Florida Power
A Progress Energy Company

July 1, 2002

Mr. Scott Sheplak, P.E.
Florida Department of Environmental Protection
Bureau of Air Regulation, Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: SUBMITTAL OF TITLE V PERMIT RENEWAL APPLICATION
HIGGINS FACILITY NO. 1030012 - FLORIDA POWER

Dear Mr. Sheplak:

Enclosed for your review is an original and three copies of the Title V application for Florida Power's Higgins Facility. An additional copy has been sent to the Pinellas County Department of Environmental Management.

If you have any questions regarding any of the information contained in this application, please do not hesitate to contact Matt Lydon at (727) 826-4152 or Jamie Hunter at (727) 826-4363.

Sincerely,

Michael W. Lentz
Plant Manager/Responsible Official

Enclosures

c: Peter A. Hessling Pinellas County DEM (w/enc)
Ken Kosky, Golder Associates Inc.

jjh/JJH038

enclosures

P.O. Box 14042
St. Petersburg, FL 33733

TITLE V OPERATION PERMIT RENEWAL APPLICATION FOR HIGGINS POWER PLANT PINELLAS COUNTY, FLORIDA

Prepared For:
Florida Power
263 13th Street South
St. Petersburg, Florida 33701-5511

Prepared By:
Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

June 2002
0237532

DISTRIBUTION:
4 Copies – FDEP Bureau of Air Regulation
1 Copy – Pinellas County Department of Environmental Management – Air Quality Division
1 Copy – Higgins Power Plant
1 Copy – Florida Power – Progress Energy
1 Copy - Golder Associates Inc.

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **Florida Power**	
2. Site Name: **Higgins Power Plant**	
3. Facility Identification Number: **1030012**	[ ] Unknown
4. Facility Location: Street Address or Other Locator: **998 East Shore Drive** City: **Oldsmar** County: **Pinellas** Zip Code: **34677**	
5. Relocatable Facility? [ ] Yes [**X**] No	6. Existing Permitted Facility? [**X**] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **Matthew Lydon, Associate Environmental Specialist**			
2. Application Contact Mailing Address: Organization/Firm: **Florida Power / Progress Energy** Street Address: **100 Central Avenue, Mail Code BB1A** City: **St. Petersburg**	State: **FL**	Zip Code: **33701**	
3. Application Contact Telephone Numbers: Telephone: **(727) 826 - 4152**	Fax: **(727) 826 - 4216**		

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	7/3/02
2. Permit Number:	1030012-002-AV
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

[ ] Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit number to be revised: _____

[ ] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

[X] Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: **1030012-001-AV**

Reason for revision: **Title V Renewal, Current Permit Expires December 31, 2002.**

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:
   Michael W. Lentz, Plant Manager Higgins
2. Owner/Authorized Representative or Responsible Official Mailing Address:
   Organization/Firm: **Florida Power / Progress Energy**
   Street Address: **100 Central Avenue, Mail Code BP44**
   City: **St. Petersburg** State: **FL** Zip Code: **33701**
3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (**727**) **827 - 6235** Fax: (**727**) **827 - 6237**
4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [✓], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

   Signature Date 7/2/02

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: **Kennard F. Kosky**
   Registration Number: **14996**
2. Professional Engineer Mailing Address:
   Organization/Firm: **Golder Associates Inc.**
   Street Address: **6241 NW 23rd Street, Suite 500**
   City: **Gainesville** State: **FL** Zip Code: **32653-1500**
3. Professional Engineer Telephone Numbers:
   Telephone: (**352**) **336 - 5600** Fax: (**352**) **336 - 6603**

4. Professional Engineer Statement:

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

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

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

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

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

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

Signature 6/29/02

Date

(seal)

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
004	Peaking Gas Turbine Unit 1		
005	Peaking Gas Turbine Unit 2		
006	Peaking Gas Turbine Unit 3		
007	Peaking Gas Turbine Unit 4		
001	Fossil Fuel Fired Steam Generator No. 1		
002	Fossil Fuel Fired Steam Generator No. 2		
003	Fossil Fuel Fired Steam Generator No. 3		
7775047-001	Relocatable Diesel Generator(s)		
--	Facility-Wide Fugitive Emissions		

Application Processing Fee

Check one: [ ] Attached - Amount: $: _____ [X] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:
2. Projected or Actual Date of Commencement of Construction:
3. Projected Date of Completion of Construction:

Application Comment

This application is a renewal of the current Title V Air Operating Permit No. 1030012-001-AV. The facility contains 3 fossil fuel fired steam generators (FFFSGs) that can fire new No. 6 or lighter grades of fuel oil or natural gas. The facility also contains 4 combustion turbine peaking units that can fire natural gas or No. 2 fuel oil having a maximum sulfur content of 0.5 percent by weight. The facility may also contain relocatable diesel generator(s) fired with new No. 2 fuel oil. Facility wide fugitive/de minimis emissions are addressed as a separate emission unit section. The fossil fuel fired steam generators SG 1, SG 2, and SG 3 were all placed on "Long Term Reserve Shutdown" on January 24, 1994 (Rule 62-210.300(2)(a)3.d., F.A.C.)

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): **28 / 0 / 2** Longitude (DD/MM/SS): **82 / 39 / 46**			
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment (limit to 500 characters): **The Higgins facility consists of 3 FFFSGs, (in Long Term Reserve Shutdown per Rule 62-210.300(2)(a)3.d.), 4 gas turbine peaking units and may contain relocatable diesel fired generator(s).**			

Facility Contact

1. Name and Title of Facility Contact: **Michael W. Lentz, Plant Manager Higgins**
2. Facility Contact Mailing Address: Organization/Firm: **Florida Power / Progress Energy** Street Address: **100 Central Avenue, Mail Code BP44** City: **St. Petersburg** State: **FL** Zip Code: **33701**
3. Facility Contact Telephone Numbers: Telephone: **(727) 827 - 6235** Fax: **(727) 827 - 6237**

Facility Regulatory Classifications

Check all that apply:

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

The FFFSG units are pre-NSPS, regulated under Rules 62-296.405 (FFFSG > 250 MMBtu/Hr Heat Input) and 62-296.700, F.A.C. (RACT, Particulate Matter). These units are regulated under the Acid Rain Program, Phase II.

The peaking units are pre-NSPS and not subject to the Acid Rain Program. These units are regulated under Rule 62-210.300, F.A.C., Permits Required.

List of Applicable Regulations

See Attachment HG-FI-A	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
SO_2	A				Sulfur Dioxide
PM	A				Particulate Matter-Total
PM_{10}	A				Particulate Matter-PM_{10}
NO_x	A				Nitrogen Oxides
CO	A				Carbon Monoxides
VOC	A				Volatile Organic Compounds
SAM	A				Sulfuric Acid Mist

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID: HG-FI-C1 [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID: HG-FI-C2 [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: HG-FI-C3 [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [X] Attached, Document ID: HG-FI-C4 [ ] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [X] Attached, Document ID: HG-FI-C5 [ ] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID: _____ [X] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [X] Attached, Document ID: **HG-FI-C12 Appendix I-1** [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [ ] Attached, Document ID:_____
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [X] Not Applicable

10. Alternative Methods of Operation:
    [ ] Attached, Document ID:_____[X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading):
    [ ] Attached, Document ID:_____[X] Not Applicable

12. Identification of Additional Applicable Requirements:
    [X] Attached, Document ID: **HG-FI-C12**[ ] Not Applicable

13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [X] Not Applicable

14. Compliance Report and Plan:
    [X] Attached, Document ID: **HG-FI-C14**[ ] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [X] Attached, Document ID: **HG-FI-C15**[ ] Not Applicable

ATTACHMENT HG-FI-A

LIST OF APPLICABLE REGULATIONS

Attachment HG-FI-A Title V Core List

Effective: 03/01/02

[**Note:** The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 06-01-01

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application.
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals.
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.: Emission Estimates.
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit – Title V Source, Form and Instructions.
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

Chapter 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 08-17-00

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.: Statement of Compliance Form.

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 03-02-99

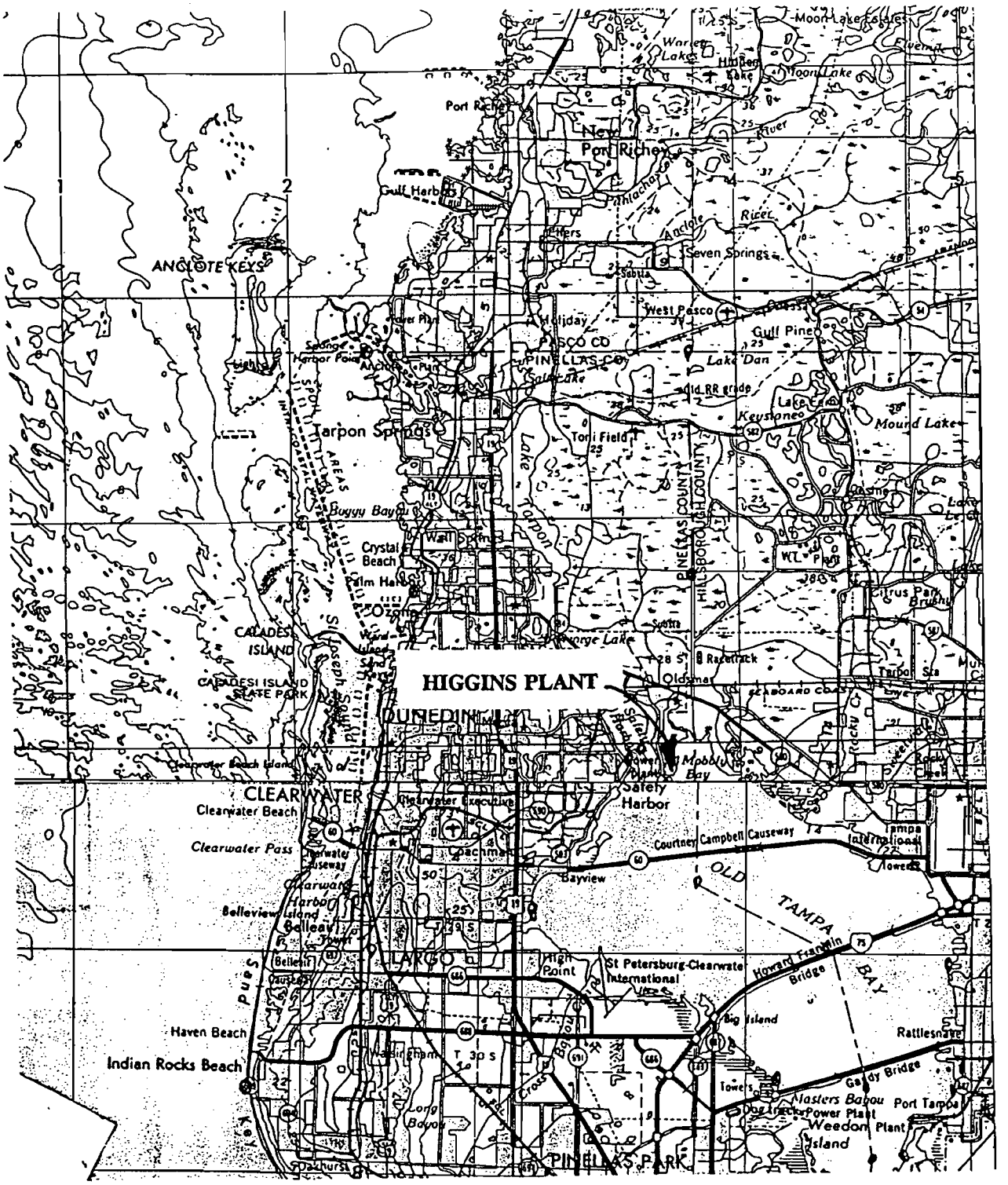
62-297.310, F.A.C.: General Test Requirements.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94
CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

ATTACHMENT HG-FI-C1

AREA MAP SHOWING FACILITY LOCATION

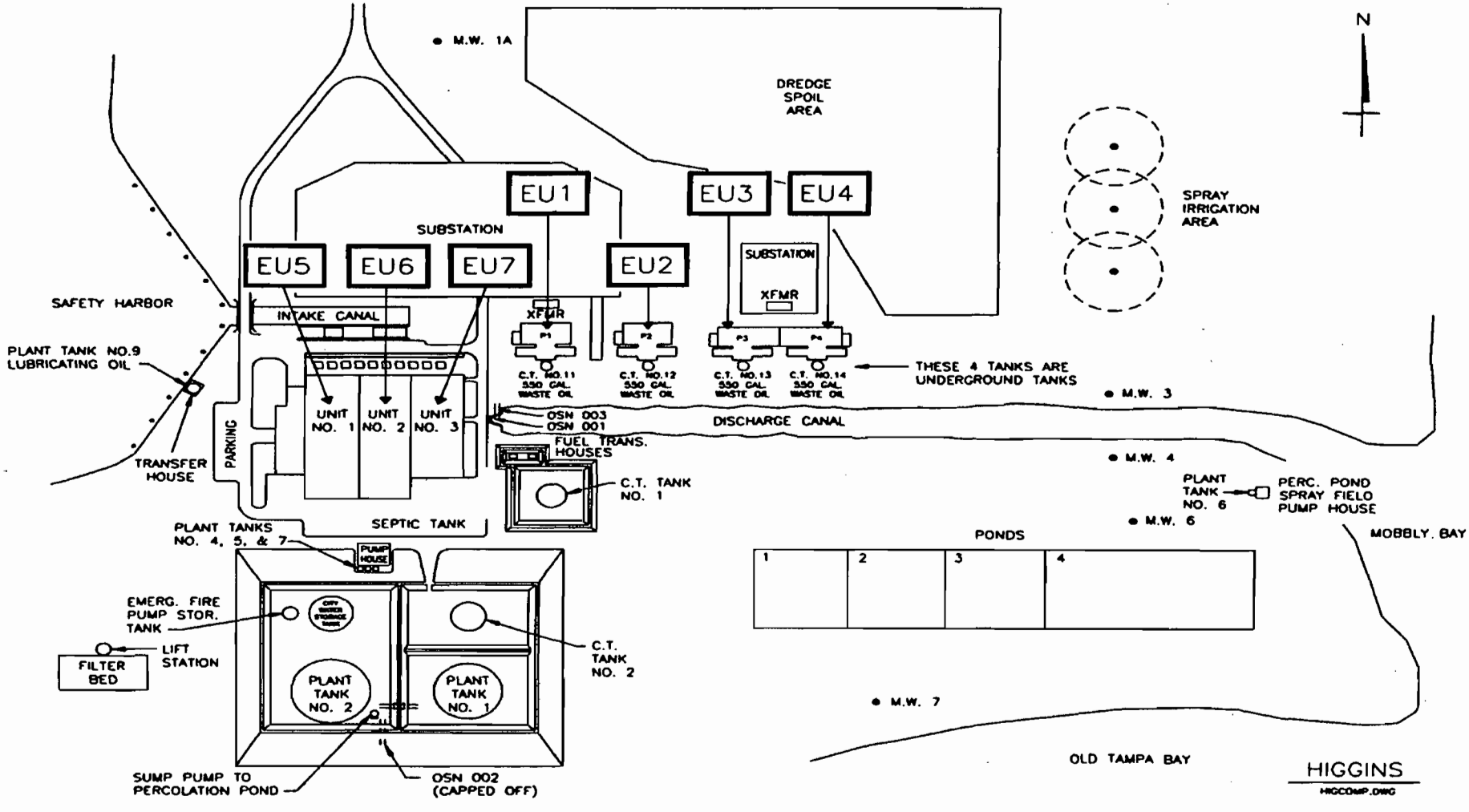


Attachment HG-FI-C1
Area Map Showing Facility Location
Florida Power, Higgins Plant

Golder Associates

ATTACHMENT HG-FI-C2

FACILITY PLOT PLAN



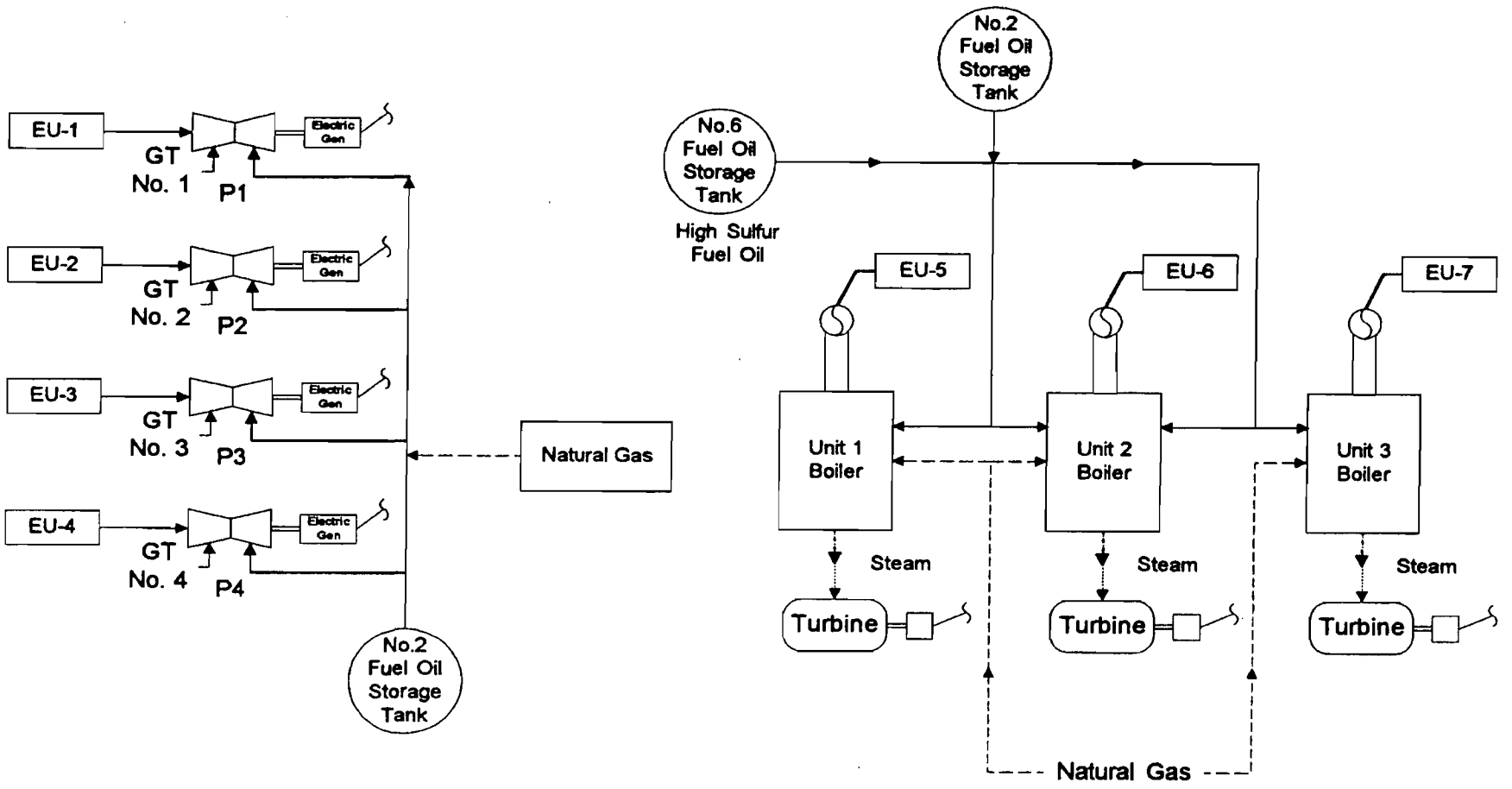
Note: EU = Emission Unit

Attachment HG-FI-C2
Facility Plot Plan, Emission Unit Identification
Florida Power, Higgins Facility

Golder Associates

ATTACHMENT HG-FI-C3

PROCESS FLOW DIAGRAM



Note:
GT = Gas Turbine
EU = Emission Unit Number
See segment section for the operating rate of each emission unit.

