service in 1994.

{Permitting note: These emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines; adopted and incorporated by reference in Rule 62-204.800(7)(b), F.A.C; and, BACT dated August 17, 1992}

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

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

B.1. Permitted Capacity. The GE and Siemens turbines have generator nameplate ratings of 92.9 and 171 megawatts, respectively. The heat input to the GE and Siemens turbines at 59° F are 1048 and 1477 MMBtu/hr, respectively. A maximum heat input of 1144 MMBtu/hour at 20° F during peak loading shall not be exceeded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC 49-203114/PSD-FL-180(A)]

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition B.28.

B.3. Methods of Operation - Fuels. Only natural gas or new No. 2 fuel oil having a maximum sulfur content of 1 grain per 100 dscf and 0.2% or less, by weight, respectively, shall be fired in these turbines at all times. To comply with the SO<sub>2</sub> emission allowables of 222 lbs/hr/GE CT and 407 lbs/hr/Siemens CT, the fuel oil consumption (based on a capacity factor of 33% at 59° F, a 7.1 lbs/gal density, a maximum 0.2% S content by wt., and peak load) is limited to 7817 gal/hr/GE CT and 14,331 gal/hr/Siemens CT, respectively.

[Rule 62-213.410, F.A.C.; and, AC 49-203114/PSD-FL-180(A) ; and, requested in initial Title V permit application received on June 14, 1996.]

38.7%

~~3390~~

6780

~~X~~

-

3390

-

3390

-

Emission

~~X~~

B.4. Hours of Operation. The allowable hours of operation while firing 0.2% S, by weight, fuel oil are 2891 hours/year/CT or a cumulative hours of operation for any CT combination of 17,345 hours/14,455 calendar year, based on a capacity factor of 33% at 59° F and peak load. A maximum capacity factor of 38.7% is allowed if the weighted 12-month rolling average sulfur content, by weight, of the fuels burned are 0.16% or less. See specific condition No. B.5.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC 49-203114/PSD-FL-180(A)]

B.5. Capacity Factors. The capacity factors for these emissions units are the ratio of actual permitted hours of operation of each turbine to the total available hours of operation per year at 59° F. The capacity factor for these turbines shall be limited to 33%, <sup>2891 hrs/</sup>8760 hrs, at peak load and based on a weighted 12-month rolling average maximum sulfur content of 0.2%, by weight. If the weighted 12-month rolling average sulfur content is less than 0.2%, by weight, the capacity factor and operating hours may be adjusted to a maximum of 38.7% using the following table:

Weighted 12-Month Rolling Sulfur Content (% by wt.)	% Capacity Factor	Hours of Operation per CT per Year	Hours Total / yr
0.2 - 0.195	33.0	2891	14,455
0.19 - 0.185	34.4	3014	
0.18 - 0.175	35.8	3136	
0.17 - 0.165	37.2	3259	
0.16 - or less	38.7	3390	

**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.}

B.6. Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas or low sulfur content No. 2 fuel oil.

[Rule 62-296.406(2), F.A.C.; and, BACT dated August 17, 1992]

B.7. Emissions from CT 7, 8, 9, and 10, while firing natural gas or new No.2 fuel oil, shall not exceed the following allowables:

*Complex*

CT 7, 8, 9, & 10 Allowables				
Pollutant	Fuel	Standard	lbs/hr.	TPY
NO <sub>x</sub>	Gas	25 ppmvd @ 15% O <sub>2</sub> - dry basis	107.00	181.37
	Oil	42 ppmvd @ 15% O <sub>2</sub> - dry basis	182.00	308.49
SO <sub>2</sub>	Gas	1 grain/100dscf	2.99	5.07
	Oil	New No. 2 F.O.- max. 0.2% S by wt.	222.00	376.29

CT 7, 8, 9, & 10 Allowables (continued)				
Pollutant	Fuel	Standard	lbs/hr.	TPY
PM/PM <sub>10</sub>	Gas		7.50	12.71
	Oil	0.01 lb/MMBtu	15.00	25.43
VOC	Gas		3.00	5.09
	Oil		5.00	8.48
CO	Gas		21.30	36.10
	Oil	25 ppmvd	54.00	91.53
H <sub>2</sub> SO <sub>4</sub>	Gas	New No. 2 F.O.- max. 0.2% S by wt.	0.44	0.75
	Oil		18.00	30.51
Flourides (FR)	Oil	New No. 2 F.O.- max. 0.2% S by wt.		
Mercury (Hg)	Oil	New No. 2 F.O.- max. 0.2% S by wt.		
Lead (Pb)	Oil	New No. 2 F.O.- max. 0.2% S by wt.		
Inorganic Arsenic	Oil	New No. 2 F.O.- max. 0.2% S by wt.		
Beryllium (Be)	Oil	New No. 2 F.O.- max. 0.2% S by wt.		
VE	Gas or	10% - Normal conditions at full load 20% - Exceptional conditions		
	Oil			

**Note:** These allowables, terms, and relevant information are compiled in Table 1-2, Air Pollutant Emission Allowables and Terms.

