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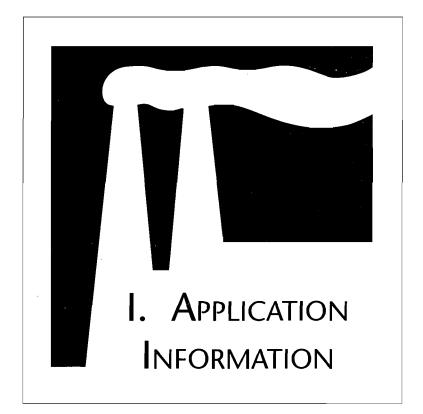
Florida Department of Environmental Protection

Prepared by:



KBN Engineering and Applied Sciences, Inc. Gainesville, Florida

TITLE V
AIR OPERATING
PERMIT APPLICATION



Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

I. APPLICATION INFORMATION

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

Identification of Facility Addressed in This Application

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

	riorida r	ower Corporation	
2. Site Name: Higgins Plant			
3. Facility Identification Number: 10	030012		[] Unknown
Facility Location Information: Street Address or Other Locator: City: Oldsmar	Shore Driv	e Pinellas	Zip Code: 34677
5. Relocatable Facility? [] Yes [x] No	•	•	ermitted Facility? [] No
Application Processing Information (DE	P Use)	,	
1. Date of Receipt of Application:		6/13/96	
2. Permit Number:		030012-	001-AV
3 PSD Number (if applicable):			
4. Siting Number (if applicable):			

DEP Form No. 62.210.900(1) - Form Effective: 03-21-96

1. Facility Owner/Company Name:

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

W. Jeffrey Pardue, Director Environmental Services Dpt

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: 3201 34th Street South

City: St. Petersburg

State: FL

Zip Code: **33711**

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(813) 866-5151

Fax: (813) 866-4926

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative* of the non-Title Vsource addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., 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.

6-13-96

Date

th letter of authorization if not currently on file.

DEP Form No. 62.210.900(1) - Form

Effective: 03-21-96

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility. An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

		Permit
Emissions Unit ID	Description of Emissions Unit	Type

1R 004 2R 005 3R 006 4R 007 5R 001	Peaking Gas Turbine Unit 1 Peaking Gas Turbine Unit 2
2R 005 3R 006 4R 007	Peaking Gas Turbine Unit 2
2R 005 3R 006 4R 007	Peaking Gas Turbine Unit 2
3R 006 4R 007	
	Peaking Gas Turbine Unit 3
5R 001	Peaking Gas Turbine Unit 4
	Fossil Fired Steam Boiler No. 1
6R 002	Fossil Fired Steam Boiler No. 2
7R 003	Fossil Fired Steam Boiler No. 3
8	Facility-Wide Fugitive Emissions

See individual Emissions Unit (EU) sections for more detailed descriptions.

Multiple EU IDs indicated with an asterisk (*). Regulated EU indicated with an "R".

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

[x] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
[] Initial air operation permit under Chapter 62-213, F.A.C., 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:
[] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.
	Operation permit to be renewed:
[] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.
	Current construction permit number:
	Operation permit to be renewed:
	Operation permit to be renewed.
[Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.
	Operation permit to be revised/corrected:
[] Air operation permit revision for a Title V source 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 to be revised:
	Reason for revision:

Category II: All Air Construction Permit Applications Subject to Processing Under Rule 62-210.300(2)(b),F.A.C.