Process Flow Legend	
----------▶	Steam Flow
----------▶	Gas Flow
——————▶	Solid / Liquid Flow

Attachment HG-FI-C3
Process Flow Diagram
Florida Power, Higgins Plant

Golder Associates

ATTACHMENT HG-FI-C4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT HG-FI-C4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Potential examples of particulate matter include:

- Fugitive dust from paved and unpaved roads, and
- Fugitive particulates from the use of bagged chemical products.

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with **Rule 62-296.320(4)(c)2, F.A.C.**:

- Maintenance of paved areas as needed,
- Regular mowing of grass and care of vegetation, and
- Limiting access to plant property by unnecessary vehicles.

ATTACHMENT HG-FI-C5

FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT HG-FI-C5
FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as "trivial activities". As a result, these activities are not included as part of this permit application. For example, emissions from general plant maintenance and upkeep activities at the facility would be considered fugitive emissions, but have been judged to be trivial since these activities are not conducted as part of the electricity generation process, not related to the source's primary business activity, and do not otherwise trigger a permit modification.

Fugitive emissions that may result from the operation of activities that are not trivial at the facility are addressed in Emission Unit 9. This emission unit section contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive/*de minimis* emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

Florida Power has not identified fugitive emission of sulfur dioxide, nitrogen oxides, carbon monoxide, or lead compounds which would exceed the thresholds defined in the permit application instructions.

Volatile Organic Compounds (VOCs)

Fugitive/*de minimis* emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation. VOCs are also emitted by the various fuel oil storage tanks on the plant property, and generator and turbine lube oil vents.

Fugitive HAPs Emissions

The following hazardous air pollutants are or may be present on the facility property and are potential sources of fugitive HAPs emissions:

- asbestos
- methyl ethyl ketone (MEK)
- toluene
- xylene

Asbestos – Present in gasket material, pipe insulation, and various other locations. The facility complies with the federal NESHAPS (40 CFR 61 Subpart M) and state rules (62-257, F.A.C.) governing the abatement of asbestos-containing materials. No releases of asbestos expected for the facility.

Methyl Ethyl Ketone, Toluene, Xylene – The facility uses paint thinners and solvents (which may contain MEK, toluene, or xylene) for use in plant maintenance activities. These containers are kept closed and are stored in weather-tight buildings. These emissions as a whole are addressed in the VOC section described above.

Regulated Toxic or Flammable Substances

The following regulated toxic or flammable substances are or may be present at the Florida Power facility:

- acetylene
- methane (natural gas)

Acetylene – Present on the facility property in 250-lb cylinders which are used for plant maintenance (welding and cutting).

Methane – Is a primary component of natural gas. The facility has a natural gas pipeline which delivers fuel to the generating units. This fuel delivery system is normally airtight, but does have safety valves which occasionally relieve (open) when an overpressure condition develops in the gas line.

ATTACHMENT HG-FI-C12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

Florida Power Corporation
Higgins Power Plant
Facility ID No.: 1030012
Pinellas County

Initial Title V Air Operation Permit
FINAL Permit No.: 1030012-001-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

December 22, 1997

Initial Title V Air Operation Permit
Florida Power Corporation - Higgins Power Plant
FINAL Permit No.: 1030012-001-AV

Table of Contents

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

FINAL Permit No.: 1030012-001-AV
Facility ID No.: 1030012
SIC Nos.: 49
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Higgins Power Plant. This facility is located at 998 East Shore Drive, Oldsmar, Pinellas County; UTM Coordinates: Zone 17, 336.5 km East and 3098.4 km North; Latitude: 28° 00' 02" North and Longitude: 82° 39' 46" West.

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

Referenced attachments made a part of this permit:
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
ASP Number 97-B-01, Order Correcting Scrivener's Error dated July 2, 1997.
OGC File Nos. 86-1580, 86-1581, 86-1582 dated December 11, 1986.
Phase II Acid Rain Application/Compliance Plan received December 14, 1995.
ORDER EXTENDING PERMIT EXPIRATION DATE (dated November 18, 1997)

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/csl

Section I. Facility Information.

Subsection A. Facility Description.

This facility consist of three fossil fuel fired steam generators (SG) and four simple cycle combustion turbine peaking units (CTP), all of which are pre-NSPS sources. The SG's are on long-term reserve shutdown. The CTP's and SG's are pre-NSPS sources. Each CT and SG exhausts through a separate stack. Also included in this permit are miscellaneous unregulated and insignificant emissions units and/or activities. Relocatable diesel fired generator(s) with a maximum heat input of 25.74 MMBtu/hour and a maximum rating of 2460 Kilowatts may be relocated to this and six other FPC facilities.

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).

E.U. ID No.	Brief Description
-001 - 003	3 - Fossil Fuel Fired Steam Generators (Pre-NSPS) - SG 1, SG 2, & SG 3
-004 - 007	4 - Combustion Turbine Peaking Units (Pre-NSPS) - CTP 1, CTP 2, CTP 3, & CTP 4
-7775047 -001	Relocatable Diesel Generator(s)

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, 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 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 a particulate matter or opacity limit set forth in or established elsewhere 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, shall be used to determine compliance with this condition.
[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. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall not 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 shall 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 Air Quality Division of the Pinellas County Department of Environmental Management:

Pinellas County Department of Environmental Management
Air Quality Division
300 South Garden Avenue
Clearwater, Florida 33756
Telephone: 813/464-4422
Fax: 813/464-4420

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

12. 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. 52., Appendix TV-1, Title V Conditions}
[Rule 62-214.420(11), F.A.C.]

13. Subsection C of Section III addresses specific conditions for a Relocatable Diesel Fired Generator(s) that may be relocated to this and five other FPC facilities. These specific conditions, requested in the Initial Title V Permit Application for the Anclote Power Plant received June 14, 1996, will become active and enforceable when FPC has notified the Department (as per specific condition III.C.24) that the relocatable generator(s) will be relocated to the Higgins Power Plant.
[AO 09-205952; and, Initial Title V Permit Application for the Anclote Power Plant received June 14,1996.]

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
-001	Fossil Fuel Fired Steam Generator - SG 1
-002	Fossil Fuel Fired Steam Generator - SG 2
-003	Fossil Fuel Fired Steam Generator - SG 3

SG 1, SG 2, and SG 3 were all placed on "Long Term Reserve Shutdown" on January 24, 1994 (Rule 62-210.300(2)(a)3.d., F.A.C.). The maximum permitted heat input rates for SG 1, SG 2, and SG 3 are 548, 523, and 548 MMBtu/ hour, respectively. The emissions units are fired on new No. 6 or lighter grades of fuel oil, as permitted herein. Natural gas and on-specification used oil, as permitted herein, may be fired in these emissions units as an alternate fuel. SG 1, SG 2, and SG 3 generate steam to power turbines that drive generators with name plate ratings of 43, 42, and 41 megawatts, respectively. These units are regulated under the Acid Rain Program, Phase II.

Each SG exhausts through a single stack. Emissions from these units are uncontrolled.

{Permitting note(s): These emissions units are Pre-NSPS, regulated under Rules 62-296.405, F.A.C. (Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input), and regulated under 62-296.700, F.A.C. (Reasonably Available Control Technology, RACT, Particulate Matter). SG 1 began commercial operation on June 6, 1951; SG 2 began commercial operation on June 30, 1953; and, SG 3 began commercial operation on January 30, 1954.}

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

Essential Potential to Emit (PTE) Parameters

A.1. Methods of Operation. Fuel(s).

a. Startup & Shutdown: The only fuels allowed to be burned are new #6 or lighter grades of fuel oils. On-specification used oil shall only be burned if the PCB's are less than 2 ppm and may be blended with new #2 fuel oil. The maximum sulfur content is 2.5 percent, by weight.

b. Normal: The only fuels allowed to be burned are new #6 or lighter grades of fuel oils and on-specification used oil. The maximum sulfur content is 2.5 percent, by weight.

c. The maximum annual cumulative amount of on-specification used oil, whether generated on or off-site, that can be burned in these emissions units shall not exceed 5 percent of the total permitted heat input for emissions units SG 1, SG 2, and SG 3.

d. The heat inputs in condition A.2. are based on the following fuel consumption rates while firing No. 6 fuel oil and natural gas. These rates may vary depending on the heating values of the fuels:

Emissions Unit	Hours/year	Fuel Oil(s)	Natural Gas
SG 1	8760	3,654 gallons/hour	0.50 MMSCF/hour
SG 2	8760	3,486 gallons/hour	0.49 MMSCF/hour
SG 3	8760	3,654 gallons/hour	0.50 MMSCF/hour

[Rule 62-213.410, F.A.C.; and AO's 52-216382, 52-216383, & 52-216384; and Title V application received on June 14, 1996.]

A.2. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	MMBtu/hr Heat Input	Fuel Type
SG 1	548	New No. 1, 2, 3, 4, 5 or 6 Fuel Oil & On-Specification Used Oil.*
	525	Natural Gas as an alternate fuel when available.
SG 2	523	New No. 1, 2, 3, 4, 5 or 6 Fuel Oil & On-Specification Used Oil.*
	515	Natural Gas as an alternate fuel when available.
SG 3	548	New No. 1, 2, 3, 4, 5 or 6 Fuel Oil & On-Specification Used Oil.*
	525	Natural Gas as an alternate fuel when available.

* The on-specification used oil burned at this facility may be generated on or off-site.
[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

A.3. Emissions Unit Operating Rate Limitation After Testing. See specific condition A.22.
[Rule 62-297.310(2), F.A.C.]

A.4. Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year/unit.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1-1 and 1-2 , Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. These tables do not supersede any of the terms or conditions of this permit.}

A.5. Visible Emissions. Visible emissions from SG 1, SG 2, and SG 3 shall not exceed 40 percent

opacity. The emissions units subject to the opacity standards of this condition shall conduct a compliance test for particulate matter emissions annually. The Department reserves the right to require the permittee to return to the more frequent testing schedule in Rule 62-296.405(1)(a), F.A.C., if the emission limiting standard for particulate matter is not regularly complied with.
[Rule 62-296.405(1)(a), F.A.C.; and, OGC Order File Nos. 86-1580, 86-1581, and 86-1582 dated December 11, 1986.]

A.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.
[Rule 62-210.700(3), F.A.C.]

A.7. Particulate Matter. Particulate matter emissions during normal operations shall not exceed 0.1 pound per million Btu heat input [(54.8 lb/hr & 240 TPY for SG 1 & SG 3, based on 548 MMBtu/hr.) and (52.3 lb/hr & 229 TPY for SG 2, based on 523 MMBtu/hr.)] as measured by the applicable compliance methods specified in condition A.18.
[Rule 62-296.405(1)(b), F.A.C.]

A.8. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input [164.4 lb/hr for SG 1 & SG 3 (based on 548 MMBtu/hr.) and 156.9 lb/hr for SG 2 (based on 523 MMbtu/hr)] during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

A.9. Sulfur Dioxide. When burning liquid fuel (fuel oil), sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by test methods in condition A.19.
[Rule 62-296.405(1)(c)1.j., F.A.C.]

A.10. Sulfur Dioxide - Sulfur Content. The sulfur content of fuel oils, on-specification used oil, or any combination of the two burned in these units, shall not exceed 2.5 percent, by weight. See specific condition A.20. For the purposes of Title V Annual Emissions Fee's, the sulfur content of natural gas burned in these units shall not exceed 1 grain per 100 dry standard cubic feet (dscf), which is equivalent to 0.003 percent by weight.
[Rule 62-296.405(1)(e)3., F.A.C.; and, requested by the applicant in Title V Application dated June 14, 1996.]

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.]

A.13. 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.14. Sulfur Dioxide. **The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or permittee upon each fuel delivery.** This protocol is allowed because the emissions units do not have an operating flue gas desulfurization device. See specific conditions A.9., A.10., A.19. and A.20.
[Rule 62-296.405(1)(f)1.b., F.A.C.]

A.15. 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: 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.}

A.16. Visible emissions. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition A.17.
[Rule 62-296.405(1)(e)1., F.A.C.]

A.17. 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.]

A.18. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-296.405(1)(e)2. and 62-297.401, F.A.C.]

A.19. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. **The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or permittee upon each fuel delivery.** See specific conditions A.9., A.10. and A.20.
[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, Permits AO 64-185095.]

A.20. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition.
[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.21. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third

run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

A.22. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 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.]

A.23. 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.]

A.24. 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. The required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

A.25. 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.]

A.26. 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.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.
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.

TABLE 297.310-1
CALIBRATION SCHEDULE

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

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management, 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 Air Quality Division of the Pinellas County Department of Environmental Management, 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 Air Quality Division of the Pinellas County Department of Environmental Management.

(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.]

A.27. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or

b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.
[Rule 62-297.310(7)(a)4., F.A.C.]

A.28. Annual and permit renewal compliance testing for particulate matter 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.
[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

Record keeping and Reporting Requirements

A.29. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management 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 Air Quality Division of the Pinellas County Department of Environmental Management.
[Rule 62-210.700(6), F.A.C.]

A.30. Submit to the Air Quality Division of the Pinellas County Department of Environmental Management a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.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 Air Quality Division of the Pinellas County Department of Environmental Management on the results of each such test.
(b) The required test report shall be filed with the Air Quality Division of the Pinellas County Department of Environmental Management 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 Air Quality Division of the Pinellas County Department of Environmental Management 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.]

A.32. Not federally enforceable. Compliance with the fuel oil sulfur content (% by wt) and sulfur dioxide emissions rate (lbs/MMBtu) of this permit shall be documented by the permittee through the submittal of quarterly reports for this facility. These quarterly reports shall be submitted within 30 days of the end of each calendar quarter to the Air Quality Division of the Pinellas County Department of Environmental Management.
[Rule 62-213.440, F.A.C.; and, AO 52-216382, AO 52-216383, and AO 52-216384.]

Addition limitations for On-Specification Used Oil

A.33. On-Specification Used Oil. On-specification used oil generated at this facility or off-site may only be burned in these emissions units if compliance with all the conditions of this permit and the following additional conditions are demonstrated:

a. On-specification Used Oil Allowed as Fuel: This permit allows the burning of used fuel oil meeting EPA "on-specification" used oil specifications, with a maximum sulfur content of 2.5 percent, by weight, and a PCB concentration of no greater than 49 ppm.

On-specification used oil shall meet the following specifications: [40 CFR 279, Subpart B.]

1. Arsenic shall not exceed 5.0 ppm;
2. Cadmium shall not exceed 2.0 ppm;
3. Chromium shall not exceed 10.0 ppm;
4. Lead shall not exceed 100.0 ppm;
5. Total halogens shall not exceed 1000 ppm;
6. Flash point shall not be less than 100 degrees F.