[BACT dated August 10, 1995, and accepted by applicant in AC 49-203114/PSD-FL-180(A)]

B.8. Emissions from CT 11, while firing natural gas or new No. 2 fuel oil, shall not exceed the following allowables:

CT 11 Allowables				
Pollutant	Fuel	Standard	lbs/hr.	TPY
NO <sub>x</sub>	Gas	25 ppmvd @ 15% O <sub>2</sub> - dry basis	149.00	252.55
	Oil	42 ppmvd @ 15% O <sub>2</sub> - dry basis	334.00	566.13
SO <sub>2</sub>	Gas	1 grain of S per 100 dscf	4.22	7.15
	Oil	New No. 2 F.O.- max. 0.2% S by weight	407.00	689.87
PM/PM <sub>10</sub>	Gas		7.50	12.71
	Oil	0.01 lb/MMBtu	17.00	28.82
VOC	Gas		5.30	8.98
	Oil		9.00	15.26
CO	Gas		30.90	52.38
	Oil	25 ppmvd	79.00	133.91
H <sub>2</sub> SO <sub>4</sub>	Gas	New No. 2 F.O.- max. 0.2% S by weight	0.64	1.08
	Oil		28.00	47.47



CT 11 Allowables (continued)				
Pollutant	Fuel	Standard	lbs/hr.	TPY
Flourides (FR)	Oil	New No. 2 F.O.- max. 0.2% S by weight		
Mercury (Hg)	Oil	New No. 2 F.O.- max. 0.2% S by weight		
Lead (Pb)	Oil	New No. 2 F.O.- max. 0.2% S by weight		
Inorganic Arsenic	Oil	New No. 2 F.O.- max. 0.2% S by weight		
Beryllium (Be)	Oil	New No. 2 F.O.- max. 0.2% S by weight		
VE	Gas or Oil	10% - Normal conditions at full load 20% - Exceptional conditions		

**Note:** These allowables, terms, and relevant information are compiled in Table 1-3, Air Pollutant Emission Allowables and Terms.  
 [BACT dated August 10, 1995, and accepted by applicant in AC 49-203114/PSD-FL-180(A)]

**Excess Emissions**

B.9. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for a longer duration.  
 [Rule 62-210.700(1), F.A.C.]

B.10. 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**

B.11. 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.  
 [40 CFR 60.11(d)]

**B.12. 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.]

B.13. The permittee shall operate a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel being fired in each turbine. This system shall be accurate to within  $\mp$  5.0 percent and shall be approved by the Administrator. [40 CFR 60. 334(a)]

B.14. The permittee shall monitor sulfur content and nitrogen content of the natural gas and No. 2 fuel oil. The frequency of determinations of these values shall be as follows:

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

(b) If the emissions unit is supplied its fuel oil without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom fuel monitoring schedule requests shall be substantiated with data and submitted to the Department. The Department will submit the request to the Administrator, who must approve the custom fuel monitoring schedule before it can be used to comply with 40 CFR 60.334(b).

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

**Test Methods and Procedures**

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

B.15. The surrogate for particulate matter (PM/PM<sub>10</sub>) emissions testing shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. If 10% opacity is exceeded at peak load, EPA Method 5, incorporated and adopted by reference

in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C., shall be used for particulate matter testing.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; and AC 49-203114/PSD-FL-180(A)]

B.16. The test method for sulfuric acid mist ( $H_2SO_4$ ) emissions shall be EPA Method 8, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

B.17. The test method for visible emissions (VE) shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

B.18. The test method for carbon monoxide (CO) emissions shall be EPA Method 10, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

B.19. The test method for nitrogen oxide ( $NO_x$ ), sulfur dioxide ( $SO_2$ ), and diluent shall be EPA Method 20, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

B.20. The test method for volatile organic compound (VOC) emissions shall be EPA Method 25A, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

B.21. A compliance test for Fluorides, Mercury, Lead, Inorganic Arsenic, and Beryllium, is not required as long as new No. 2 fuel oil is fired.

[AC 49-203114/PSD-FL-180(A)]

B.22. The permittee shall comply with the stack sampling requirements contained in Appendix SS-1, Stack Sampling Facilities (attached).

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

B.23. To compute the nitrogen oxide emissions, the permittee shall use analytical methods and procedures that are accurate to within  $\pm 5$  percent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.