ın	us Application for Air Permit is submitted to obtain:
[] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.
	Current operation/construction permit number(s):
[] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.
	Operation permit to be renewed:
[] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g.; to address one or more newly constructed or modified emissions units.
	Operation permit to be revised:
	Reason for revision:
Ca	ntegory III: All Air Construction Permit Applications for All Facilities and Emissions Units.
	Emissions Units.
Th	Emissions Units. is Application for Air Permit is submitted to obtain:] Air construction permit to construct or modify one or more emissions units within a
Th	Emissions Units. is Application for Air Permit is submitted to obtain:] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).
Th	Emissions Units. is Application for Air Permit is submitted to obtain:] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source). Current operation permit number(s), if any:] Air construction permit to make federally enforceable an assumed restriction on the

Application Processing Fee Chack one

Check one.					
[] Attached - Amount: \$	[] Not Applicable.				
Construction/Modification Information					
1. Description of Proposed Project or Alterations:					
	,				
	e e				

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14996

3. Projected Date of Completion of Construction:

2. Professional Engineer Mailing Address:

Organization/Firm: KBN Eng and Applied Sciences Street Address: 6241 NW 23rd Street, Suite 500

2. Projected or Actual Date of Commencement of Construction:

City: Gainesville State: FL

3. Professional Engineer Telephone Numbers:

Telephone: (352) 336-5600 Fax: (352) 336-6603 Zip Code: 32653-1500

4. Professional Engineer's 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 $[\chi]$ 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.

Tromand In 18nd	6/9/96
Signature (seal) F. K.	Date

Attachany exception to certification statement.

7

DEP Form No. 62 24 0.900(1) - Form

6/1/96

Application Contact

1. Name and Title of Application Contact:

Scott Osbourn, Senior Environmental Engineer

2. Application Contact Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: 3201 34th Street South

City: St. Petersburg

State: FL

Zip Code: 33711

3. Application Contact Telephone Numbers:

Telephone: (813) 866-5158

Fax: (813) 866-4926

Application Comment

See Attachment TVAI-1				

ATTACHMENT TVAI-1

ATTACHMENT TVAI-1

This Title V application is for the Higgins Facility. The application's structure is as follows:

	Emission Units	
Gas Turbines	EU1, EU2, EU3, EU4	
General	4 peaking units	
Emission Points	1 stack per turbine	
Segments	No. 2 fuel oil, Natural gas	
Pollutants	Maximum fuel oil sulfur content	
VE Emissions	VE limits applicable	
CEM	none	
PSD	Existing Baseline Sources	
Steam Units	EU5, EU6, EU7	
General	*3 fossil fired steam boilers	
Emission Points	1 stack per unit	
Segments**	No. 6 fuel oil, Natural gas, and No. 2 fuel oil (pilot	
Pollutants	SO ₂ , PM	
VE Emissions	VE limits applicable	
CEM	none	
PSD	Existing Baseline Sources	
Facility-wide Fugitive	EU8	
General	Facility-wide	
Emission Points	Fugitive	
Segments	see description	
Pollutants	NA	
VE Emissions	NA	
CEM	NA	
PSD	Existing Baseline Sources	

^{*}These units are in long-term reserve shutdown status.

^{**} The fossil fuel steam generating units may also fire "on-specification" used oil and evaporate non-hazardous boiler chemical cleaning waste waters. These activities will be conducted pursuant to the policy guidance from DARM. Conducting these activities will neither affect the emissions from the steam generating units nor affect compliance with any applicable requirement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coord Zone: 17		6.5 Nor	th (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: Code: A		5. Facility Major Group SIC Code:	6. Facility SIC(s):	

7. Facility Comment (limit to 500 characters):

The Higgins Facility consists of 3 fossil fuel steam generators, (in long-term reserve shutdown per Rule 62-210.300(2)(a)3.d) and 4 gas turbine peaking units.