Used oil that does not meet the specifications for on-specification used oil shall not be burned at this facility.

b. Quantity Limited: The maximum cumulative annual amount of on-specification used oil that can be burned at this facility shall not exceed 5 % of the total allowable heat input for SG 1, SG 2, and SG 3.

c. Used Oil Containing PCBs Not Allowed: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement or any part of this condition.

d. PCB Concentration of 2 to 49 ppm: On-specification used oil with a PCB concentration of 2 to 49 ppm shall be burned only at normal source operating temperatures. On specification used oil with a PCB concentration of 2 to 49 ppm shall not be burned during periods of startup or shutdown. Before accepting from each marketer the first shipment of on-specification used oil with a PCB concentration of 2 to 49 ppm, the owner or operator shall provide each marketer with a one-time written and signed notice certifying that the owner or operator will burn the used oil in a qualified combustion device. The notice must state that EPA or a RCRA-delegated state agency has been given a description of the used oil management activities at the facility and that an industrial boiler or furnace will be used to burn the used oil with a PCB concentration of 2 to 49 ppm. The description of the used oil management activities shall be submitted to the Administrator of EPA or Administrator, Hazardous Waste Regulation Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400.

e. Certification Required: The owner or operator shall receive from the marketer, for each load of used oil received, a certification that the used oil meets the specifications for on-specification used oil and contains a PCB concentration of no greater than 49 ppm. This certification shall also describe the basis for the certification, such as analytical results.

Note that a claim that used oil does not contain quantifiable levels of PCBs (that is, that the used oil contains less than 2 ppm of PCBs) must be documented by testing or other information. The first person making the claim that the used oil does not contain PCBs is responsible for furnishing the documentation. The documentation can be tests, personal or special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the used oil contains no detectable PCBs.

f. Testing Required: If the owner or operator does not receive certification from the marketer as described above, the owner or operator shall properly sample and test each load of used oil received for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs*,
and percent sulfur content by weight, ash, and BTU value (BTU per gallon).
Testing (sampling, extraction and analysis) shall be performed using

approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

* Testing for PCB's is not necessary if quantifiable levels are less than 2 ppm (ref. to specific condition A.34.e., above)

If the owner or operator relies on certification from the marketer as described above, the owner or operator shall, at a minimum, each calendar quarter, sample one load of used oil received, selected at random by the owner or operator, and analyze the sample for the above parameters. If the analytical results show that the used oil does not meet the specification for on-specification used oil, or that it contains a PCB concentration of 50 ppm or greater, the owner or operator shall immediately notify the Air Quality Division of the Pinellas County Department of Environmental Management and provide the analytical results to the Department. The owner or operator shall immediately cease burning of the used oil.

g. Special Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil:

(1) The gallons of on-specification used oil received and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
(2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)
(3) The name and address of all marketers delivering used oil to the facility.
(4) Copies of the marketer certifications, if obtained, and any supporting information.
(5) Documentation that the used oil contains less than 2 ppm PCBs, if claimed, including the name and address of the person making the claim.
(6) Results of the analyses required above.
(7) A copy of the notice to EPA and a copy of the one-time written notice provided to each marketer.
(8) The hourly usage if the on-specification used oil is burned exclusively (not blended).

The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained for 5 years.

h. Quarterly Reporting Required: The owner or operator shall submit to the Air Quality Division of the Pinellas County Department of Environmental Management, within thirty days of the end of each calendar quarter, a summary of the quarterly analyses and the total amount of

on-specification used oil received and burned during the quarter.

The owner or operator shall submit, with the Annual Operation Report form, the analytical results and the amount of on-specification used oil burned during the previous calendar year.

[40 CFR 279.61 and 761.20(e); Rules 62-4.070(3), 62-212.400(2)(f)1. and 62-213.440, F.A.C.; and, initial Title V Application received June 14, 1996.]

Operation and Maintenance Plan

A.34. The following is the specified Operation and Maintenance Plan for Particulate Control as required by Rule.

A. Process Parameters

1. Heat Input Rate:	SG 1 & SG 3 - 548 MMBtu/hr (Maximum) SG 2 - 523 MMBtu/hr (Maximum)
2. Fuel:	No. 6 or lighter grades of fuel oil, on-specification used fuel oil, and natural gas with a maximum sulfur content, by weight, of 2.50%, 1 grain per 100 dry standard cubic feet, and 2.50%, respectively.
3. Fuel Firing Rate:	SG 1 & SG 3 - 3654 gal/hr for fuel oils. SG 2 - 3486 gal/hr for fuel oil. SG 1 and SG 3 - natural gas at 0.5 MMCF/hour and SG 2 - natural gas at 0.49 MMCF/hr.
4. Ash Content:	as sampled.
5. Steam Temperature:	950 °F
6. Steam Pressure:	1315 psig
7. Steam Flow Rate:	450,000 lb/hr
8. Stack Height:	174 ft
9. Boiler Manufacture:	Babcock and Wilcox
10. Burner Arrangement:	Front Fired

B. Inspection and Maintenance Program

1. Scheduled during major outages: Boilers, controls, auxiliaries, burners and duct work are to be inspected and repaired as necessary. All parts are to be inspected, cleaned and replaced as necessary.
2. Scheduled during non-peak load periods in spring and fall: This schedule is affected by forced outage requirements.

3. The following operating parameters are to be continuously monitored and maintained at appropriate levels to produce efficient fuel combustion:

   a. fuel flow rate
   b. fuel temperature
   c. fuel pressure
   d. air flow rate
   e. steam flow rate
   f. steam temperature
   g. steam pressure

4. Plant operators are to monitor, adjust and record the following operating parameters at least once per day to assure efficient plant operations:

   a. temperatures (superheat, fuel)
   b. flows (steam, feedwater, fuel)
   c. unit load

5. Fuel oil quality is to be checked prior to delivery and/or burning. Fuel oil shall be analyzed, by the most recent ASTM method, for the determination of the following:

   a. Heat content (Btu/gal)
   b. sulfur content (% by wt)
   c. API gravity and density (lbs/gal)

C. Recordkeeping

Records of inspections, maintenance, and performance parameters shall be retained for a minimum of five years and shall be made available to the Department or Air Quality Division of the Pinellas County Department of Environmental Management upon request.

[Rule 62-296.700(6), F.A.C. .; and, AO 52-216382, AO 52-216383, and AO 52-216384.]

Subsection B. This section addresses the following emissions units.

E. U. ID No.	Brief Description
-004 - 007	Combustion Turbine Peaking Units, CTP 1, CTP 2, CTP 3, and CTP 4

The above referenced combustion turbine peaking units (CTP's) may only fire new No. 2 fuel oil or natural gas having a maximum sulfur content of 0.5 percent, by weight, and 1 grain per 100 dry standard cubic feet (dscf), respectively. CTP 1 and CTP 2 have a maximum heat input of 566 MMBtu/hour at 59° F and each powers a generator rated at 37.0 MW (megawatts of electricity). CTP 3 and CTP 4 have a maximum heat input of 631 MMBtu/hour at 59° F and each powers a generator rated at 42.9 MW (megawatts of electricity). Emissions are not controlled and each turbine exhausts through a separate stack. These emissions units are pre-NSPS and not subject to the Acid Rain Program. CTP 1, CTP 2, CTP 3, and CTP 4 began commercial service on March 15, 1969, April 12, 1969, December 1, 1970, and January 9, 1971, respectively.

{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

B.1. Permitted Capacity. CTP 1 and CTP 2 each have a maximum heat input of 566 MMBtu/hour at 59° F and each powers a generator rated at 37.0 MW (megawatts of electricity). CTP 3 and CTP 4 each have a maximum heat input of 631 MMBtu/hour at 59° F and each powers a generator rated at 42.9 MW. At other ambient temperatures, the units shall be operated in accordance with established performance curves, which will be made available at the site during compliance testing .
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 52-216420, AO 52-216421, AO 52-216422, AO 52-216423.]

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition B.13.

B.3. 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.]

B.4. Methods of Operation - Fuels.
(a). Only new No. 2 fuel oil having a maximum sulfur content of 0.5 percent, by weight, or natural gas having a maximum sulfur content of 1 grain per 100 dscf shall be fired in these turbines.

(b). The heat inputs in condition B.1 are based on the following fuel consumption rates while firing new No. 2 fuel oil and natural gas. These rates may vary depending on the heating values of the fuels:

Emissions Unit(s)	New No. 2 Fuel Oil	Natural Gas
CTP 1 & CTP 2	4,032 gals/hr (96 bbl/hr)	0.57 MMCF/hr
CTP 3 & CTP 4	4,494 gals/hr (107 bbl/hr)	0.63 MMCF/hr

[Rules 62-4.160(2) and 62-213.440(1), F.A.C.; and, AO 64-216420, AO-216421, AO 64-216422, AO 64-216423.]

Emission Limitations and Standards

{Permitting note: Table 1-3, 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.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 64-216420, AO-216421, AO 64-216422, AO 64-216423.]

B.6. Sulfur Content. The sulfur content of the new No. 2 fuel oil shall not exceed 0.5 percent, by weight, and the sulfur content of the natural gas shall not exceed 1 gr/100 dscf.
[Rule 62-213.440, F.A.C.; and, AO 64-216420, AO-216421, AO 64-216422, AO 64-216423.]

Excess Emissions

B.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.]

B.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

B.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 B.12.
[Rule 62-213.440, F.A.C.; and, AO 52-216420, AO 52-216421, AO 52-216422, AO 52-216423.]

B.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.}

B.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.]

B.12. The fuel sulfur content, percent by weight, provided by the vendor or permittee 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.
[Rules 62-213.440 and 62-297.440, F.A.C.]

B.13. Operating Rate During Testing.
Testing of emissions shall be conducted with the emissions unit operating at capacity. Capacity is defined as 95 - 100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at permitted 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, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by this permit. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department's local office with the compliance test report.
[Rule 62-297.310(2), F.A.C.; and, AO 64-216420, AO-216421, AO 64-216422, AO 64-216423.]

B.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.]

B.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 Air Quality Division of the Pinellas County Department of Environmental Management, 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 Air Quality Division of the Pinellas County Department of Environmental Management, 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 Air Quality Division of the Pinellas County Department of Environmental Management.

(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]

B.16. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuels; or

b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or

c. 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

B.17. Malfunction Reporting. In the case of excess emissions resulting from malfunctions as defined in conditions B.7 and B.8, 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 Air Quality Division of the Pinellas County Department of Environmental Management.
[Rule 62-210.700(6), F.A.C.]

B.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 Air Quality Division of the Pinellas County Department of Environmental Management on the results of each such test.
(b) The required test report shall be filed with the Air Quality Division of the Pinellas County Department of Environmental Management 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 C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-7775047 -001	Relocatable Diesel Fired Generator(s)

The relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled. These conditions were requested in the Initial Title V Permit Application for the Anclote Power Plant received June 14, 1996. The generator(s) may be relocated at this facility and any of the following facilities:

1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
3. Anclote Power Plant, 1729 Baileys Bluff Road, Holliday, Pasco County.
4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
6. The future FPC Polk County Site, County Road 555, 1 mi. southwest of Homeland, Polk County.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack.}

The following specific conditions apply to the emissions units listed above regardless of location:

Essential Potential to Emit (PTE) Parameters

C.1. These conditions become active and enforceable once FPC has given notification to the Air Quality Division of the Pinellas County Department of Environmental Management, if appropriate, that these units will be relocated to this facility. Notification shall be given as per specific condition C.24. [Rule 62-4.070(3), F.A.C.; Anclote Power Plant Permit AC 09-202080; and, Initial Title V Permit Application for the Anclote Power Plant received June 14,1996.]

C.2. Permitted Capacity. The maximum operation heat input rates are as follows:
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Unit No.	MMBtu/hr/generator(s) Heat Input	Fuel Type
-7775047 -001	25.74	New Low Sulfur No. 2 Fuel Oil

C.3. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.14.
[Rule 62-297.310(2), F.A.C.]

C.4. Methods of Operation - Fuels. Only new low sulfur No. 2 fuel oil shall be fired in the combustion turbine(s).
[Rule 62-213.410, F.A.C.]

C.5. Hours of Operation. The hours of operation expressed as "engine-hours" shall not exceed 2970 hours in any consecutive 12 month period. The total hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each generator.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1-4, 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.}

C.6. Visible Emissions. Visible emissions from each generator shall not be equal to or greater than 20 percent opacity.
[Rule 62-296.320(4)(b)1., F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

C.7. Sulfur Dioxide - Sulfur Content. The sulfur content of the new No. 2 fuel oil shall not exceed 0.50 percent, by weight.
[Requested in initial Title V permit application dated June 14, 1996; and, Anclote Power Plant Permit AC 09-202080.]

Excess Emissions

C.8. 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.]

C.9. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

C.10. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. See specific condition C.13. [Rule 62-213.440, F.A.C.]

C.11. 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: The attached Table 2-2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.12. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

C.13. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s). [Rules 62-213.440 and 62-297.440, F.A.C.]

C.14. Operating Rate During Testing. Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate of 186.3 gallons per hour. 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 operations may be 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. Failure to submit the actual operating rate may invalidate the test.
[Rules 62-297.310(2), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

C.15. Applicable Test Procedures.
(a) Required Sampling Time.
2. Opacity Compliance Tests. 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.]

C.16. 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 Air Quality Division of the Pinellas County Department of Environmental Management 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 Air Quality Division of the Pinellas County Department of Environmental Management, 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 Air Quality Division of the Pinellas County Department of Environmental Management.

(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; and, Anclote Power Plant Permit AO 09-205952.]

C.17. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year.

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

C.18. After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content. See specific conditions C.6, C.7, C.10, C.13, and C.14.

[Rules 62-4.070(3) and 62-297.310(7)(b),F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

Recordkeeping and Reporting Requirements

C.19. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify the Air Quality Division of the Pinellas County Department of Environmental Management 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 Air Quality Division of the Pinellas County Department of Environmental Management.
[Rule 62-210.700(6), F.A.C.]

C.20. Test Reports.
(a) Each generator shall be tested on an annual basis within 30 days of the date October 25.
(b) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Air Quality Division of the Pinellas County Department of Environmental Management on the results of each such test.
(c) The required test report shall be filed with the Air Quality Division of the Department of Environmental Management as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(d) The test reports for a unit that has been relocated shall be submitted to the Department office that will handle compliance issues for the new location within 45 days of testing.
[Rule 62-297.310(8), F.A.C.; and, Anclote Power Plant Permit AO 09-25952.]

C.21. To demonstrate compliance with specific condition C.5, records shall indicate the daily hours of operation for each diesel generator, the daily hours of operation expressed as "engine- hours", and a cumulative total hours of operation expressed as "engine hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Air Quality Division of the Pinellas County Department of Environmental Management upon request.
[Rules 62-213.440 and 62-297.310(8), F.A.C.; and, Anclote Power Plant Permit AO 09-205952.]

C.22. To demonstrate compliance with specific condition C.7, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Air Quality Division of the Pinellas County Department of Environmental Management upon request.
[Rule 62-297.310(8), F.A.C.; and, AO 09-205952.]

Source Obligation

C.23. Specific conditions in Anclote Power Plant construction permit AC 09-202080, limiting the "engine hours", were accepted by the applicant to escape Prevention of Significant Deterioration review. If Florida Power Corporation requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400(5), F.A.C., as though construction had not yet begun.
[Rule 62-212.400(2)(g), F.A.C.; and, Anclote Power Plant Permits AC 09-202080 and AO 09-205952.]

C.24. Florida Power Corporation shall notify the Department's district office and the local air program (when applicable) of where the diesel generator(s) is presently located and where the diesel generator(s) is to be relocated, in writing, at least 15 days prior to the date on which any diesel generator(s) is to be relocated. The notification shall specify the following;

a. which generator(s), by serial number, is being relocated,
b. which location the generator(s) is being relocated from and which location it is being relocated to, and
c. the approximate startup date at the new location.

[Rule 62-4.070(3), F.A.C.; and, Anclote Power Plant Permit AC 09-202080]

Section IV. This section is the Acid Rain Program.

Operated by: Florida Power Corporation
ORIS code: 630

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

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

E.U. ID No.	Description
-001	Fossil Fuel Fired Steam Generator - SG 1
-002	Fossil Fuel Fired Steam Generator - SG 2
-003	Fossil Fuel Fired Steam Generator - SG 3

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_2) allowance allocations for each Acid Rain unit:

E.U. ID No.	EPA I.D.	Year	2000	2001	2002
-001	1	**SO_2 allowances, under Table 2 or 3 of 40 CFR 73**	418*	418*	418*
-002	2	**SO_2 allowances, under Table 2 or 3 of 40 CFR 73**	469*	469*	469*
-003	3	**SO_2 allowances, under Table 2 or 3 of 40 CFR 73**	964*	964*	964*

*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 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. Comments, notes, and justifications: None.

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

Florida Power Corporation
Higgins Power Plant

FINAL Permit ID No.: 1030012-001-AV
Facility ID No.: 1030012

E.U. ID Nos. Brief Description

-001 & -003	Fossil Fuel Fired Steam Generator - SG 1 & SG 3								
			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s) *	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions Steady state Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	40% Opacity 60% Opacity					Rule 62-296.405(1)(a), F.A.C. Rule 62.210.700(3), F.A.C.	 A.5 A.6
PM Emissions Steady State Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	0.1 lb/MMBtu 0.3 lb/MMBtu	54.8 164.4	240.0			Rule 62.296.405(1)(b), F.A.C. Rule 62.210.700(3), F.A.C.	 A.7 A.8
Sulfur Dioxide	F.O. & OSUO or N.G.	8760 8760	2.75 lb/MMBtu, max. 2.5% S by wt. or 1 gr/100 dscf			1,507.0	6,600.7	Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(c)1.i., F.A.C.	A.9 A.10

-002	Fossil Fuel Fired Steam Generators - SG 2								
			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s) *	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions Steady state Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	40% Opacity 60% Opacity					Rule 62-296.405(1)(a), F.A.C. Rule 62.210.700(3), F.A.C. OGC Order TFR-92-A-01	 A.5 a.6
PM Emissions Steady State Soot Blowing or Load Changing	F.O. & OSUO or N.G.	8760	0.1 lb/MMBtu 0.3 lb/MMBtu	52.3 156.9	229.0			Rule 62.296.405(1)(b), F.A.C. Rule 62.210.700(3), F.A.C.	 A.7 A.8
Sulfur Dioxide	F.O. & OSUO or N.G.	8760 8760	2.75 lb/MMBtu, max. 2.5% S by wt. Or 1 gr/100 dscf			1,438.3	6,299.5	Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(c)1.i.,	A.9 A.10

*Natural Gas (N.G.), No. 1, 2, 3, 4, 5, & 6 fuel oil (F.O.) and on-specification used oil (OSUO). OSUO is limited to 5% of the total heat input for these units (Cond. A.1 & A.34)
** The "Equivalent Emissions" listed are for informational purposes only.
This table summarizes information for convience purposes only. This table does not supersede any of the terms or conditions of this permit.