[40 CFR 60.335(a)]

B.24. The following equation shall only be used by the permittee to demonstrate compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 40 CFR 60.333 as follows:

a. The nitrogen oxides emission rate ( $\text{NO}_x$ ) shall be computed for each run using the following equation:

$$\text{NO}_x = (\text{NO}_{x0}) (P_r/P_o)^{0.5} e^{19(H_o - 0.00633)} (288^\circ\text{K}/T_a)^{1.53}$$

where:

$\text{NO}_x$  = emission rate of  $\text{NO}_x$  at 15 percent  $\text{O}_2$  and ISO standard ambient conditions, volume percent.

$\text{NO}_{x0}$  = observed  $\text{NO}_x$  concentration, ppm by volume.

$P_r$  = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

$P_o$  = observed combustor inlet absolute pressure at test, mmHg.

$H_o$  = observed humidity of ambient air, g  $\text{H}_2\text{O}$ /g air.

$e$  = transcendental constant, 2.718.

$T_a$  = ambient temperature,  $^\circ\text{K}$ .

- b. The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacture.
- c. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The  $\text{NO}_x$  emissions shall be determined at each of the load conditions specified in specific condition b. above.

[40 CFR 60.335(c)(1),(2) and (3)]

B.25. The permittee shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 shall be used for the sulfur content of gaseous fuels [incorporated by reference in 40 CFR 60.17 or the latest edition(s)]. The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the Dilution ratio) may be used, subject to approval of the Administrator.

[40 CFR 60.335(d)]

B.26. To meet the requirements of 40 CFR 60.334(b), the permittee shall use the methods specified in 40 CFR 60.335(a) and (d) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency.

[40 CFR 60.335(e)]

B.27. 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.]

#### **Operating Rate During Testing**

B.28. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity, in which case subsequent emissions unit operations are limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. The permitted capacity shall at no time be exceeded. Capacity is defined as 95 to 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, an emissions unit may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, average ambient temperature during the test, capacity vs. ambient temperature curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. In no case shall the maximum permitted heat input exceed 1144 MMBtu/hr/CT at 20° F.

[Rule 62.297.310(2), F.A.C.; and, AC 49-203114/PSD-FL-180(A)]

B.29. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall

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

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

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

a. Visible emissions, if there is an applicable standard;

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 operating 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 investigations, 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, 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.; SIP approved]

B.30. 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 (TPY) or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 TPY of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

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

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

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.] {Table 297.310-1, Calibration Schedule is attached}

B.31. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report

with the Department on the results of each such test.

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

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

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition; their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test



procedure for each run.

19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

### **Recordkeeping and Reporting Requirements**

B.32. The permittee 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.

[40 CFR 60.7(b)]

B.33. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate).

Written reports of excess emissions shall include the following information:

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

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

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

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

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

B.34. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

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

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

*{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)*

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

B.35. Frequency of Reporting: (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

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

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

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

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review

information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

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

[40 CFR 60.7(e)(1)]

B.36. The permittee 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.

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

B.37. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

B.38. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:

a. Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 or any period during

which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

b. Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 percent, by weight, pursuant to the BACT.

[40 CFR 60.334(c)(1) & (2); Rule 212.400(6), F.A.C.; and, BACT dated December 14, 1992]

**NSPS Common Condition**

B.39. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

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

**Operated by: Florida Power Corporation**  
**ORIS code: 8049**

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

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

E.U. ID No.	Description
-002	GE PG 7111EA Combustion Turbine - CT 7
-002	GE PG 7111EA Combustion Turbine - CT 8
-002	GE PG 7111EA Combustion Turbine - CT 9
-002	GE PG 7111EA Combustion Turbine - CT 10

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

a. DEP Form No. 62-210.900(1)(a), dated 07/01/95.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations and nitrogen oxide (NO<sub>x</sub>) requirements for each Acid Rain unit:

E.U. ID No.	EPA I.D.	Year	2000	2001	2002
-002	7	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR 73	699*	699*	699*
-002	8	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR 73	699*	699*	699*
-002	9	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR 73	699*	699*	699*
-002	10	SO <sub>2</sub> allowances, under Table 2 or 3 of 40 CFR 73	699*	699*	699*

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

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.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.440(3), F.A.C.

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

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

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

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

{See condition No. 51., Appendix TV-1, Title V Conditions}

[Rule 62-214.420(11), F.A.C.]