Facility Contact

1	Name	and	Title	of Facility	v Contact:
1.	1 141110	and	11110	or racini	Y Communication.

M. W. Lentz, Plant Manager

2. Facility Contact Mailing Address:

Organization/Firm: Florida Power Corporation

Street Address: Shore Drive

City: Oldsmar

State: FL

9

Zip Code: 34677

998 East Shore Dr.

3. Facility Contact Telephone Numbers:

Telephone: (813) 866, 2239

(813) 866-2239

9

DEP Form No. 62.210.900(1) - Form

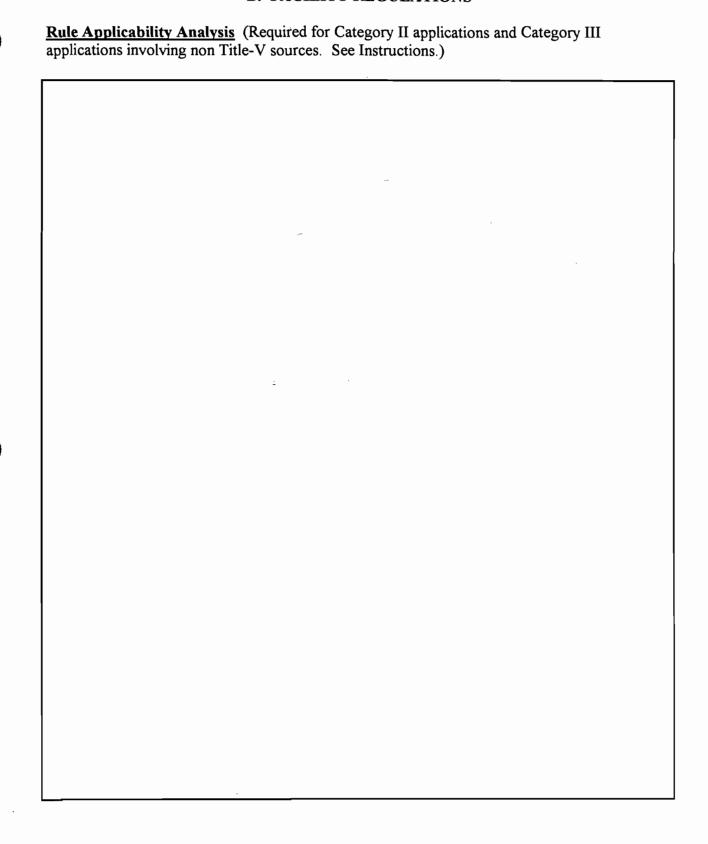
Effective: 03-21-96

6/1/96

Facility Regulatory Classifications

Small Business Stationary Sour Yes	rce? [x] No	[] Unknown
2. Title V Source? [x] Yes	[] No	
3. Synthetic Non-Title V Source? [] Yes,	[x] No	
4. Major Source of Pollutants Otl [x] Yes	her than Hazardous Air Polluta [] No	ants (HAPs)?
5. Synthetic Minor Source of Police [] Yes	lutants Other than HAPs? [x] No	
Major Source of Hazardous Ai Yes	r Pollutants (HAPs)? [x] No	
7. Synthetic Minor Source of HA [] Yes	Ps? [x] No	
8. One or More Emissions Units (Subject to NSPS? [x] No	
9. One or More Emissions Units S [] Yes	Subject to NESHAP? [x] No	
10. Title V Source by EPA Design[] Yes	nation? [x]No	
11 Facility Regulatory Classificati	ions Comment (limit to 200 ch	aracters):
		_

B. FACILITY REGULATIONS



11

6/1/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

14424Y/F1/TVFI

See Attachment HG-FE-B 9

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

6/4/96

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted		2. Pollutant Classification	
O2 Sulfur D	ovide	A	
	ate Matter - Total	A	
	ate Matter - PM10	A	
Ox Nitrogen		A	
O Carbon M		A	
	Organic Compounds	А	
AM Sulfuric	Acid Mist	A	
133 Nickel C		A	
APS Total Ha	ardous Air Pollutants	A	
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D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information:

1. Po	llutant Emitted:		
2. Re	equested Emissions Cap:	(lb/hr)	(tons/yr)
3. Ba	sis for Emissions Cap Code:		
4. Fa	cility Pollutant Comment (limit to 40	0 characters):	

Facility Pollutant Detail Information:

1. Pollutant Emitted:			
2. Requested Emissions Cap:	(lb/hr)	(tons/yr)	
3. Basis for Emissions Cap Code:			
4. Facility Pollutant Comment (limit	to 400 characters):		