Table 1-2, Summary of Air Pollutant Standards and Terms

Florida Power Corporation
Higgins Power Plant

FINAL Permit No.: 1030012-001-AV
Facility ID No.: 1030012

Additional Standards for On-Specification Used Oil (OSUO)

E.U. ID Nos. **Brief Description**

-001-003	Fossil Fuel Fired Steam Generators, SG 1, SG 2, & SG 3								
			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s)	Hours/ Year	Standards	lbs./ hour	TPY	lbs./hour	TPY	Regulatory Citation(s)	See Permit Condition(s)
Arsenic	OSUO		5.0 ppm						A.33
Cadmium	OSUO		2.0 ppm						A.33
Chromium	OSUO		10.0 ppm						A.33
Lead	OSUO		100.0 ppm						A.33
Total Halogens	OSUO		1000 ppm						A.33
Flash Point	OSUO		$\geq$ 100 degrees F						A.33
PCB	OSUO		$<$ 49 ppm						A.33
SO_2			max. 2.5% S by wt.						A.33

* Burning of on-specification used oil shall not exceed 5 percent of the total heat input to units SG 1, SG 2, & SG 3 (Cond. A.1 & A.33).
This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.
** Rules 62-4.070(3) and 62-213.440, F.A.C.; and, AO 52-216382, AO 52-216383, & AO 52-216384.

Table 1-3, Air Pollutant Emission Allowables and Terms

Florida Power Corporation
Higgins Power Plant

FINAL Permit ID No.: 1030012-001-AV
Facility ID No.: 1030012

E.U. ID Nos. Brief Description

-004 & -005	Combustion Turbine Peaking Units - CTP 1 & CTP 2								
			Allowable Emissions			Equivalent Emissions *			
Pollutant Name	Fuel(s)	Hours/ Year	Standards	lb/ hour	TPY	lb/hour	TPY	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions	New No. 2 F.O.	8760	< 20% Opacity					Rule 62-296.320(4)(b)1., F.A.C.	B.5
Sulfur Dioxide	New No. 2 F.O. N.G	8760	max. 0.50% S by wt. or 1 gr/100 dscf			286.3 **	1253.9 **	Rule 62-213..440, F.A.C.	B.6

-006 & -007	Combustion Turbine Peaking Units - CTP 3 & CTP 4								
			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s) *	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour	TPY	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions	New No. 2 F.O.	8760	< 20% Opacity					Rule 62-296.320(4)(b)1., F.A.C.	B.5
Sulfur Dioxide	New No. 2 F.O. N.G.	8760	max. 0.50% S by wt. or 1 gr/100 dscf			319.1 ***	1397.5 ***	Rule 62-213..440, F.A.C.	B.6

* The "Equivalent Emissions" listed are for informational purposes only.
** Based on a maximum F.O. consumption of 96.0 bbl/hr, 7.1 lb/gal, operating 8760 hr/yr., and maximum F.O. sulfur content of 0.50 %, by wt.
*** Based on a maximum F.O. consumption of 107.0 bbl/hr, 7.1 lb/gal, operating 8760 hr/yr., and maximum F.O. sulfur content of 0.50 %, by wt.
This table summarizes information for convenience purposes only and does not supersede any of the terms or conditions of this permit.

Table 1-4, Air Pollutant Emission Allowables and Terms

Florida Power Corporation
Higgins Power Plant

FINAL Permit ID No.: 1030012-001-AV
Facility ID No.: 1030012

-777047-001	Relocatable Generator(s)								
			Allowable Emissions			Equivalent Emissions			
Pollutant Name	Fuel(s) *	Hours/ Year *	Standards	lb/ hour	TPY	lb/hour **	TPY **	Regulatory Citation(s)	See Permit Condition(s)
Visible Emissions	#2 F.O.	8760	20% Opacity					Rule 62-296.320(4)(b)1., F.A.C.	C.6
Sulfur Dioxide	#2 F.O.	8760	0.50% by wt.					Rule 62-296.320(4)(b)1., F.A.C.	C.7

** The "Equivalent Emissions" listed are for informational purposes only.
This table summarizes information for convience purposes only. This table does not supersede any of the terms or conditions of this permit.

Note: The above unit(s), which are permitted to be located at seven facilities.

Table 2-1, Compliance Testing Requirements

Florida Power Corporation
Higgins Power Plant

FINAL Permit ID No.: 1030012-001-AV
Facility ID No.: 1030012

E.U. ID							
Pollutant Name or parameter	Fuel(s)	EPA/Reference Method	Testing Time or Frequency	Frequency Base Date[2]	Min. Compl. Test Time	CMS	Permit Condition(s)
E.U. CTP 1, 2, 3, & 4							
SO_2	Oil	F.O. Analysis[1]	Per Delivery[1]		NA		B.12
VE	Oil	EPA Meth. 9	Annual		1 Hour		B. 11,14,15, & 16
E.U. SG 2, 3, & 4							
SO_2	Gas						
	Oil	F.O. Analysis[1]	Per Delivery[1]				A.19 & 20
PM	Gas						
	Oil	EPA Meth. 5	Annual				A.18, A.19, 24, & 28
VE	Gas	EPA Meth. 9	Annual		1 Hour		A.16, 17, 24, & 27

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

Table 2-2, Compliance Testing Requirements

Florida Power Corporation
Higgins Power Plant

FINAL Permit ID No.: 1030012-001-AV
Facility ID No.: 1030012

Relocatable Diesel Generator(s)

E.U. -7775047 -001							
SO_2	Oil	F.O. Analysis[1]	Per Delivery[1]		NA		C.12
VE	Oil	EPA Meth. 9	Annual		1 Hour		C.13, 15, 17, & 18

Note: The above unit(s) are permitted to be located at seven facilities.

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.

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	Luke Oil Storage Building
8	Portable Unleaded Gasoline Tank
9	Surface Coating and Solvent Cleaning
10	No. 2 Diesel Fuel Tank

Steam Generating Units - SAG 2, SAG 3, & SAG 4

Evaporation of on-site generated boiler non-hazardous cleaning chemicals (citrosolv and ammonia). This activity occurs once every three to five years or longer.

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'.

Emissions Unit	Description
-xxx	General Purpose Engines
-xxx	Fuel Storage Tanks
-xxx	Emergency Generator

Appendix H-1, Permit History/ID Number Changes

Florida Power Corporation
Higgins

Facility ID No.: 1030012-001-AV

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1,2]	Revised Date(s)
-001	Higgins #1 Boiler #6 Fuel	AO52-216382	01/26/93	09/16/98		
-002	Higgins Plant Unit #2	AO52-216383	07/26/93	09/16/98		
-003	Higgins Boiler #3	AO52-216384	01/26/93	09/16/98		
-004	Peaking Unit 1 Gas Turbine Gen.	AO52-216420	11/13/92	11/10/97		
-005	Peaking Unit 2 Gas Turbine Gen.	AO52-216421		11/10/97		
-006	Peaking Unit 3 Gas Turbine Gen.	AO52-216422	11/13/92	11/10/97		
-007	Peaking Unit 4 Gas Turbine Gen.	AO52-216423	11/13/92	11/10/97		

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

From: **Facility ID No.**:

To: **Facility ID No.**: 1030012

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

APPENDIX SS-1, STACK SAMPLING FACILITIES

APPENDIX TV-1, TITLE V CONDITIONS

ATTACHMENT HG-FI-C14

COMPLIANCE REPORT AND PLAN

ATTACHMENT HG-FI-C14

COMPLIANCE REPORT AND PLAN

On the date specified in Attachment HG-FI-C15, the facility and emission units identified in this application are in compliance with the Applicable Regulations identified in this application form. Compliance with the conditions set forth in this operation permit will be certified on an annual basis by the submittal of the Statement of Compliance – Title V Source DEP Form No. 62-213.900(7). This report will be submitted by March 1 of each year for the prior calendar year. Combustion Turbine Peaking Units 1-4 have not operated more than 400 hours on fuel oil since the current Title V Permit No. 1030012-001-AV had become effective (January 1, 1998). Additionally, Units 1 and 2 had not operated on fuel oil since 1997 and Units 3 and 4 have not operated on fuel oil since 1999. Due to a leak into the interstitial space of the fuel oil storage tank, the tank has been taken out of service. The engine manifolds also need to be repaired. Since the units are expected to fire No. 2 fuel oil during permit renewal compliance testing, these repairs will be made. The repairs are expected to be completed in 2003. Upon completion of the repairs, Units 1 through 4 will be tested within 30 days after they have first fired oil.

At the time of testing, the permittee will submit a properly signed and sealed certification from the permittee's Professional Engineer stating that the emissions unit has been tested and compliance with the terms and conditions contained within the current Title V permit has been properly demonstrated after completion of all of the VE tests.

ATTACHMENT HG-FI-C15

COMPLIANCE CERTIFICATION

ATTACHMENT HG-FI-C15

COMPLIANCE CERTIFICATION

The facility and emission units identified in this application are in compliance with the Applicable Regulations identified in the application form and attachments referenced in the section. The compliance report for this facility will be submitted by March 1 of each year for the prior calendar year. The compliance statement is as follows:

> I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.

Signature, Responsible Official

7/2/02
Date

Michael W. Lentz, Plant Manager Higgins

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Peaking Gas Turbine Unit 1

4. Emissions Unit Identification Number:
ID: **004**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**MARCH 1969**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Pratt & Whitney** Model Number:
2. Generator Nameplate Rating: **37** MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**566**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on permit limit firing No. 2 fuel oil. Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU1-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU1**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Gas turbine gases exhaust through a single stack per turbine unit.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **55** feet	7. Exit Diameter: **15.1** feet
8. Exit Temperature: **850** °F	9. Actual Volumetric Flow Rate: **1,000,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation - Distillate Oil (Diesel) - Turbine**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **4.101**	5. Maximum Annual Rate: **35,929**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b) = 4,032 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation – Natural Gas – Turbine**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.57**	5. Maximum Annual Rate: **4,993**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters): **Maximum Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b).** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum sulfur content of natural gas is 1.0 grain per 100 cf.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			NS
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: SO_2	2. Total Percent Efficiency of Control: 0 %
3. Potential Emissions: 287.1 lb/hour 1,258 tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.5% Sulfur Reference: Permit No. 1030012-001-AV Condition III.B.6	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): See Attachment HG-EU1-G8	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Permit limit based on AP-42 emission factor.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.5% Sulfur Oil	4. Equivalent Allowable Emissions: 287.1 lb/hour 1,258 tons/year
5. Method of Compliance (limit to 60 characters): Fuel oil analysis	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Permit No. 1030012-001-AV Condition III.B.9	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual VE Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-296.310(2)(a). No VE test < 400 hr/yr except for period of one year preceding permit renewal date. [Rule 62-297.310(7)(a)8]**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE99**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **FDEP Rule 62-210.700(1); Allowed for 2 hours (120 minutes) per 24 hours for start up, shutdown and malfunction.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: HG-EU1-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: HG-EU1-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: HG-EU1-J5 [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: HG-EU1-J6 [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU1-J14**

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT HG-EU1-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU1-D

Applicable Requirements Listing

APPLICATION EMISSION UNIT ID: EU1 – Peaking Combustion Turbine No. 1

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	Excess Emissions;
62-210.700(4)	Excess Emissions; poor maintenance
62-210.700(6)	Excess Emissions; notification

Stationary Sources-Emission Standards:

62-296.320(4)(b)(State Only)	CTs/Diesel Units
62-296.700(3)	Specific RACT Limiting Standards[1]
62-296.700(4)	Maximum Allowable Emission Rates
62-296.700(5)	Circumvention
62-296.700(6)(e)	Records and Inspection

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(2)	All Units (Operating Rate)
62-297.310(4)	All Units (Applicable Test Procedures)
62-297.310(5)	All Units (Determination of Process Variables)
62-297.310(7)(a)3.	Permit Renewal Test Required
62-297.310(7)(a)4.	Annual Test
62-297.310(7)(a)8.	VE Compliance Test if > 400 hrs/yr
62-297.310(7)(a)9.	FDEP Notification - 15 days
62-297.310(8)	Test Reports

[1] It is the position of the applicant that the use of very low sulfur oil and natural gas meets the requirements of this rule

ATTACHMENT HG-EU1-G8

CALCULATION OF EMISSIONS

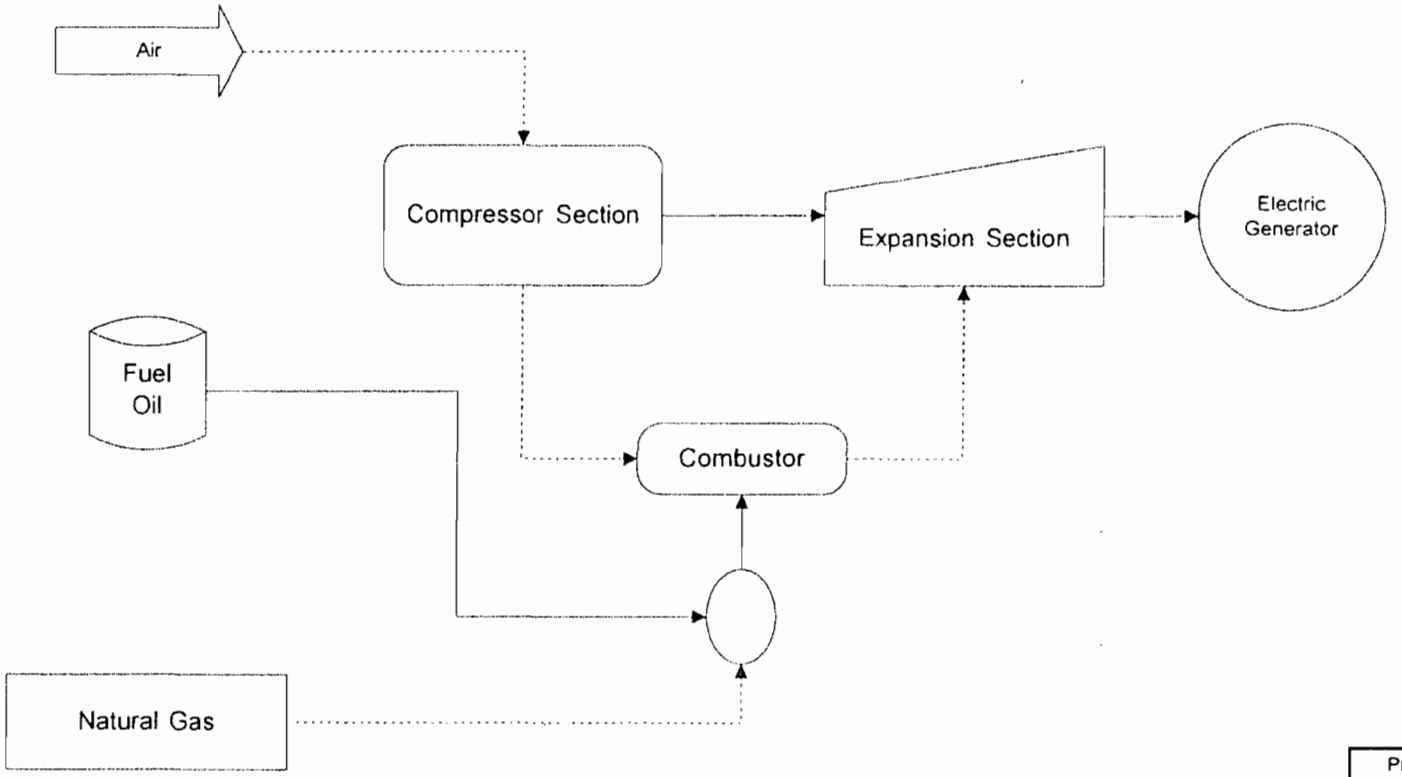
Attachment HG-EU1-G8. Maximum Estimated Emissions for Emissions Limited Pollutants
Higgins Power Plant, Gas Turbine Peaking Units

Pollutant/Units	Gas Turbine No. 1, No. 2	Gas Turbine No. 3, No. 4
Hours of Operation	8,760	8,760
Annual Capacity Factor (%)	100	100
Sulfur Dioxide (lb/hr) = Emission Factor (lb/1,000 gal) x sulfur content (%) x Fuel Usage (gal/hr)		
Basis	AV Permit/AP-42	AV Permit/AP-42
Emission Factor (lb/1,000 gal x sulfur content)	140 x S	140 x S
Sulfur Content (%)	0.5	0.5
Fuel Usage (1,000 gal/hr)	4.101	4.572
Emission Rate (lb/hr)	287.1	320.0
(TPY)	1,257	1,402

Source: FDEP Permit No. 1030012-001-AV, AO 64-216420, AO-216421, AO 64-216422, and AO 64-216423.