5. Comments, notes, and justifications: None.

# Table 1-1, Air Pollutant Emission Allowables and Terms

Florida Power Corporation  
Intercession City Plant

DRAFT Permit ID No.: 0970014-001-AV  
Facility ID No.: 0970014

Emissions Unit & No.			Allowables per each Combustion Turbine			Equivalent Emissions <sup>1</sup>		Regulation(s)	Permit Specific Condition(s)
Pollutant	Fuel(s)	Hrs/Yr /CT	Standards(s)	lbs/hr /CT <sup>1</sup>	TPY /CT <sup>2</sup>	lbs/hr /CT <sup>2</sup>	TPY /CT <sup>2</sup>		
E.U.-001 (CTP 1, CTP 2, CTP 3, CTP 4, CTP 5, & CTP 6)									
SO <sub>2</sub>	Oil	8760	New No. 2 F.O.- max. 0.2% S by wt.			364.23	1595.33	Rule 62-212.400(6), F.A.C	A.6
VE	Oil	8760	20% opacity					Rule 62-212.400(6), F.A.C	A.5

1 - Emissions rates based on 59° F and 15% O<sub>2</sub> at peak load.  
2 - Equivalent to 8760 hours per year at peak load.

## Table 1-2, Air Pollutant Emission Allowables and Terms

Florida Power Corporation  
Intercession City Plant

DRAFT Permit ID No.: 0970014-001-AV  
Facility ID No.: 0970014

Emissions Unit & No.		
Pollutant	Fuel(s)	Hrs/Yr /CT

Allowables per each Combustion Turbine		
Standards(s)	lbs/hr /CT	TPY /CT

Regulation(s)	Permit Specific Condition(s)
---------------	------------------------------

E.U.-002 (CT 7, CT 8, CT 9, & CT 10)		
NO <sub>x</sub>	Gas	3390
	Oil	3390
SO <sub>2</sub>	Gas	3390
	Oil	2891
PM/PM <sub>10</sub>	Gas	3390
	Oil	3390
VOC	Gas	3390
	Oil	3390
CO	Gas	3390
	Oil	3390
H <sub>2</sub> SO <sub>4</sub>	Gas	3390
	Oil	2891
Flourines (Fl)	Oil	3390
Mercury (Hg)	Oil	3390
Lead (Pb)	Oil	3390
Inorganic Arsenic (As)	Oil	3390
Beryllium (Be)	Oil	3390
VE	Gas or	3390
	Oil	

25 ppmvd @ 15% O <sub>2</sub> - dry basis	107.00	181.37 <sup>a</sup>
42 ppmvd @ 15% O <sub>2</sub> - dry basis	182.00	308.49 <sup>a</sup>
1 grain of S per 100 dscf	2.99	5.07 <sup>c</sup>
New No. 2 F.O.- max. 0.2% S by wt.	222.00	320.90 <sup>b</sup>
	7.50	12.71 <sup>c</sup>
0.01 lb/MMBtu	15.00	25.43 <sup>c</sup>
	3.00	5.09 <sup>c</sup>
	5.00	8.48 <sup>c</sup>
	21.30	36.10 <sup>c</sup>
25 ppmvd	54.00	91.53 <sup>c</sup>
New No. 2 F.O.- max. 0.2% S by wt.	0.44	0.75 <sup>c</sup>
	18.00	26.02 <sup>b</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
10% - Normal conditions at full load		
20% - Exceptional conditions		

Rule 62-212.400(6), F.A.C.	B.6
Rule 62-212.400(6), F.A.C.	B.6
BACT	B.6
Rule 62-212.400(6), F.A.C.	B.6
BACT	B.6
BACT	B.6
BACT	B.6
BACT	B.6
Rule 62-212.400(6), F.A.C.	B.6
Rule 62-212.400(6), F.A.C.	B.6
BACT	B.6
BACT	B.6
BACT	B.6
BACT	B.6
BACT	B.6
BACT	B.6
BACT	B.6
Rule 62-212.400(6), F.A.C.	B.6

a - Emissions rates based on 59° F and 15% O<sub>2</sub> at peak load.

b - Total TPY for SO<sub>2</sub> assumes 33% capacity factor, 2891 hours/CT/yr at peak load, and fuel with a maximum sulfur content of 0.2%, by weight. Refer to Specific Condition No.

B.5 for listed capacity factors vs. sulfur content in fuel oil and specific condition No. B.3 for the fuel consumption based on the permitted TPY of SO<sub>2</sub> emissions.

c - Equivalent to 3390 hours per year at peak load (38.7% capacity factor) and 59° F.

d - Emissions controlled by standards.