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

Area Map Showing Facility Location: [X] Attached, Document ID: HG-FE-1 HG-FE-1	
[] Not Applicable [] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID: HG-FE-2 [] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s): [x] Attached, Document ID(s): HG-FE-3 [] Not Applicable [] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulat [x] Attached, Document ID: HG-FE-4 [] Not Applicable [e Matter:] Waiver Requested
5. Fugitive Emissions Identification: [x] Attached, Document ID: HG-FE-5 [] Not Applicable [] Waiver Requested
6. Supplemental Information for Construction Permit Applica [] Attached, Document ID: [x] Not Applicable	tion:
Additional Supplemental Requirements for Category I App	olications Only
7. List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable	
8. List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be [x] Not Applicable	Individually Listed
9. Alternative Methods of Operation: [] Attached, Document ID: [x] Not Applicable	
10. Alternative Modes of Operation (Emissions Trading): [] Attached, Document ID: [x] Not Applicable	

15

6/9/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

11. Identification of Additional Applicable Requirements: [
12. Compliance Assurance Monitoring Plan: [x] Attached, Document ID: HG-FE-12 [] Not Applicable
13. Risk Management Plan Verification:
Plan Submitted to Implementing Agency - Verification Attached Document ID:
[x] Plan to be Submitted to Implementing Agency by Required Date
[] Not Applicable
14. Compliance Report and Plan [x] Attached, Document ID: HG-FE-14 [] Not Applicable
15. Compliance Statement (Hard-copy Required) [x] Attached, Document ID: HG-FE-15 [] Not Applicable

ATTACHMENT HG-FE-B FACILITY REGULATIONS

ATTACHMENT HG-FE-B **FACILITY REGULATIONS**

Master Applicable Requirements Listing - Power Plants

FACILITY: FPC Higgins Plant

FDEP Rules:

General Permits: 62-4.030 62-4.040(1)(a) - Exemptions from permitting - Exemptions from permitting 62-4.040(1)(b) 62-4.100 62-4.130

Asbestos NESHAP:

62-204.800(8)(b)8.(State Only) - Asbestos Removal

62-204.800(8)(d)(State Only) - General Provisions(Asbestos)

Stationary Sources-General:

62-210.300(2)

Exemptions - Plant Specific:

62-210.300(3)(a)4. - comfort heating < 1 mmBtu/hr 62-210.300(3)(a)5. - mobile sources 62-210.300(3)(a)7. - non-industrial vacuum cleaning 62-210.300(3)(a)8. - Refrigeration Equipment 62-210.300(3)(a)9. - vacuum pumps for labs 62-210.300(3)(a)10. - steam cleaning equipment - sanders < 5 ft² or less surface area 62-210.300(3)(a)11. 62-210.300(3)(a)12. - space heating equip.; (non-boilers)

62-210.300(3)(a)14. - bakery ovens 62-210.300(3)(a)15. - lab equipment

- brazing, soldering or welding 62-210.300(3)(a)16.

62-210.300(3)(a)17. - laundry dryers

- emergency generators, limited to 32,000 gal/yr 62-210.300(3)(a)20. 62-210.300(3)(a)21. - general purpose engines, limited to 32,000 gal/yr

- fire and safety equipment 62-210.300(3)(a)22.

62-210.300(3)(a)23. - surface coating >5% VOC; 6 gal/day or less, averaged month.

- surface coating < 5% or less VOC 62-210.300(3)(a)24.

62-210.300(3)(b) - Temporary Exemption

62-210.370(3) - AORs 62-210.900(5) - AOR Form

Title V Permits:

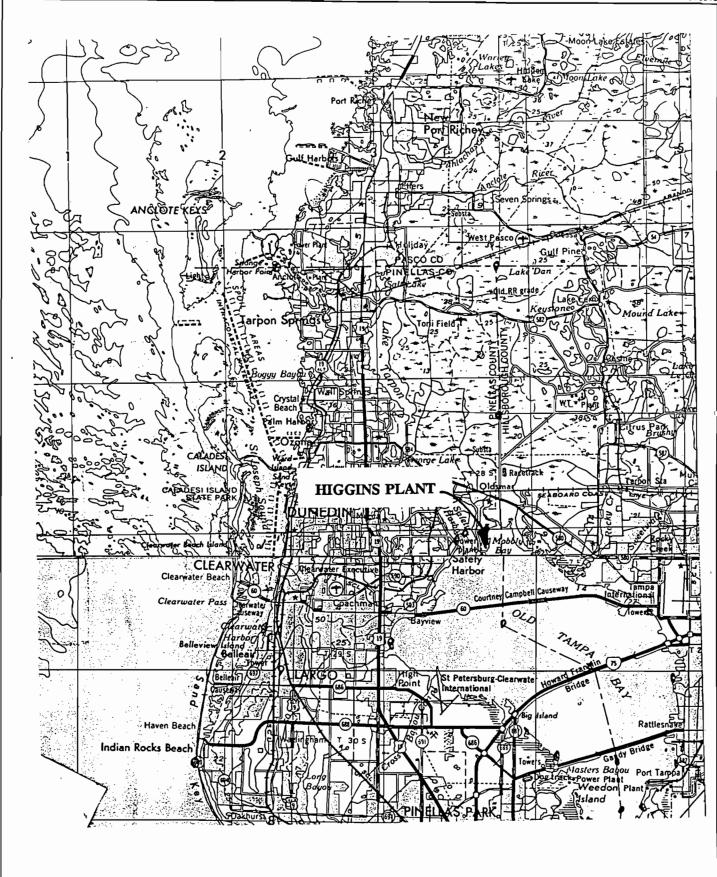
- Fees 62-213.205(1)(a)

62-213.205(1)(b)

62-213.205(1)(c)

62-213.205(1)(e) 62-213.205(1)(f) 62-213.205(1)(g) 62-213.205(1)(i) 62-213.205(1)(j) 62-213.400 - Permits/Revisions 62-213.410 - Changes without permit revisions - Permits-allows continued operation 62-213.420.(1)(b)2. 62-213.420.(1)(b)3. - Permits-additional information - Permit Shield 62-213.460 62-213.900(1) - Fee Forum Open Burning: 62-256.300 - Prohibitions - Land Clearing 62-256.500 - Open burning Allowed 62-256.700 Asbestos Removal: 62-257.301 - Notification and Fee - Fee Schedule 62-257.400 62-257.900 - Form Stationary Sources-Emission Standards: 62-296.320(2) (State Only) 62-296.320(3)(b)(State Only) - Emergency Open Burning - General VE Standard 62-296.320(4)(b) - Unconfined Emissions of Particulate Matter 62-296.320(4)(c) Stationary Sources-Emission Monitoring 62-297.310(7)(a)10. - Exemption of annual VE for 210.300(3)(a) sources/Gen. Per. Federal Regulations: Asbestos Removal: - Prohibited Activities 40 CFR 61.05 - Compliance with work practice standard 40 CFR 61.12(b) - Circumvention 40 CFR 61.19 40 CFR 61.145 - Demolition and Renovation 40 CFR 61.148 - Standard for Insulating Material