ATTACHMENT HG-EU1-J1

PROCESS FLOW DIAGRAM



Attachment HG-EU1-J1
Process Flow Diagram
Florida Power, Higgins Plant

Golder Associates

ATTACHMENT HG-EU1-J2

FUEL ANALYSIS
NO. 2 FUEL OIL

FLORIDA POWER CORPORATION
CENTRAL CHEMICAL LABORATORY
15760 WEST POWERLINE STREET
CRYSTAL RIVER, FL 34428
TEL: 352-563-4463; EXT: 5239
MICROWAVE: 240-5239 MAC CN77

Higgins **Unit (s):**

Sample Date: 01/14/1999 **Sample Number:** FO-7006

Type of Fuel: No. 2 oil

Enter the type of Sample: Gas Turbine

RESULTS*

API Gravity @	34.2
%S:	0.28
Density (@ 60° F):	0.8535
Density (lb/gal):	7.1105

HHV, BTU/lb:	19,566	**% ASH:**	
HHV, BTU/gal:	139,114	**% Carbon:**	
HHV, BTU/bbl:	5,842,788	**% Hydrogen:**	
LHV, BTU/lb:		**% Nitrogen:**	
LHV, BTU/gal:		**% Water:**	
LHV, BTU/bbl:			

Sample

* Analysis performed by: Caleb Brett

Jeff Smith
Chemist, Central Chem Lab

ATTACHMENT HG-EU1-J5

COMPLIANCE TEST REPORT

ATTACHMENT HG-EU1-J5

COMPLIANCE TEST REPORT

Combustion Turbine Peaking Units 1-4 have not operated more than 400 hours on fuel oil since the current Title V Permit No. 1030012-001-AV had become effective (January 1, 1998). Additionally, Units 1 and 2 had not operated on fuel oil since 1997 and Units 3 and 4 have not operated on fuel oil since 1999. Due to a leak into the interstitial space of the fuel oil storage tank, the tank has been taken out of service. The engine manifolds also need to be repaired. Since the units are expected to fire No. 2 fuel oil during permit renewal compliance testing, these repairs will be made. The repairs are expected to be completed in 2003. Upon completion of the repairs, Units 1 through 4 will be tested within 30 days after they have first fired oil.

At the time of testing, the permittee will submit a properly signed and sealed certification from the permittee's Professional Engineer stating that the emissions unit has been tested and compliance with the terms and conditions contained within the current Title V permit has been properly demonstrated after completion of all of the VE tests.

ATTACHMENT HG-EU1-J6

PROCEDURES FOR STARTUP/SHUTDOWN

ATTACHMENT HG-EU1-J6

PROCEDURES FOR STARTUP/SHUTDOWN

Startup for the gas turbine begins with an electric control system using a switch to initiate the unit startup cycle. The unit generator is synchronized with the grid and can be "on line" (electrical power production) within 5 minutes from startup.

The gas turbine has no emission controls. If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective action taken or preventative measures adopted. Corrective actions may include switching the unit from automatic (remote) to local control. Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit generator from the system electrical grid), shutting off the fuel, and coasting to a stop.

ATTACHMENT HG-EU1-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT HG-EU1-J14

COMPLIANCE ASSURANCE MONITORING PLAN

There are no emission control devices for the CTs, therefore no compliance assurance monitoring plan is required.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Peaking Gas Turbine Unit 2

4. Emissions Unit Identification Number:
ID: **005**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**APRIL 1969**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Pratt & Whitney** Model Number:
2. Generator Nameplate Rating: **37** MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:			**566**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr			tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on permit limit firing No. 2 fuel oil. Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU2-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU2**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Gas turbine gases exhaust through a single stack per turbine unit.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **56** feet	7. Exit Diameter: **15.1** feet
8. Exit Temperature: **850** °F	9. Actual Volumetric Flow Rate: **1,000,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation - Distillate Oil (Diesel) - Turbine**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **4.101**	5. Maximum Annual Rate: **35,929**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b) = 4,032 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation – Natural Gas – Turbine**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.57**	5. Maximum Annual Rate: **4,993**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters): **Maximum Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b).** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum sulfur content of natural gas is 1.0 grain per 100 cf.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			NS
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **287.1** lb/hour **1,258** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.5% Sulfur** Reference: **Permit No. 1030012-001-AV Condition III.B.6**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU1-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Permit limit based on AP-42 emission factor.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.5% Sulfur Oil**	4. Equivalent Allowable Emissions: **287.1** lb/hour **1,258** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.B.9**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual VE Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-296.310(2)(a). No VE test < 400 hr/yr except for period of one year preceding permit renewal date. [Rule 62-297.310(7)(a)8]**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE99**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **FDEP Rule 62-210.700(1); Allowed for 2 hours (120 minutes) per 24 hours for start up, shutdown and malfunction.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: **HG-EU1-J1** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: **HG-EU1-J2** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: **HG-EU2-J5** [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: **HG-EU1-J6** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU1-J14**

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT HG-EU2-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU2-D

Applicable Requirements Listing

APPLICATION EMISSION UNIT ID: EU2 – Peaking Combustion Turbine No. 2

FDEP Rules:

Stationary Sources-General:	
62-210.700(1)	Excess Emissions;
62-210.700(4)	Excess Emissions; poor maintenance
62-210.700(6)	Excess Emissions; notification
Stationary Sources-Emission Standards:	
62-296.320(4)(b)(State Only)	CTs/Diesel Units
62-296.700(3)	Specific RACT Limiting Standards[1]
62-296.700(4)	Maximum Allowable Emission Rates
62-296.700(5)	Circumvention
62-296.700(6)(e)	Records and Inspection
Stationary Sources-Emission Monitoring (where stack test is required):	
62-297.310(2)	All Units (Operating Rate)
62-297.310(4)	All Units (Applicable Test Procedures)
62-297.310(5)	All Units (Determination of Process Variables)
62-297.310(7)(a)3.	Permit Renewal Test Required
62-297.310(7)(a)4.	Annual Test
62-297.310(7)(a)8.	VE Compliance Test if > 400 hrs/yr
62-297.310(7)(a)9.	FDEP Notification - 15 days
62-297.310(8)	Test Reports

[1] It is the position of the applicant that the use of very low sulfur oil and natural gas meets the requirements of this rule

ATTACHMENT HG-EU2-J5

COMPLIANCE TEST REPORT

ATTACHMENT HG-EU2-J5

COMPLIANCE TEST REPORT

Combustion Turbine Peaking Units 1-4 have not operated more than 400 hours on fuel oil since the current Title V Permit No. 1030012-001-AV had become effective (January 1, 1998). Additionally, Units 1 and 2 had not operated on fuel oil since 1997 and Units 3 and 4 have not operated on fuel oil since 1999. Due to a leak into the interstitial space of the fuel oil storage tank, the tank has been taken out of service. The engine manifolds also need to be repaired. Since the units are expected to fire No. 2 fuel oil during permit renewal compliance testing, these repairs will be made. The repairs are expected to be completed in 2003. Upon completion of the repairs, Units 1 through 4 will be tested within 30 days after they have first fired oil.

At the time of testing, the permittee will submit a properly signed and sealed certification from the permittee's Professional Engineer stating that the emissions unit has been tested and compliance with the terms and conditions contained within the current Title V permit has been properly demonstrated after completion of all of the VE tests.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Peaking Gas Turbine Unit 3

4. Emissions Unit Identification Number:
ID: **006**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**DECEMBER 1970**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Pratt & Whitney** Model Number:

2. Generator Nameplate Rating: **43** MW

3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**631**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on permit limit firing No. 2 fuel oil. Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU3-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU3**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Gas turbine gases exhaust through a single stack per turbine unit.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **55** feet	7. Exit Diameter: **15.1** feet
8. Exit Temperature: **850** °F	9. Actual Volumetric Flow Rate: **1,000,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation - Distillate Oil (Diesel) - Turbine**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **4.572**	5. Maximum Annual Rate: **40,055**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b) = 4,494 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation – Natural Gas – Turbine**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.63**	5. Maximum Annual Rate: **5,528**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters): **Maximum Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b).** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum sulfur content of natural gas is 1.0 grain per 100 cf.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			NS
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **320.0** lb/hour **1,402** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.5% Sulfur** Reference: **Permit No. 1030012-001-AV Condition III.B.6**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU1-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Permit limit based on AP-42 emission factor.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.5% Sulfur Oil**	4. Equivalent Allowable Emissions: **320.0** lb/hour **1,402** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.B.9**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual VE Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-296.310(2)(a). No VE test < 400 hr/yr except for period of one year preceding permit renewal date. [Rule 62-297.310(7)(a)8]**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE99**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **FDEP Rule 62-210.700(1); Allowed for 2 hours (120 minutes) per 24 hours for start up, shutdown and malfunction.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: HG-EU1-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: HG-EU1-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: HG-EU3-J5 [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: HG-EU1-J6 [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU1-J14**

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:_____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT HG-EU3-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU3-D

Applicable Requirements Listing

APPLICATION EMISSION UNIT ID: EU3 – Peaking Combustion Turbine No. 3

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	Excess Emissions;
62-210.700(4)	Excess Emissions; poor maintenance
62-210.700(6)	Excess Emissions; notification

Stationary Sources-Emission Standards:

62-296.320(4)(b)(State Only)	CTs/Diesel Units
62-296.700(3)	Specific RACT Limiting Standards[1]
62-296.700(4)	Maximum Allowable Emission Rates
62-296.700(5)	Circumvention
62-296.700(6)(e)	Records and Inspection

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(2)	All Units (Operating Rate)
62-297.310(4)	All Units (Applicable Test Procedures)
62-297.310(5)	All Units (Determination of Process Variables)
62-297.310(7)(a)3.	Permit Renewal Test Required
62-297.310(7)(a)4.	Annual Test
62-297.310(7)(a)8.	VE Compliance Test if > 400 hrs/yr
62-297.310(7)(a)9.	FDEP Notification - 15 days
62-297.310(8)	Test Reports

[1] It is the position of the applicant that the use of very low sulfur oil and natural gas meets the requirements of this rule

ATTACHMENT HG-EU3-J5

COMPLIANCE TEST REPORT

ATTACHMENT HG-EU3-J5

COMPLIANCE TEST REPORT

Combustion Turbine Peaking Units 1-4 have not operated more than 400 hours on fuel oil since the current Title V Permit No. 1030012-001-AV had become effective (January 1, 1998). Additionally, Units 1 and 2 had not operated on fuel oil since 1997 and Units 3 and 4 have not operated on fuel oil since 1999. Due to a leak into the interstitial space of the fuel oil storage tank, the tank has been taken out of service. The engine manifolds also need to be repaired. Since the units are expected to fire No. 2 fuel oil during permit renewal compliance testing, these repairs will be made. The repairs are expected to be completed in 2003. Upon completion of the repairs, Units 1 through 4 will be tested within 30 days after they have first fired oil.

At the time of testing, the permittee will submit a properly signed and sealed certification from the permittee's Professional Engineer stating that the emissions unit has been tested and compliance with the terms and conditions contained within the current Title V permit has been properly demonstrated after completion of all of the VE tests.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Peaking Gas Turbine Unit 4

4. Emissions Unit Identification Number:
ID: **007**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**JANUARY 1971**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: **Pratt & Whitney** Model Number:
2. Generator Nameplate Rating: **43** MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**631**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):			

Maximum heat input based on permit limit firing No. 2 fuel oil. Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU4-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU4**	2. Emission Point Type Code: **1**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):

Gas turbine gases exhaust through a single stack per turbine unit.

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code: **V**	6. Stack Height: **55** feet	7. Exit Diameter: **15.1** feet
8. Exit Temperature: **850** °F	9. Actual Volumetric Flow Rate: **1,000,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	

13. Emission Point UTM Coordinates:

Zone: **17** East (km): **336.5** North (km): **3098.4**

14. Emission Point Comment (limit to 200 characters):

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation - Distillate Oil (Diesel) - Turbine**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **4.572**	5. Maximum Annual Rate: **40,055**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b) = 4,494 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Electric Generation – Natural Gas – Turbine**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.63**	5. Maximum Annual Rate: **5,528**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,000**
10. Segment Comment (limit to 200 characters): **Maximum Hourly Rate based on Permit No. 1030012-003-AV Condition III.B.4(b).** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum sulfur content of natural gas is 1.0 grain per 100 cf.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			NS
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **320.0** lb/hour **1,402** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.5% Sulfur** Reference: **Permit No. 1030012-001-AV Condition III.B.6**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU1-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Permit limit based on AP-42 emission factor.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.5% Sulfur Oil**	4. Equivalent Allowable Emissions: **320.0** lb/hour **1,402** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.B.9**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual VE Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-296.310(2)(a). No VE test < 400 hr/yr except for period of one year preceding permit renewal date. [Rule 62-297.310(7)(a)8]**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: **VE99**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **FDEP Rule 62-210.700(1); Allowed for 2 hours (120 minutes) per 24 hours for start up, shutdown and malfunction.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: HG-EU1-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: HG-EU1-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: HG-EU4-J5 [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: HG-EU1-J6 [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID:_____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU1-J14**

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT HG-EU4-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU4-D

Applicable Requirements Listing

APPLICATION EMISSION UNIT ID: EU4 – Peaking Combustion Turbine No. 4

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	Excess Emissions;
62-210.700(4)	Excess Emissions; poor maintenance
62-210.700(6)	Excess Emissions; notification

Stationary Sources-Emission Standards:

62-296.320(4)(b)(State Only)	CTs/Diesel Units
62-296.700(3)	Specific RACT Limiting Standards[1]
62-296.700(4)	Maximum Allowable Emission Rates
62-296.700(5)	Circumvention
62-296.700(6)(e)	Records and Inspection

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(2)	All Units (Operating Rate)
62-297.310(4)	All Units (Applicable Test Procedures)
62-297.310(5)	All Units (Determination of Process Variables)
62-297.310(7)(a)3.	Permit Renewal Test Required
62-297.310(7)(a)4.	Annual Test
62-297.310(7)(a)8.	VE Compliance Test if > 400 hrs/yr
62-297.310(7)(a)9.	FDEP Notification - 15 days
62-297.310(8)	Test Reports

[1] It is the position of the applicant that the use of very low sulfur oil and natural gas meets the requirements of this rule

ATTACHMENT HG-EU4-J5

COMPLIANCE TEST REPORT

ATTACHMENT HG-EU4-J5

COMPLIANCE TEST REPORT

Combustion Turbine Peaking Units 1-4 have not operated more than 400 hours on fuel oil since the current Title V Permit No. 1030012-001-AV had become effective (January 1, 1998). Additionally, Units 1 and 2 had not operated on fuel oil since 1997 and Units 3 and 4 have not operated on fuel oil since 1999. Due to a leak into the interstitial space of the fuel oil storage tank, the tank has been taken out of service. The engine manifolds also need to be repaired. Since the units are expected to fire No. 2 fuel oil during permit renewal compliance testing, these repairs will be made. The repairs are expected to be completed in 2003. Upon completion of the repairs, Units 1 through 4 will be tested within 30 days after they have first fired oil.

At the time of testing, the permittee will submit a properly signed and sealed certification from the permittee's Professional Engineer stating that the emissions unit has been tested and compliance with the terms and conditions contained within the current Title V permit has been properly demonstrated after completion of all of the VE tests.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Fossil Fired Steam Boiler No. 1

4. Emissions Unit Identification Number:
ID: **001**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**JUNE 1951**	**49**	[X]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: 43 MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**548**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on permit limit firing New No. 1, 2, 3, 4, 5, or 6 Fuel Oil & On-Specification Used Oil.

Maximum heat input based on permit limit firing natural gas = 525 MMBtu/hr.

Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU5-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU5**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Boiler gases exhaust through a single stack.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **174** feet	7. Exit Diameter: **12.5** feet
8. Exit Temperature: **312** °F	9. Actual Volumetric Flow Rate: **204,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation - Residual Oil No. 6 – Normal Firing**		
2. Source Classification Code (SCC): **1-01-004-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.605**	5. Maximum Annual Rate: **31,582**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **152**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,654 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Unit is front fired.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation - Distillate Oil No. 1 and No. 2**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.971**	5. Maximum Annual Rate: **34,786**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,654 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Distillate fuel oil is used as a pilot for startup, shutdown, and malfunction.** **Heat Content – HHV.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation – Natural Gas – Boilers > 100 Million Btu/hr except Tangential**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.522**	5. Maximum Annual Rate: **4,572**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,050**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 0.50 MMCF/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum Percent Sulfur = 1.0 grain/100 CF natural gas.** **Heat Input – HHV.**		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation – Liquid Waste – Waste Oil**		
2. Source Classification Code (SCC): **1-01-013-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.971**	5. Maximum Annual Rate: **3,479**	6. Estimated Annual Activity Factor:
9. Maximum % Sulfur: **2.5**	10. Maximum % Ash: **0.9**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,654 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Limited to 10% annual heat input. 5% in Permit No. 1030012-003-AV Condition III.A.1(c).** **Heat Content – HHV.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			EL
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **1,507.0** lb/hour **6,600.7** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **2.75 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.9**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Firing No. 6 fuel oil. Permit No. 1030012-001-AV Condition III.A.10 limits maximum sulfur content to 2.5%.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **2.75 lb/MMBtu**	4. Equivalent Allowable Emissions: **1,507.0** lb/hour **6,600.7** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.A.14**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **164.4** lb/hour **300** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.3 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.8**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential lb/hr – soot-blowing while oil firing. Potential TPY – 0.125 lb/MMBtu, 24 hours (0.1 during normal operation, 21 hr; 0.3 during soot-blowing, 3 hr)**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/MMBtu**	4. Equivalent Allowable Emissions: **54.8** lb/hour **240** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on oil firing during normal operations** **Permit No. 1030012-001-AV Condition III.A.7**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **0** %
3. Potential Emissions: **164.4** lb/hour **300** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.3 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.8**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential lb/hr – soot-blowing while oil firing. Potential TPY – 0.125 lb/MMBtu, 24 hours (0.1 during normal operation, 21 hr; 0.3 during soot-blowing, 3 hr)**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.3 lb/MMBtu**	4. Equivalent Allowable Emissions: **164.4** lb/hour **90** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on soot-blowing while oil firing (3 hr/24 hr)** **Permit No. 1030012-001-AV Condition III.A.8**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 4

1. Visible Emissions Subtype: **VE40**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **40** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual Compliance Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **VE limit at steady state. Permit No. 1030012-001-AV Condition III.A.5**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 4

1. Visible Emissions Subtype: **VE60**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **60** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **24** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **60% opacity during load changing and boiler cleaning (soot-blowing) for 3 hr / 24 hr. 100% opacity allowed for 4 six-minute periods during 3 hr. Permit No. 1030012-001-AV Condition III.A.6**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 3 of 4

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **Not to exceed 2 hr / 24 hr during malfunction.** **Permit No. 1030012-001-AV Condition III.A.11**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 4 of 4

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **Excess emissions for startup, shutdown.** **Permit No. 1030012-001-AV Condition III.A.12**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: HG-EU5-J1 [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: HG-EU5-J2 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: HG-EU5-J4 [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: HG-EU5-J5 [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: HG-EU5-J6 [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [X] Attached, Document ID: HG-FI-C12 Condition III.A.34 [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: **HG-EU5-J11** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU5-J14**

15. Acid Rain Part Application (Hard-copy Required)

[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **HG-EU5-J15**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT HG-EU5-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU5-D

Applicable Requirements Listing

EMISSION UNIT: EU5: Unit 1 (FFFSG)

FDEP Rules:

Air Pollution Control-General Provisions:
62-204.800(12) (State Only) - Acid Rain Program
62-204.800(13) (State Only) - Allowances
62-204.800(14) (State Only) - Acid Rain Program Monitoring

Stationary Sources-General:

62-210.650	- Circumvention
62-210.700(1)	- Malfunction only for FFSG
62-210.700(2)	- FFSG; startup/shut down
62-210.700(3)	- FFSG; sootblowing/load change
62-210.700(4)	- Maintenance
62-210.700(6)	

Acid Rain:

62-214.300	- Acid Rain Units (Applicability)
62-214.320	- Acid Rain Units (Application Shield)
62-214.330	- Compliance Options (if 214.430)
62-214.340	- Exemptions (new units, retired units)
62-214.350(2);(3);(6)	- Acid Rain Units (Certification)
62-214.370	- Acid Rain Units (Revisions; correction; potentially applicable if a need arises)
62-214.430	- Acid Rain Units (Compliance Options-if required)

Stationary Sources-Emission Standards/RACT:

62-296.405(1)(a)	- FFSG; VE
62-296.405(1)(b)	- FFSG; PM
62-296.405(1)(c)1.j.	- FFSG; Oil-SO_2 (general limit)
62-296.405(1)(e)	- FFSG; Test Methods
62-296.405(1)(f)1.a.(i)	- FFSG; Opacity CEMS exempted for oil/gas units
62-296.405(1)(f)1.b.	- FFSG; SO_2 CEMS exempted for non-controlled units (oil/gas)
62-296.700(3)	- Specific RACT Limiting Standards
62-296.700(4)	- Maximum Allowable Emission Rates
62-296.700(5)	- Circumvention
62-296.700(6)(a)3.	- Air Pollution Control Systems/ESP
62-296.700(6)(d)	- Fossil Fuel Steam Generators
62-296.700(6)(e)	- Records and Inspection

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume

62-297.310(4)(c)	- Required Flow Rate Range-PM/H_2SO_4/F
62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5-only
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities-general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)2.	- FFSG excess emissions
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if <400 hrs/yr
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Compliance Test (Fuel Sampling)
62-297.310(8)	- Test Reports

Federal Rules:

Acid Rain-Permits:

40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO_2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO_2 Allowances-violation
40 CFR 72.9(c)(1)(iii)	- SO_2 Allowances-Phase II Units (listed)
40 CFR 72.9(c)(4)	- SO_2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- SO_2 Allowances-no deduction for 72.9(c)(1)(i)
40 CFR 72.9(e)	- Excess Emission Requirements
40 CFR 72.9(f)	- Recordkeeping and Reporting
40 CFR 72.9(g)	- Liability
40 CFR 72.20(a)	- Designated Representative; required
40 CFR 72.20(b)	- Designated Representative; legally binding
40 CFR 72.20(c)	- Designated Representative; certification requirements
40 CFR 72.21	- Submissions
40 CFR 72.22	- Alternate Designated Representative
40 CFR 72.23	- Changing representatives; owners
40 CFR 72.30(a)	- Requirements to Apply (operate)
40 CFR 72.30(c)	- Requirements to Apply (reapply before expiration)
40 CFR 72.30(d)	- Requirements to Apply (submittal requirements)
40 CFR 72.32	- Permit Shield
40 CFR 72.33(b)	- Dispatch System ID; unit/system ID
40 CFR 72.33(c)	- Dispatch System ID; ID requirements
40 CFR 72.33(d)	- Dispatch System ID; ID change
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield
40 CFR 72.90	- Annual Compliance Certification

CEMS have not been installed since this unit is on long term reserve shutdown. CEMS would be added if the unit is operated.

Monitoring Part 75:

40 CFR 75.4	- Compliance Dates
40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(1)	- Primary Measurement; SO_2; except 75.11&.16; Subpart D
40 CFR 75.10(a)(2)	- Primary Measurement; NO_x; except 75.12&.17; Subpart E
40 CFR 75.10(a)(3)(i)	- Primary Measurement; CO_2; monitor
40 CFR 75.10(a)(4)	- Primary Measurement; Opacity; except 75.14&.18
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(d)	- Primary Measurement; Hourly Operating; Opacity; SO_2
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.12(b)	- NOx Monitoring; Determination of NO_x emission rate; Appendix F
40 CFR 75.13(a)	- CO2 Monitoring; Continuous monitor
40 CFR 75.14(a)	- Opacity Monitoring; Coal and oil units
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Appendix D & E
40 CFR 75.21(a)	- QA/QC; CEMS; Appendix B
40 CFR 75.21(b)	- QA/QC; Opacity; Part 51 Appendix M
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(1)	- General Missing Data Procedures; SO_2
40 CFR 75.30(a)(2)	- General Missing Data Procedures; flow
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NO_x
40 CFR 75.30(b)	- General Missing Data Procedures; certified backup monitor
40 CFR 75.30(c)	- General Missing Data Procedures; certified backup monitor
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Procedures
40 CFR 75.53	- Recordkeeping (special situations)
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(c)	- Recordkeeping-SO_2
40 CFR 75.54(d)	- Recordkeeping-NO_x
40 CFR 75.54(e)	- Recordkeeping-CO_2
40 CFR 75.54(f)	- Recordkeeping-Opacity
40 CFR 75.55	- Monitoring Plan
40 CFR 75.56	- Certification; QA/QC Provisions
40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement

40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
40 CFR 75.65	- Opacity Reports
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures
Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO_2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NO_x & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO_2; from combustion sources
Appendix H	- Traceability Protocol

ATTACHMENT HG-EU5-G8

CALCULATION OF EMISSIONS

Attachment HG-EU5-G8. Calculation of Emissions

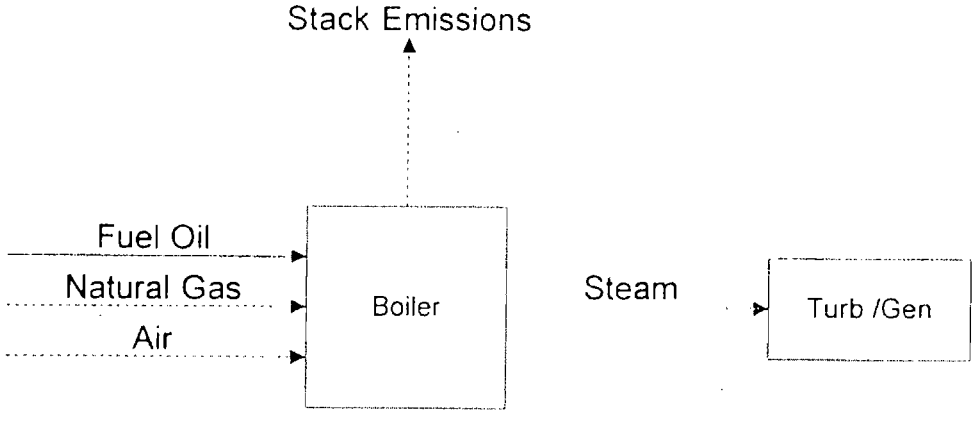
Maximum Estimated Emissions for Emisions Limited Pollutants, Steam Generator Units 1, 2, and 3, Higgins Plant

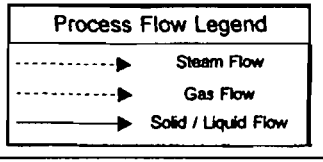
	Unit 1		Unit 2		Unit 3	
Pollutant	Oil-Firing	Natural Gas	Oil-Firing	Natural Gas	Oil-Firing	Natural Gas
Hours of Operation	8,760	8,760	8,760	8,760	8,760	8,760
Sulfur Dioxide (lb/hr) (Oil)= EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)						
Sulfur Dioxide (lb/hr) (Gas)= Fuel sulfur content (Percent; gr/ 100 cf) x 2 (64 MW SO_2/32 MW S) x Fuel Consumption (Fuel units/hr)						
Basis	DEP Rules	1 gr S/100 cf	DEP Rules	1 gr S/100 cf	DEP Rules	1 gr S/100 cf
EF (lb/MMBtu)	2.75		2.75		2.75	
HIR (MMBtu/hr)	548		523		548	
Sulfur content (gr/100 cf)		1		1		1
Fuel consumptiom (100 cf/hr)		5,219.0		4,981.0		5,219.0
lb/hr	1507.0	1.5	1438.3	1.4	1507.0	1.5
TPY	6600.7	6.5	6299.5	6.2	6600.7	6.5
Particulate Matter (lb/hr) (Oil)= EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)						
Particulate Matter (lb/hr) (Gas)= EF (lb/fuel unit) x Fuel Consumption (fuel unit)						
Basis (1)	DEP Rules	AP-42	DEP Rules	AP-42	DEP Rules	AP-42
EF (lb/MMBtu) or (lb/MMcf)	0.3	3	0.3	3	0.3	3
EF (lb/MMBtu) (Oil; normal/sootblowing:	0.125		0.125		0.125	
HIR (MMBtu/hr)	548	548	523	523	548	548
Fuel consumptiom (MMcf/hr)		0.52		0.50		0.52
lb/hr	164.4	1.6	156.9	1.5	164.4	1.6
TPY	300.0	6.9	286.3	6.5	300.0	6.9
Particulate Matter (PM-10)(lb/hr) (Oil)= EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)						
Particulate Matter (PM-10)(lb/hr) (Gas)= EF (lb/fuel unit) x Fuel Consumption (fuel unit)						
Basis (1)	DEP Rules	AP-42	DEP Rules	AP-42	DEP Rules	AP-42
EF (lb/MMBtu) or (lb/MMcf)	0.3	3	0.3	3	0.3	3
EF (lb/MMBtu) (Oil; normal/sootblowing:	0.125		0.125		0.125	
HIR (MMBtu/hr)	548	548	523	523	548	548
Fuel consumptiom (MMcf/hr)		0.52		0.50		0.52
lb/hr	164.4	1.6	156.9	1.5	164.4	1.6
TPY	300.0	6.9	286.3	6.5	300.0	6.9

(1) FDEP Rule 62-296.405(1) and 62-296.800; 0.3 and 0.1 lb/MMBtu for soot-blowing and normal operations, respectively; EPA, 1998, AP-42, Table 1.4-1.

ATTACHMENT HG-EU5-J1

PROCESS FLOW DIAGRAM





Attachment HG-EU5-J1
Process Flow Diagram
Florida Power, Higgins Plant

Golder Associates

ATTACHMENT HG-EU5-J2

FUEL ANALYSIS
FUEL OILS

ATTACHMENT HG-EU5-J2

FUEL ANALYSIS
FUEL OILS

Steam Units No. 1, 2, and 3 for the Higgins plant were placed in long-term reserve shutdown on January 24, 1994. As a result, these units have not been operating and have not been required to submit applicable fuel analyses. The latest analyses of fuels burned in these units were performed in May 1993 and the results were submitted to FDEP.

ATTACHMENT HG-EU5-J4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT HG-EU5-J4

DESCRIPTION OF STACK SAMPLING FACILITIES

The Higgins Plant Steam Generator Unit No. 1 and 2 are required by Permit 1030012-003-AV to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to Rule 62-297.345, F.A.C., the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by rule, the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports meet Rule 297.345(3)(a)3, F.A.C., requirements (i.e. 2 stack diameters downstream and 0.5 stack diameters upstream of flow disturbances).
- At least two sampling ports, 90 degrees apart have been installed on the circular stack.
- The working platform is at least 24 square feet in area, at least three feet wide, extends180 degrees around the stack, has safety rails, toeboards, and a hinged floor opening attached to it. There are no obstructions 14 inches below the port and 6 inches on either side of the port.
- The platform access ladder is equipped with a safety cage.

ATTACHMENT HG-EU5-J5

COMPLIANCE TEST REPORT

ATTACHMENT HG-EU5-J5

COMPLIANCE TEST REPORT

Steam Units No. 1, 2, and 3 for the Higgins plant were placed in long-term reserve shutdown on January 24, 1994. As a result, these units have not been operating and have not been required to perform applicable compliance tests. The latest compliance tests were performed in May 1993 and the results were submitted to FDEP.

ATTACHMENT HG-EU5-J6

PROCEDURES FOR STARTUP/SHUTDOWN

ATTACHMENT HG-EU5-J6

PROCEDURES FOR STARTUP AND SHUTDOWN MINIMIZING EXCESS EMISSIONS

Startup of the fossil-fuel boilers begins when fuel (No. 2 or No. 6 fuel oil) is introduced into one or more burners within the boiler and lighted (commencement of combustion). Startup is complete and steady-state operation begins when the combustion process has stabilized and the megawatt load on the unit is stable and above 10 percent load.

Shutdown of the fossil-fuel boilers begins when unit megawatt load is decreased to below 10 percent of maximum and continues until the final burner gun is removed from service.

Emissions may be detected during all modes of boiler operation by various continuous emissions monitors. Continuous monitors are currently in place for NO_x, CO_2, and opacity. Audible and visual alarms are activated whenever the permitted value for opacity is approached.

Countermeasures which may be taken in the event of excess emissions include, but are not limited to:

- burner elevation loading
- proper excess air adjustments
- recognizing and removal of faulty burners
- fuel oil temperature adjustments
- proper and timely operation of boiler cleaning devices
- removal of the unit from system-dispatch mode (load control)
- reduction of unit megawatt load
- stopping and restarting of boiler cleaning devices
- lowering load ramp rate
- pressure rate changes
- placing boiler controls on manual
- adjusting burner dampers to increase windbox/furnace air pressure

Knowledge of the appropriate countermeasures to take when excess emissions occur is a part of the routine operator training for those who operate the boilers. Topics include current permit limits, maximum allowable duration of excess emissions, appropriate countermeasures for excess emissions, duty to notify, and fuels and combustion training.

ATTACHMENT HG-EU5-J11

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT HG-EU5-J11
ALTERNATIVE METHODS OF OPERATION

The boiler units currently are not in operation and have been placed in long-term reserve shutdown under Rule 62-210.300(2)(a)3.d. Each boiler can fire No. 6 fuel oil using No. 2 fuel oil as an ignitor fuel during startup. These boilers can also fire on-specification used oil and natural gas as an alternate fuel when available.

ATTACHMENT HG-EU5-J14

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT HG-EU5-J14

COMPLIANCE ASSURANCE MONITORING PLAN

There are no emission control devices for the fossil fuel fired steam generators, therefore no compliance assurance monitoring plan is required.

ATTACHMENT HG-EU5-J15

ACID RAIN PART APPLICATION
ACID RAIN PART – PHASE II

Phase II Permit Application

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

This submission is: ☒ New ☐ Revised

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

Higgins Plant, FL, 630

STEP 2
Enter the boiler ID# from NADB for each affected unit, and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e

a	b	c	d	e
Boiler ID#	Compliance Plan: Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Compliance Plan: Repowering Plan	New Units: Commence Operation Date	New Units: Monitor Certification Deadline
1	Yes	*No*		
2	Yes	*No*		
3	Yes	*No*		
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

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

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

Plant Name (from Step 1)
Higgins Plant

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

Standard Requirements

Permit Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from Step 1)
Higgins Plant

Recordkeeping and Reporting Requirements (cont.)

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

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

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

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

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

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

Name *W. Jeffrey Pardue, C.E.P., Director, Environmental Services Dept.*	
Signature	Date *12/14/95*

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

AIRS
FINDS

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Fossil Fired Steam Boiler No. 2

4. Emissions Unit Identification Number:
ID: **002**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**JUNE 1953**	**49**	[X]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: Manufacturer:		Model Number:	
2. Generator Nameplate Rating:	42	MW	
3. Incinerator Information:			
Dwell Temperature:			°F
Dwell Time:			seconds
Incinerator Afterburner Temperature:			°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**523**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on permit limit firing New No. 1, 2, 3, 4, 5, or 6 Fuel Oil & On-Specification Used Oil.