### Table 1-3, Air Pollutant Emission Allowables and Terms

Florida Power Corporation  
Intercession City Plant

DRAFT Permit ID No.: 0970014-001-AV  
Facility ID No.: 0970014

Emissions Unit & No.		
Pollutant	Fuel(s)	Hrs/Yr /CT

Allowables per each Combustion Turbine		
Standards(s)	lbs/hr /CT	TPY /CT

Regulation(s)	Permit Specific Condition(s)
---------------	------------------------------

E.U.-003 (CT 11)		
NO <sub>x</sub>	Gas	3390
	Oil	3390
SO <sub>2</sub>	Gas	3390
	Oil	2891
PM/PM <sub>10</sub>	Gas	3390
	Oil	3390
VOC	Gas	3390
	Oil	3390
CO	Gas	3390
	Oil	3390
H <sub>2</sub> SO <sub>4</sub>	Gas	3390
	Oil	2891
Flourines (Fl)	Oil	3390
Mercury (Hg)	Oil	3390
Lead (Pb)	Oil	3390
Inorganic Arsenic	Oil	3390
Beryllium (Be)	Oil	3390
VE	Gas or	3390
	Oil	

25 ppmvd @ 15% O <sub>2</sub> - dry basis	149.00	252.55 <sup>a</sup>
42 ppmvd @ 15% O <sub>2</sub> - dry basis	334.00	566.13 <sup>a</sup>
1 grain of S per 100 dscf	4.22	7.15 <sup>c</sup>
New No. 2 F.O.- max. 0.2% S by wt.	407.00	588.32 <sup>b</sup>
	7.50	12.71 <sup>c</sup>
0.01 lb/MMBtu	17.00	28.82 <sup>c</sup>
	5.30	8.98 <sup>c</sup>
	9.00	15.26 <sup>c</sup>
	30.90	52.38 <sup>c</sup>
25 ppmvd	79.00	133.91 <sup>c</sup>
New No. 2 F.O.- max. 0.2% S by wt.	0.64	1.08 <sup>c</sup>
	28.00	40.47 <sup>b</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
New No. 2 F.O.- max. 0.2% S by wt.		<sup>d</sup>
10% - Normal conditions at full load		
20% - Exceptional conditions		

Rule 62-212.400(6), F.A.C.	B.7
Rule 62-212.400(6), F.A.C.	B.7
BACT	B.7
Rule 62-212.400(6), F.A.C.	B.7
BACT	B.7
BACT	B.7
BACT	B.7
BACT	B.7
Rule 62-212.400(6), F.A.C.	B.7
Rule 62-212.400(6), F.A.C.	B.7
BACT	B.7
BACT	B.7
BACT	B.7
BACT	B.7
BACT	B.7
BACT	B.7
BACT	B.7
Rule 62-212.400(6), F.A.C.	B.7

a - Emissions rates based on 59° F and 15% O<sub>2</sub> at peak load.

b - Total TPY for SO<sub>2</sub> assumes 33% capacity factor, 2891 hours/CT/yr at peak load, and fuel with a maximum sulfur content of 0.2%, by weight. Refer to Specific Condition No. B.5 for listed capacity factors vs. sulfur content in fuel oil and specific condition No. B.3 for the fuel consumption based on the permitted TPY of SO<sub>2</sub> emissions.

c - Equivalent to 3390 hours per year at peak load (38.7% capacity factor) and 59° F.

d - Emissions controlled by standards.

## Table 2-1, Compliance Testing Requirements

Florida Power Corporation  
Intercession City Plant

DRAFT Permit ID No.: 0970014-001-AV  
Facility ID No.: 0970014

E.U. ID							
Pollutant Name or parameter	Fuel(s)	EPA/Reference Method	Testing Time or Frequency	Frequency Base Date <sup>2</sup>	Min. Compl. Test Time	CMS	Permit Condition(s)

E.U. CTP - 1, 2, 3, 4, 5, & 6							
SO <sub>2</sub>	Oil	F.O. Analysis <sup>1</sup>	Per Delivery <sup>2</sup>		NA		A.14, 18, 19,20
VE	Oil	EPA Meth. 9	Annual		1 Hour		A.15

E.U. CT- 7, 8, 9, 10, & 11							
NO <sub>x</sub>	Gas	EPA Meth. 20	Annual		3 Hour		B.4
	Oil	EPA Meth. 20	Annual				
SO <sub>2</sub>	Gas		Continuous			yes	
	Oil	F.O. Analysis <sup>1</sup>	Per Delivery <sup>2</sup>				
PM/PM <sub>10</sub>	Gas						
	Oil	EPA Meth. 5	Annual				
VOC	Gas	EPA Meth. 25A	Annual				
	Oil	EPA Meth. 25A	Annual				
CO	Gas	EPA Meth. 10	Annual				
	Oil	EPA Meth. 10	Annual				
H <sub>2</sub> SO <sub>4</sub>	Gas	EPA Meth. 8	Annual				
	Oil	EPA Meth. 8	Annual				
Fl, Hg, Pb, Be, & As(Inorganic)	Oil	New No.2 F.O.- max. 0.2% by wt.	Per Delivery <sup>2</sup>	Per Delivery <sup>2</sup>	NA		
VE	Gas	EPA Meth. 9	Annual		1 Hour		B.4
							B.4

1- Sulfur content of the fuel oil shall be provided by the supplier for every delivery.

2- The custom fuel monitoring schedule in condition No. 3 thru 8.