Maximum heat input based on permit limit firing natural gas = 515 MMBtu/hr.

Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU6-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU6**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Boiler gases exhaust through a single stack.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **174** feet	7. Exit Diameter: **12.5** feet
8. Exit Temperature: **310** °F	9. Actual Volumetric Flow Rate: **206,000** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation - Residual Oil No. 6 – Normal Firing**		
2. Source Classification Code (SCC): **1-01-004-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.441**	5. Maximum Annual Rate: **30,141**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **152**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,486 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Unit is front fired.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation - Distillate Oil No. 1 and No. 2**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.79**	5. Maximum Annual Rate: **33,199**	6. Estimated Annual Activity Factor:
11. Maximum % Sulfur: **0.5**	12. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,486 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Distillate fuel oil is used as a pilot for startup, shutdown, and malfunction.** **Heat Content – HHV.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation – Natural Gas – Boilers > 100 Million Btu/hr except Tangential**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.498**	5. Maximum Annual Rate: **4,363**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,050**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 0.49 MMCF/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum Percent Sulfur = 1.0 grain/100 CF natural gas.** **Heat Input – HHV.**		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation – Liquid Waste – Waste Oil**		
2. Source Classification Code (SCC): **1-01-013-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.79**	5. Maximum Annual Rate: **3,320**	6. Estimated Annual Activity Factor:
13. Maximum % Sulfur: **2.5**	14. Maximum % Ash: **0.9**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,486 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Limited to 10% annual heat input. 5% in Permit No. 1030012-003-AV Condition III.A.1(c).** **Heat Content – HHV.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			EL
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **1,438.3** lb/hour **6,299.5** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **2.75 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.9**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Firing No. 6 fuel oil. Permit No. 1030012-001-AV Condition III.A.10 limits maximum sulfur content to 2.5%.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **2.75 lb/MMBtu**	4. Equivalent Allowable Emissions: **1,438.3** lb/hour **6,299.5** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.A.14**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **156.9** lb/hour **286.3** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.3 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.8**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential lb/hr – soot-blowing while oil firing. Potential TPY – 0.125 lb/MMBtu, 24 hours (0.1 during normal operation, 21 hr; 0.3 during soot-blowing, 3 hr)**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/MMBtu**	4. Equivalent Allowable Emissions: **52.3** lb/hour **229.1** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on oil firing during normal operations. Permit No. 1030012-001-AV Condition III.A.7.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **0** %
3. Potential Emissions: **156.9** lb/hour **286.3** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.3 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.8**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential lb/hr – soot-blowing while oil firing. Potential TPY – 0.125 lb/MMBtu, 24 hours (0.1 during normal operation, 21 hr; 0.3 during soot-blowing, 3 hr)**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.3 lb/MMBtu**	4. Equivalent Allowable Emissions: **156.9** lb/hour **85.9** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on soot-blowing while oil firing (3 hr/24 hr)** **Permit No. 1030012-001-AV Condition III.A.8**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 4

1. Visible Emissions Subtype: **VE40**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **40 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual Compliance Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **VE limit at steady state. Permit No. 1030012-001-AV Condition III.A.5**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 4

1. Visible Emissions Subtype: **VE60**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **60** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **24** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **60% opacity during load changing and boiler cleaning (soot-blowing) for 3 hr / 24 hr. 100% opacity allowed for 4 six-minute periods during 3 hr. Permit No. 1030012-001-AV Condition III.A.6**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 3 of 4

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [**X**] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **Not to exceed 2 hr / 24 hr during malfunction.** **Permit No. 1030012-001-AV Condition III.A.11**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 4 of 4

1. Visible Emissions Subtype: VE	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: Best Operational Practices	
5. Visible Emissions Comment (limit to 200 characters): Excess emissions for startup, shutdown. Permit No. 1030012-001-AV Condition III.A.12	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram
   [X] Attached, Document ID: **HG-EU5-J1** [ ] Not Applicable [ ] Waiver Requested

2. Fuel Analysis or Specification
   [X] Attached, Document ID: **HG-EU5-J2** [ ] Not Applicable [ ] Waiver Requested

3. Detailed Description of Control Equipment
   [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested

4. Description of Stack Sampling Facilities
   [X] Attached, Document ID: **HG-EU5-J4** [ ] Not Applicable [ ] Waiver Requested

5. Compliance Test Report
   [X] Attached, Document ID: **HG-EU5-J5**
   [ ] Previously submitted, Date: _____
   [ ] Not Applicable

6. Procedures for Startup and Shutdown
   [X] Attached, Document ID: **HG-EU5-J6** [ ] Not Applicable [ ] Waiver Requested

7. Operation and Maintenance Plan
   [X] Attached, Document ID: **HG-FI-C12 Condition III.A.34** [ ] Not Applicable
   [ ] Waiver Requested

8. Supplemental Information for Construction Permit Application
   [ ] Attached, Document ID: _____ [X] Not Applicable

9. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [X] Not Applicable

10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: **HG-EU5-J10** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU5-J14**

15. Acid Rain Part Application (Hard-copy Required)

[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **HG-EU5-J15**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT HG-EU6-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU6-D

Applicable Requirements Listing

EMISSION UNIT: EU5: Unit 2 (FFFSG)

FDEP Rules:

Air Pollution Control-General Provisions:
62-204.800(12) (State Only) - Acid Rain Program
62-204.800(13) (State Only) - Allowances
62-204.800(14) (State Only) - Acid Rain Program Monitoring

Stationary Sources-General:

62-210.650	- Circumvention
62-210.700(1)	- Malfunction only for FFSG
62-210.700(2)	- FFSG; startup/shut down
62-210.700(3)	- FFSG; sootblowing/load change
62-210.700(4)	- Maintenance
62-210.700(6)	

Acid Rain:

62-214.300	- Acid Rain Units (Applicability)
62-214.320	- Acid Rain Units (Application Shield)
62-214.330	- Compliance Options (if 214.430)
62-214.340	- Exemptions (new units, retired units)
62-214.350(2);(3);(6)	- Acid Rain Units (Certification)
62-214.370	- Acid Rain Units (Revisions; correction; potentially applicable if a need arises)
62-214.430	- Acid Rain Units (Compliance Options-if required)

Stationary Sources-Emission Standards/RACT:

62-296.405(1)(a)	- FFSG; VE
62-296.405(1)(b)	- FFSG; PM
62-296.405(1)(c)1.j.	- FFSG; Oil-SO_2 (general limit)
62-296.405(1)(e)	- FFSG; Test Methods
62-296.405(1)(f)1.a.(i)	- FFSG; Opacity CEMS exempted for oil/gas units
62-296.405(1)(f)1.b.	- FFSG; SO_2 CEMS exempted for non-controlled units (oil/gas)
62-296.700(3)	- Specific RACT Limiting Standards
62-296.700(4)	- Maximum Allowable Emission Rates
62-296.700(5)	- Circumvention
62-296.700(6)(a)3.	- Air Pollution Control Systems/ESP
62-296.700(6)(d)	- Fossil Fuel Steam Generators
62-296.700(6)(e)	- Records and Inspection

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume

62-297.310(4)(c)	- Required Flow Rate Range-PM/H_2SO_4/F
62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5-only
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities-general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)2.	- FFSG excess emissions
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if <400 hrs/yr
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Compliance Test (Fuel Sampling)
62-297.310(8)	- Test Reports

Federal Rules:

Acid Rain-Permits:

40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO_2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO_2 Allowances-violation
40 CFR 72.9(c)(1)(iii)	- SO_2 Allowances-Phase II Units (listed)
40 CFR 72.9(c)(4)	- SO_2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- SO_2 Allowances-no deduction for 72.9(c)(1)(i)
40 CFR 72.9(e)	- Excess Emission Requirements
40 CFR 72.9(f)	- Recordkeeping and Reporting
40 CFR 72.9(g)	- Liability
40 CFR 72.20(a)	- Designated Representative; required
40 CFR 72.20(b)	- Designated Representative; legally binding
40 CFR 72.20(c)	- Designated Representative; certification requirements
40 CFR 72.21	- Submissions
40 CFR 72.22	- Alternate Designated Representative
40 CFR 72.23	- Changing representatives; owners
40 CFR 72.30(a)	- Requirements to Apply (operate)
40 CFR 72.30(c)	- Requirements to Apply (reapply before expiration)
40 CFR 72.30(d)	- Requirements to Apply (submittal requirements)
40 CFR 72.32	- Permit Shield
40 CFR 72.33(b)	- Dispatch System ID; unit/system ID
40 CFR 72.33(c)	- Dispatch System ID; ID requirements
40 CFR 72.33(d)	- Dispatch System ID; ID change
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield
40 CFR 72.90	- Annual Compliance Certification

CEMS have not been installed since this unit is on long term reserve shutdown. CEMS would be added if the unit is operated.

Monitoring Part 75:

40 CFR 75.4	- Compliance Dates
40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(1)	- Primary Measurement; SO_2; except 75.11&.16; Subpart D
40 CFR 75.10(a)(2)	- Primary Measurement; NO_x; except 75.12&.17; Subpart E
40 CFR 75.10(a)(3)(i)	- Primary Measurement; CO_2; monitor
40 CFR 75.10(a)(4)	- Primary Measurement; Opacity; except 75.14&.18
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(d)	- Primary Measurement; Hourly Operating; Opacity; SO_2
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.12(b)	- NOx Monitoring; Determination of NO_x emission rate; Appendix F
40 CFR 75.13(a)	- CO2 Monitoring; Continuous monitor
40 CFR 75.14(a)	- Opacity Monitoring; Coal and oil units
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Appendix D & E
40 CFR 75.21(a)	- QA/QC; CEMS; Appendix B
40 CFR 75.21(b)	- QA/QC; Opacity; Part 51 Appendix M
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(1)	- General Missing Data Procedures; SO_2
40 CFR 75.30(a)(2)	- General Missing Data Procedures; flow
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NO_x
40 CFR 75.30(b)	- General Missing Data Procedures; certified backup monitor
40 CFR 75.30(c)	- General Missing Data Procedures; certified backup monitor
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Procedures
40 CFR 75.53	- Recordkeeping (special situations)
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(c)	- Recordkeeping-SO_2
40 CFR 75.54(d)	- Recordkeeping-NO_x
40 CFR 75.54(e)	- Recordkeeping-CO_2
40 CFR 75.54(f)	- Recordkeeping-Opacity
40 CFR 75.55	- Monitoring Plan
40 CFR 75.56	- Certification; QA/QC Provisions
40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement

40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
40 CFR 75.65	- Opacity Reports
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures
Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO_2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NO_x & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO_2; from combustion sources
Appendix H	- Traceability Protocol

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Fossil Fired Steam Boiler No. 3

4. Emissions Unit Identification Number:
ID: **003**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**JANUARY 1954**	**49**	[X]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:			
Manufacturer:		Model Number:	
2. Generator Nameplate Rating:	41	MW	
3. Incinerator Information:			
Dwell Temperature:			°F
Dwell Time:			seconds
Incinerator Afterburner Temperature:			°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**548**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	24 hours/day	**7**	days/week
	52 weeks/year	**8,760**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

Maximum heat input based on permit limit firing New No. 1, 2, 3, 4, 5, or 6 Fuel Oil & On-Specification Used Oil.

Maximum heat input based on permit limit firing natural gas = 525 MMBtu/hr.

Maximum heat input rate is a function of ambient temperature (per permit condition).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Attachment HG-EU7-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **EU7**	2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Boiler gases exhaust through a single stack.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: **V**	6. Stack Height: **174** feet	7. Exit Diameter: **12.5** feet
8. Exit Temperature: **301** °F	9. Actual Volumetric Flow Rate: **180,500** acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: **17** East (km): **336.5** North (km): **3098.4**		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation - Residual Oil No. 6 – Normal Firing**		
2. Source Classification Code (SCC): **1-01-004-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.605**	5. Maximum Annual Rate: **31,582**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **2.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **152**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,654 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Unit is front fired.** **Heat Content – HHV.**		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation - Distillate Oil No. 1 and No. 2**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.971**	5. Maximum Annual Rate: **34,786**	6. Estimated Annual Activity Factor:
15. Maximum % Sulfur: **0.5**	16. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,654 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Distillate fuel oil is used as a pilot for startup, shutdown, and malfunction.** **Heat Content – HHV.**		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation – Natural Gas – Boilers > 100 Million Btu/hr except Tangential**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.522**	5. Maximum Annual Rate: **4,572**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,050**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 0.50 MMCF/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Maximum Percent Sulfur = 1.0 grain/100 CF natural gas.** **Heat Input – HHV.**		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **External Combustion Boilers – Electric Generation – Liquid Waste – Waste Oil**		
2. Source Classification Code (SCC): **1-01-013-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **3.971**	5. Maximum Annual Rate: **3,479**	6. Estimated Annual Activity Factor:
17. Maximum % Sulfur: **2.5**	18. Maximum % Ash: **0.9**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Max. Hourly Rate based on Permit No. 1030012-003-AV Condition III.A.1(d) = 3,654 gal/hr.** **Rates may vary depending on the heating value of the fuel.** **Maximum Annual Rate based on 8,760 hr/yr.** **Limited to 10% annual heat input. 5% in Permit No. 1030012-003-AV Condition III.A.1(c).** **Heat Content – HHV.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
PM			EL
PM_{10}			NS
NO_x			NS
CO			NS
VOC			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **1,507.0** lb/hour **6,600.7** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **2.75 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.9**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Firing No. 6 fuel oil. Permit No. 1030012-001-AV Condition III.A.10 limits maximum sulfur content to 2.5%.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **2.75 lb/MMBtu**	4. Equivalent Allowable Emissions: **1,507.0** lb/hour **6,600.7** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.A.14**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **164.4** lb/hour **300.0** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.3 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.8**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential lb/hr – soot-blowing while oil firing. Potential TPY – 0.125 lb/MMBtu, 24 hours (0.1 during normal operation, 21 hr; 0.3 during soot-blowing, 3 hr)**	

Allowable Emissions Allowable Emissions 1 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.1 lb/MMBtu**	4. Equivalent Allowable Emissions: **30.6** lb/hour **134.0** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on oil firing during normal operations. Permit No. 1030012-001-AV Condition III.A.7.**	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **0** %
3. Potential Emissions: **164.4** lb/hour **300.0** tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.3 lb/MMBtu** Reference: **Permit No. 1030012-001-AV Condition III.A.8**	7. Emissions Method Code: **0**
8. Calculation of Emissions (limit to 600 characters): **See Attachment HG-EU5-G8**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Potential lb/hr – soot-blowing while oil firing. Potential TPY – 0.125 lb/MMBtu, 24 hours (0.1 during normal operation, 21 hr; 0.3 during soot-blowing, 3 hr)**	

Allowable Emissions Allowable Emissions 2 of 2

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.3 lb/MMBtu**	4. Equivalent Allowable Emissions: **164.4** lb/hour **90.0** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5 or 17**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Based on soot-blowing while oil firing (3 hr/24 hr)** **Permit No. 1030012-001-AV Condition III.A.8**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 4

1. Visible Emissions Subtype: **VE40**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **40 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual Compliance Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **VE limit at steady state. Permit No. 1030012-001-AV Condition III.A.5**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 2 of 4

1. Visible Emissions Subtype: **VE60**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **60** % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **24** min/hour	
4. Method of Compliance: **EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **60% opacity during load changing and boiler cleaning (soot-blowing) for 3 hr / 24 hr. 100% opacity allowed for 4 six-minute periods during 3 hr. Permit No. 1030012-001-AV Condition III.A.6**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 3 of 4

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **Not to exceed 2 hr / 24 hr during malfunction. Permit No. 1030012-001-AV Condition III.A.11**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 4 of 4

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour	
4. Method of Compliance: **Best Operational Practices**	
5. Visible Emissions Comment (limit to 200 characters): **Excess emissions for startup, shutdown.** **Permit No. 1030012-001-AV Condition III.A.12**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: **HG-EU5-J1** [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: **HG-EU5-J2** [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: **HG-EU7-J4** [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [X] Attached, Document ID: **HG-EU5-J5** [ ] Previously submitted, Date: _____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: **HG-EU5-J6** [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [X] Attached, Document ID: **HG-FI-C12 Condition III.A.34** [ ] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: **HG-EU5-J10** [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable **See Attachment HG-EU5-J14**

15. Acid Rain Part Application (Hard-copy Required)

[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: **HG-EU5-J15**

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID:_____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:_____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[ ] Not Applicable

ATTACHMENT HG-EU7-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU7-D

Applicable Requirements Listing

EMISSION UNIT: EU5: Unit 3 (FFFSG)

FDEP Rules:

Air Pollution Control-General Provisions:
62-204.800(12) (State Only) - Acid Rain Program
62-204.800(13) (State Only) - Allowances
62-204.800(14) (State Only) - Acid Rain Program Monitoring

Stationary Sources-General:

62-210.650	- Circumvention
62-210.700(1)	- Malfunction only for FFSG
62-210.700(2)	- FFSG; startup/shut down
62-210.700(3)	- FFSG; sootblowing/load change
62-210.700(4)	- Maintenance
62-210.700(6)	

Acid Rain:

62-214.300	- Acid Rain Units (Applicability)
62-214.320	- Acid Rain Units (Application Shield)
62-214.330	- Compliance Options (if 214.430)
62-214.340	- Exemptions (new units, retired units)
62-214.350(2);(3);(6)	- Acid Rain Units (Certification)
62-214.370	- Acid Rain Units (Revisions; correction; potentially applicable if a need arises)
62-214.430	- Acid Rain Units (Compliance Options-if required)

Stationary Sources-Emission Standards/RACT:

62-296.405(1)(a)	- FFSG; VE
62-296.405(1)(b)	- FFSG; PM
62-296.405(1)(c)1.j.	- FFSG; Oil-SO_2 (general limit)
62-296.405(1)(e)	- FFSG; Test Methods
62-296.405(1)(f)1.a.(i)	- FFSG; Opacity CEMS exempted for oil/gas units
62-296.405(1)(f)1.b.	- FFSG; SO_2 CEMS exempted for non-controlled units (oil/gas)
62-296.700(3)	- Specific RACT Limiting Standards
62-296.700(4)	- Maximum Allowable Emission Rates
62-296.700(5)	- Circumvention
62-296.700(6)(a)3.	- Air Pollution Control Systems/ESP
62-296.700(6)(d)	- Fossil Fuel Steam Generators
62-296.700(6)(e)	- Records and Inspection

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume

62-297.310(4)(c)	- Required Flow Rate Range-PM/H_2SO_4/F
62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5-only
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities-general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)2.	- FFSG excess emissions
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if <400 hrs/yr
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Compliance Test (Fuel Sampling)
62-297.310(8)	- Test Reports

Federal Rules:

Acid Rain-Permits:

40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO_2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO_2 Allowances-violation
40 CFR 72.9(c)(1)(iii)	- SO_2 Allowances-Phase II Units (listed)
40 CFR 72.9(c)(4)	- SO_2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- SO_2 Allowances-no deduction for 72.9(c)(1)(i)
40 CFR 72.9(e)	- Excess Emission Requirements
40 CFR 72.9(f)	- Recordkeeping and Reporting
40 CFR 72.9(g)	- Liability
40 CFR 72.20(a)	- Designated Representative; required
40 CFR 72.20(b)	- Designated Representative; legally binding
40 CFR 72.20(c)	- Designated Representative; certification requirements
40 CFR 72.21	- Submissions
40 CFR 72.22	- Alternate Designated Representative
40 CFR 72.23	- Changing representatives; owners
40 CFR 72.30(a)	- Requirements to Apply (operate)
40 CFR 72.30(c)	- Requirements to Apply (reapply before expiration)
40 CFR 72.30(d)	- Requirements to Apply (submittal requirements)
40 CFR 72.32	- Permit Shield
40 CFR 72.33(b)	- Dispatch System ID; unit/system ID
40 CFR 72.33(c)	- Dispatch System ID; ID requirements
40 CFR 72.33(d)	- Dispatch System ID; ID change
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield
40 CFR 72.90	- Annual Compliance Certification

CEMS have not been installed since this unit is on long term reserve shutdown. CEMS would be added if the unit is operated.

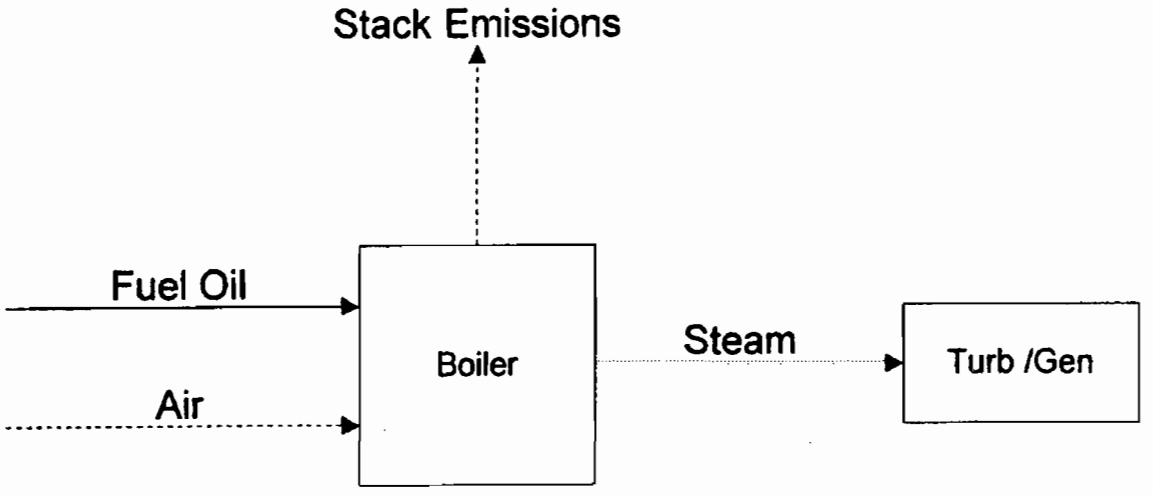
Monitoring Part 75:

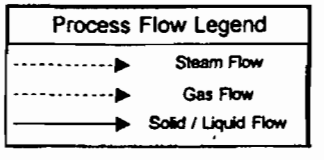
40 CFR 75.4	- Compliance Dates
40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(1)	- Primary Measurement; SO_2; except 75.11&.16; Subpart D
40 CFR 75.10(a)(2)	- Primary Measurement; NO_x; except 75.12&.17; Subpart E
40 CFR 75.10(a)(3)(i)	- Primary Measurement; CO_2; monitor
40 CFR 75.10(a)(4)	- Primary Measurement; Opacity; except 75.14&.18
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(d)	- Primary Measurement; Hourly Operating; Opacity; SO_2
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.12(b)	- NOx Monitoring; Determination of NO_x emission rate; Appendix F
40 CFR 75.13(a)	- CO2 Monitoring; Continuous monitor
40 CFR 75.14(a)	- Opacity Monitoring; Coal and oil units
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Appendix D & E
40 CFR 75.21(a)	- QA/QC; CEMS; Appendix B
40 CFR 75.21(b)	- QA/QC; Opacity; Part 51 Appendix M
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(1)	- General Missing Data Procedures; SO_2
40 CFR 75.30(a)(2)	- General Missing Data Procedures; flow
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NO_x
40 CFR 75.30(b)	- General Missing Data Procedures; certified backup monitor
40 CFR 75.30(c)	- General Missing Data Procedures; certified backup monitor
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Procedures
40 CFR 75.53	- Recordkeeping (special situations)
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(c)	- Recordkeeping-SO_2
40 CFR 75.54(d)	- Recordkeeping-NO_x
40 CFR 75.54(e)	- Recordkeeping-CO_2
40 CFR 75.54(f)	- Recordkeeping-Opacity
40 CFR 75.55	- Monitoring Plan
40 CFR 75.56	- Certification; QA/QC Provisions
40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement

40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
40 CFR 75.65	- Opacity Reports
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures
Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO_2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NO_x & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO_2; from combustion sources
Appendix H	- Traceability Protocol

ATTACHMENT HG-EU7-J1

PROCESS FLOW DIAGRAM





Attachment HG-EU7-J1
Process Flow Diagram
Florida Power, Higgins Plant

Golder Associates

ATTACHMENT HG-EU7-J4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT HG-EU7-J4

DESCRIPTION OF STACK SAMPLING FACILITIES

The Higgins Plant Steam Generator Unit No. 3 is required by Permit 1030012-003-AV to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to Rule 62-297.345, F.A.C., the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified rule, the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports meet Rule 297.345(3)(a)3, F.A.C., requirements (i.e. 2 stack diameters downstream and 0.5 stack diameters upstream of flow disturbances).
- At least two sampling ports, 90 degrees apart have been installed on the circular stack.
- The working platform is at least 24 square feet in area, at least three feet wide, extends180 degrees around the stack, has safety rails, toeboards, and a hinged floor opening attached to it. There are no obstructions 14 inches below the port and 6 inches on either side of the port.
- The platform access ladder is equipped with a safety cage.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Relocatable Diesel Fired Generator(s)

4. Emissions Unit Identification Number:
ID: **7775047-001**
[ ] No ID
[ ] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Generators may be located at one of seven Florida Power Plants.

See Permit No. 1030012-001-AV Section III.C.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:		
Manufacturer: **Caterpillar**	Model Number: **3508-DITA**	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		**9**	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	**2,970**	hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

The relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hr while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2,460 kW. Per unit; hours of operation is sum of individual hours for each generator. Generator Nameplate Rating: 0.82.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Attachment HG-EU8-D	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Each generator has its own stack.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 15 feet	7. Exit Diameter: 1 feet
8. Exit Temperature: 1,004 °F	9. Actual Volumetric Flow Rate: 7,283 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Internal Combustion Engines – Industrial - Distillate Oil (Diesel) – Reciprocating**		
2. Source Classification Code (SCC): **2-02-001-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **62.1**	5. Maximum Annual Rate: **184**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0**	9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Maximum Hourly Rate based on single engine.** **Maximum Annual Rate based on total for 3 units (2,970 hours).** **Maximum percent ash: (0.01 rounded to 0).** **Million Btu per SCC Unit: 138.24 (rounded to 138).**		

Segment Description and Rate: Segment____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
19. Maximum % Sulfur:	20. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2			EL
NO_x			NS
CO			NS
PM			NS
PM_{10}			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **0 %**
3. Potential Emissions: **4.47** lb/hour **6.64** tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: **0.5 % Sulfur Content** Reference: **Permit No. 1030012-001-AV Condition III.C.7**	7. Emissions Method Code: **5**
8. Calculation of Emissions (limit to 600 characters): **From manufacturer**	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Lb/hr – 1 unit; TPY – 1 unit at 2,970 hours (total limit for 3 units).**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **0.5 % Sulfur Content**	4. Equivalent Allowable Emissions: **4.47** lb/hour **6.64** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis**	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): **Permit No. 1030012-001-AV Condition III.C.7 and C.18.**	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 4

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Annual Compliance Test EPA Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **VE limit at steady state. Permit No. 1030012-001-AV Condition III.C.6 and C.18.**	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: HG-EU5-J1 [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: _____ [ ] Previously submitted, Date: _____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: _____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: _____ [X] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: _____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: _____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: _____

[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: _____

[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: _____

[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: _____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID: _____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID: _____

[X] Not Applicable

ATTACHMENT HG-EU8-D

APPLICABLE REQUIREMENTS

ATTACHMENT HG-EU8-D

Applicable Requirements Listing

APPLICATION EMISSION UNIT ID: EU8 – Relocatable Diesel Generator(s)

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	Excess Emissions;
62-210.700(4)	Excess Emissions; poor maintenance
62-210.700(6)	Excess Emissions; notification

Stationary Sources-Emission Standards:

62-296.320(4)(b)(State Only)	CTs/Diesel Units

Stationary Sources-Emission Monitoring (where stack test is required):

62-297.310(2)(a)	All Units (Operating Rate)
62-297.310(4)(a)2.	All Units (Applicable Test Procedures)
62-297.310(5)	All Units (Determination of Process Variables)
62-297.310(7)(a)3.	Permit Renewal Test Required
62-297.310(7)(a)4.	Annual Test
62-297.310(7)(a)8.	VE Compliance Test if > 400 hrs/yr
62-297.310(7)(a)9.	FDEP Notification - 15 days
62-297.310(8)	Test Reports

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Regulated or Unregulated Emissions Unit? (Check one)

[ ] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[X] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Facility-Wide Fugitive/De Minimis Emissions

4. Emissions Unit Identification Number:
ID:
[ ] No ID
[X] ID Unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

See Attachment HG-EU9-A9.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:		
Manufacturer:	Model Number:	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:				mmBtu/hr
2. Maximum Incineration Rate:		lb/hr		tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				
This emission unit consists of numerous fugitive sources.				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: **4**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **This EU consists of various activities generating fugitive emissions.**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Petroleum and Solvent Evaporation – Petroleum Product Storage – Fugitive Emissions – Fuel Oil (Storage)**		
2. Source Classification Code (SCC): **4-03-888-01**	3. SCC Units: **Thousand Gallons Stored**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: **6,759**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Segment refers to combined storage capacity of various petroleum product storage tanks contained in the emission unit at the time of this permit application submittal. See Attachment HG-EU9-E10.**		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Petroleum and Solvent Evaporation – Petroleum Product Storage – Fugitive Emissions – Fuel Oil (Throughput)**		
2. Source Classification Code (SCC): **4-03-999-99**	3. SCC Units: **Thousand Gallons Throughput**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: **235,856**
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): **Segment refers to combined throughput of various petroleum product storage tanks contained in the emission unit. See Attachment HG-EU9-E10.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
VOC			NS

ATTACHMENT HG-EU9-A9

EMISSIONS UNIT COMMENT

ATTACHMENT HG-EU9-A9

EMISSIONS UNIT COMMENT – TRIVIAL ACTIVITIES

The trivial activities identified in this application are provided for information only and are identified as examples of, but not limited to, the trivial activities identified by the Division of Air Resources Management's (DARM's) guidance. It is understood that such activities do not have to be included in with the Title V Application. The trivial activities identified herein are consistent, in terms of amounts of emissions and types, with those listed in DARM's guidance.

EMISSIONS UNIT COMMENT – NOTIFICATION OF TEMPORARY EXEMPTIONS

Pursuant to Rule 62-210.300(3)(b)1., notice is herein provided that the emission units listed in this attachment are not subject to a permit issued by the Department of Environmental Protection and are exempt from permitting until a final determination is made under the Title V permitting requirements (Rule 62-213 F.A.C.). These units would not have triggered review under Rules 62-212.400 or 62-212.500 or any new source performance standard listed in Rule 62-204.800, F.A.C.

Attachment HG-EU9-A9
General Emissions Unit Information for Unregulated Emissions Unit

Florida Power, Higgins, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Maintenance/Machine shop	Sand blaster, drill press, welding, lathes,	ER/TR
	Cabinets with solvents, oils, flammables, etc.	TR
	Parts washer- light oil (not current)	TR
	Cylinders (acetylene, etc.)	TR
General Boiler Building	Emergency diesel generator (basement)- fuel oil tank (300 gal.)	TR/UR
	Waste oil recovery- 55 gal. drums Used oil recovery- 55 gal.	TR
	Electric shop flammable liquid cabinet (oils, solvents, paints)	TR
	Sand blaster, drill press, welding, lathes	ER/TR
	Cabinets with solvents, oils, flammables, etc.	TR
	Flammable liquid cabinets (oils, solvents, paints, etc.)	TR
	Paint cabinets- closed	TR
Unit 1	Turbine lube oil reservoir tank	UR
	Waste oil sump and recovery tank	UR
	Oil gun cleaning station (No. 2 oil used)	TR
Unit 2	Turbine lube oil reservoir tank	UR
	Waste oil sump and recovery tank	UR
	Oil gun cleaning station (No. 2 oil used)	TR
Unit 3	Turbine lube oil reservoir tank	UR
	Waste oil sump and recovery tank	UR
	Oil gun cleaning station (No. 2 oil used)	TR
Gas Turbine 1 (GT 2, 3, 4)	Lube Oil Vent with demister	UR
	Lube oil storage tank (underground)- 2600 gal.	UR

Attachment HG-EU9-A9
General Emissions Unit Information for Unregulated Emissions Unit

Florida Power, Higgins, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	Waste oil storage tank- 546 gal.	UR
	Turbine cooling- 175 gal. 50% glycol/50% water mix.	TR
Fuel Storage and Associated Areas	Tank No.1- No. 6 Fuel Oil 56,000 bbls	UR
	Tank No.2- No. 6 Fuel Oil 80,000 bbls	UR
	Peaker Tank No. 1- No. 2 Fuel Oil 400,000 gal.	UR
	Peaker Tank No. 2- No. 2 Fuel Oil 636,000 gal.	UR
	Pump diesel fuel tank (percolation pond spray field) (200 gal)	UR
	Emergency fire pump diesel fuel tanks (2) (110 gal)	UR
	Aux. diesel tank (500 gal)	UR
	Hydraulic oil tank (2100 gal)	UR
	Fuel truck unloading station	UR
General Site	Oil water separators	TR
Substation	Transformers and Associated Equipment	TR

Note: ER = Exempt by rule 62-210.300(3)(a); TR = Trivial;
UR = Unregulated

ATTACHMENT HG-EU9-E10

SEGMENT COMMENT

Attachment HG-EU9-E10
General Emissions Unit Information

Florida Power, Higgins Plant, Petroleum Product Storage and Throughput Operations

FP Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons)
CT #01(#1 Tank)	No. 2 fuel oil	404,922	54,976,300
CT #02(#2 Tank)	No. 2 fuel oil	635,670	86,304,980
CT #11	Waste oil (below ground)	546	3,276
CT #12	Waste oil (below ground)	546	3,276
CT #13	Waste oil (below ground)	546	3,276
CT #14	Waste oil (below ground)	546	3,276
CT No. 1	Lube oil (below ground)	2600	2600
CT No. 2	Lube oil (below ground)	2600	2600
CT No. 3	Lube oil (below ground)	2600	2600
CT No. 4	Lube oil (below ground)	2600	2600
Plant #01(#1 Tank)	No. 6 fuel oil	2,335,704	38,707,128
Plant #02(#2 Tank)	No. 6 fuel oil	3,369,702	55,842,472
Plant #04	Diesel (equipment)	110	660
Plant #05	Diesel (equipment)	110	660
Plant #06	Diesel (equipment)	200	1,200
Plant #07	Auxiliary diesel	500	3000
Plant #09	Hydraulic oil	2184	5000
	TOTAL	6,758,802	235,855,704