**Appendix E-1. List of Exempt Emissions Units and/or Activities.**

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Full 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 whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., are also exempt from the permitting requirements of Chapter 62-213, F.A.C., provided such emissions units and activities also meet the exemption criteria of Rule 62-213.430(6)(b), F.A.C. The below listed emissions units and/or activities are hereby exempt pursuant to Rule 62-213.430(6), F.A.C.

1	Lube Oil System Vents
2	Lube Oil Reservoir Tank
3	Oil Water Separators
4	Hazardous Waste Building
5	Parts Washers/Degreasers
6	Waste Oil Storage Tanks
7	Lube Oil Storage Building
8	Portable Unleaded Gasoline Tank
9	No. 2 Diesel Fuel Tank

**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 ‘exempt emissions units’.

<b>Emissions Unit</b>	<b>Description</b>
-xxx	Surface Coating and Solvent Cleaning
-xxx	General Purpose Engines
-xxx	Fuel Storage Tanks
-xxx	Helper Cooling Towers
-xxx	Emergency Generator

**APPENDIX SS-1, STACK SAMPLING FACILITIES**

Florida Power Corporation  
Intercession City Plant  
Page 34 of 36

**DRAFT Permit No.: 0970014-001-AV**

**APPENDIX TV-1, TITLE V CONDITIONS**

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

Florida Power Corporation  
Intercession City

Facility ID No.: 0970014-001-AV

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

E.U.

<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u>	<u>Revised Date(s)</u>
-001	Combustion Turbine Peaking Unit #1	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #2	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #3	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #4	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #5	AO49-176549	07/20/90	01/15/96		
-001	Combustion Turbine Peaking Unit #6	AO49-176549	07/20/90	01/15/96		
-002	92.9 MW Simple Cycle Gas CT	AC49-203114/	08/17/92	12/31/95		10/06/93
-002	92.9 MW Simple Cycle Gas CT	PSD-FL-180				11/15/93
-002	92.9 MW Simple Cycle Gas CT					07/15/94
-002	185.5 MW Simple Cycle Gas CT					01/20/95
-003	185.5 MW Simple Cycle Gas CT					

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

From: Facility ID No.: 30ORL4900014

To: Facility ID No.: 0970014

Notes:

- 1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
- 2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
- {Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

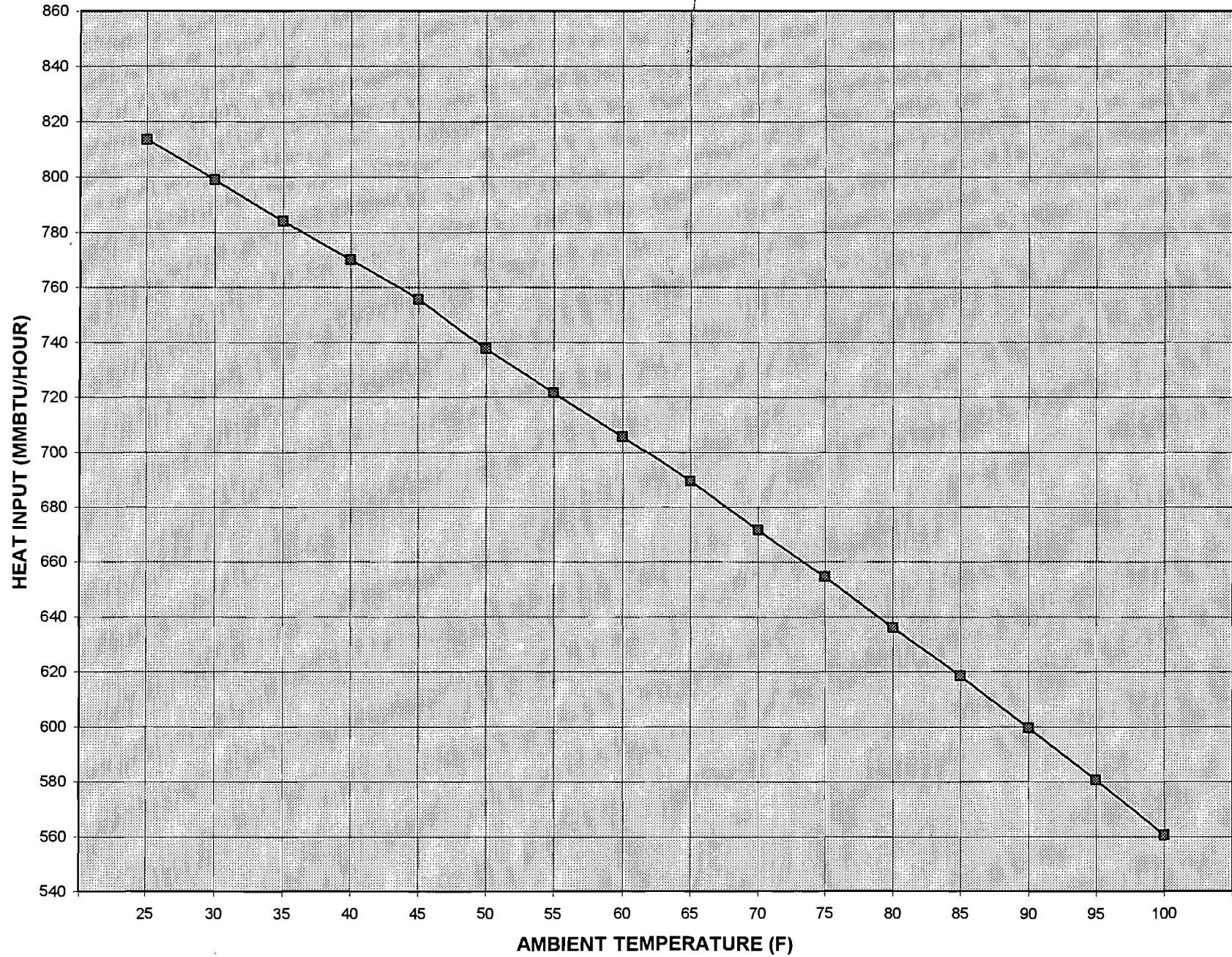
Name: \_\_\_\_\_

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

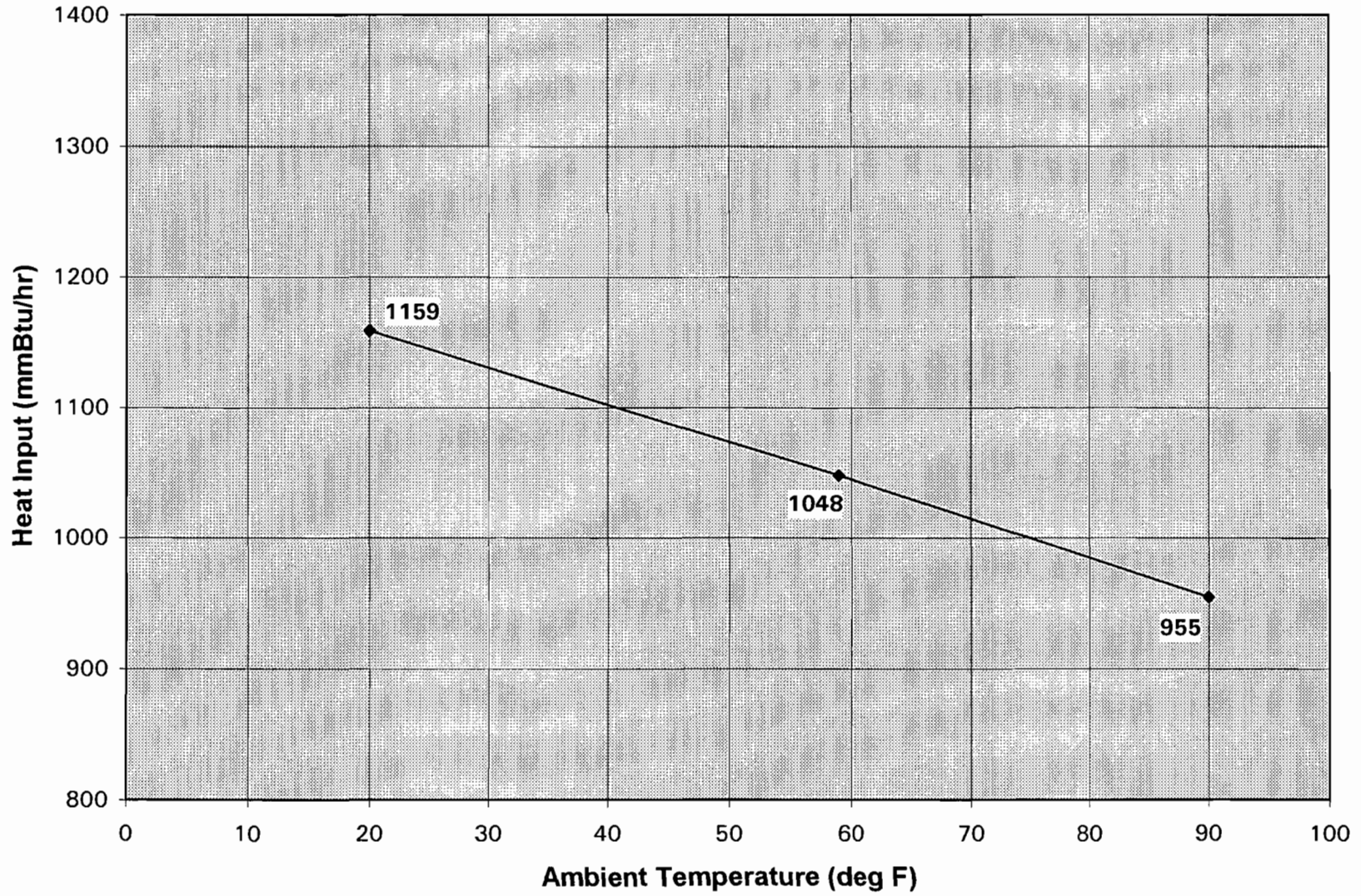
Title: \_\_\_\_\_



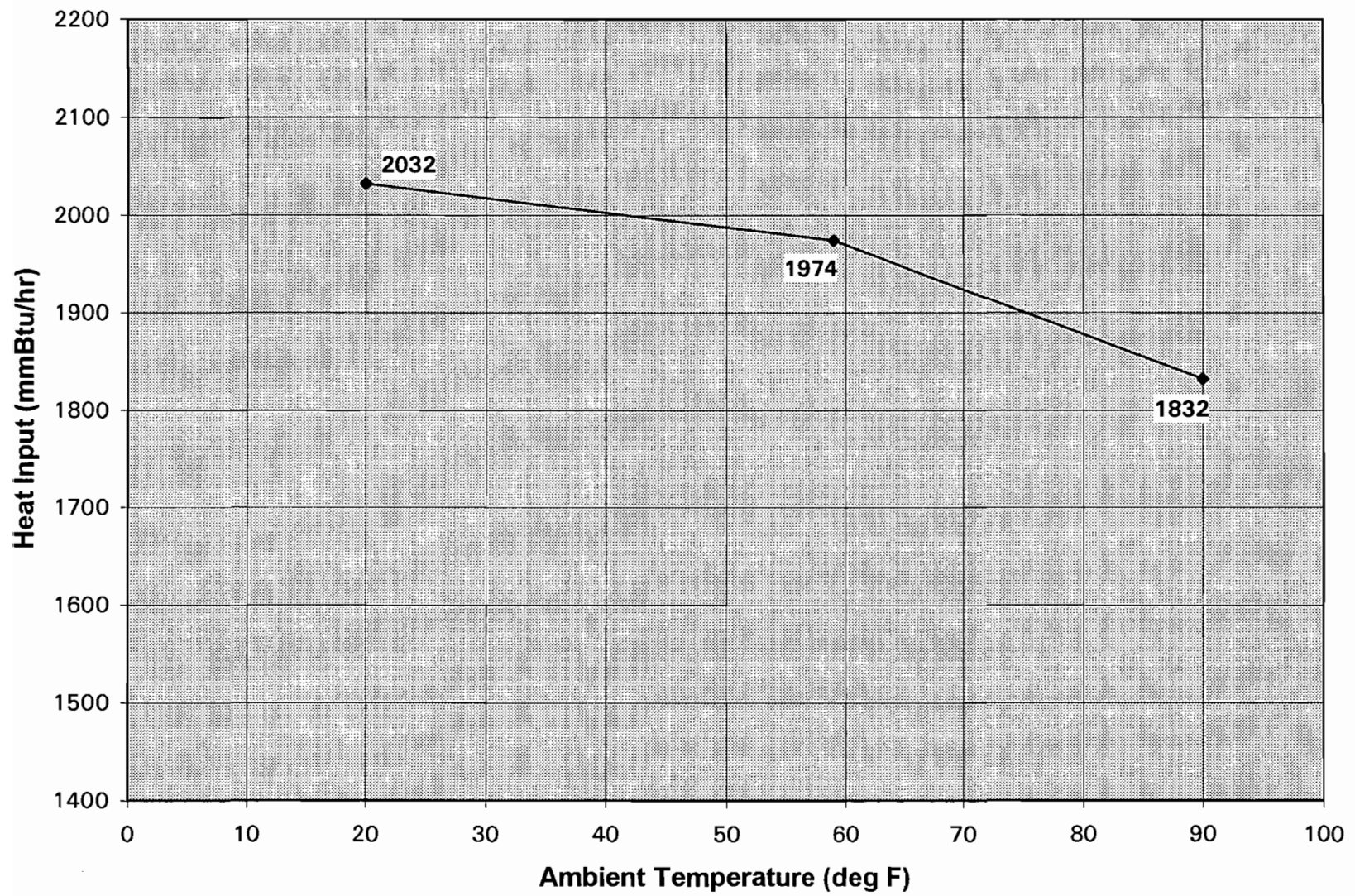
# INTERCESSION CITY P1-6 COMBUSTION TURBINES



**Intercession City P7 - P10  
(Natural Gas)**



### Intercession City P11 (Oil)





**Intercession City P11  
(Natural Gas)**