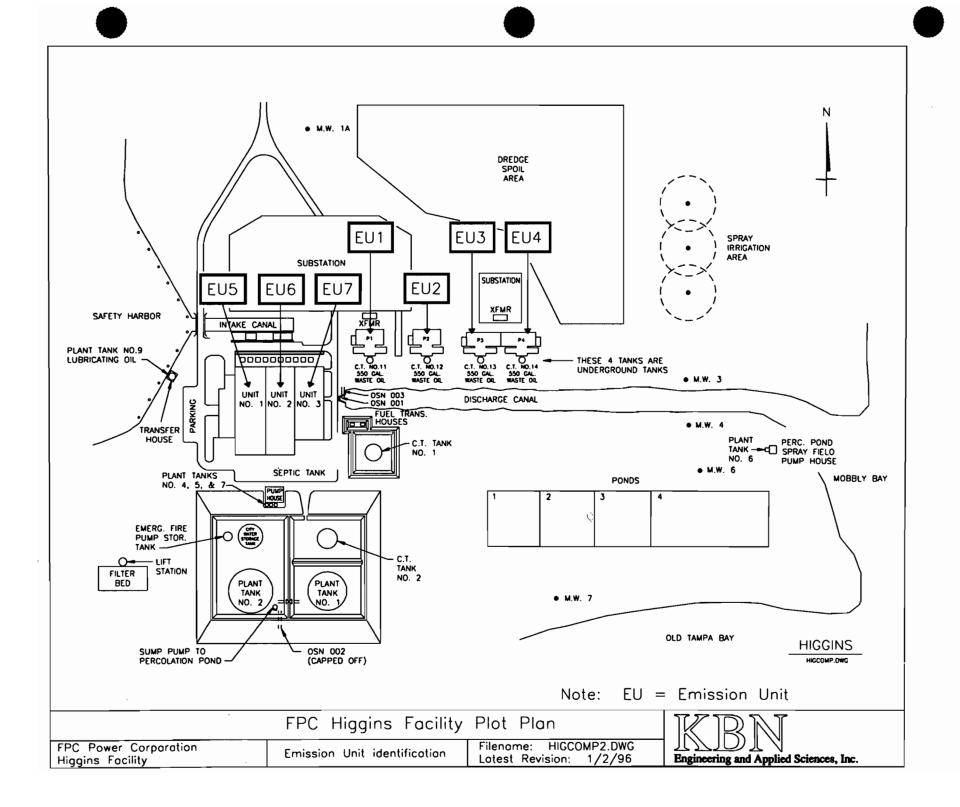
ATTACHMENT HG-FE-1 AREA MAP



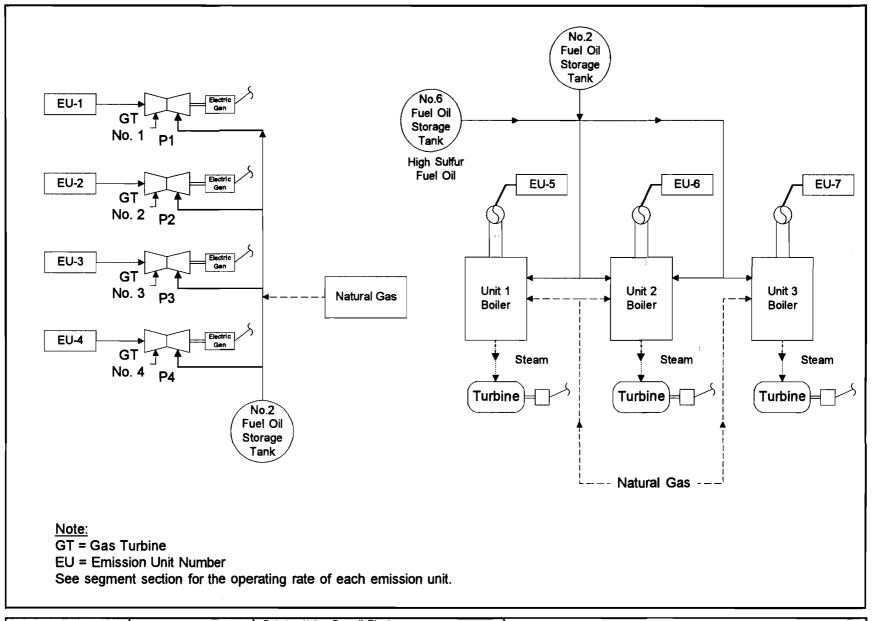
Attachment HG-FE-1 Area Map Florida Power Corporation, Higgins Plant



ATTACHMENT HG-FE-2 FACILITY PLOT PLAN



ATTACHMENT HG-FE-3 PROCESS FLOW DIAGRAM



Process Flow Legend	Florida Power	Emission Unit: Overall Plant	
	Corporation.	Process Area: Overall Plant	Engineering and Applied
Gas Flow	Higgins Plant	Filename: FPCHG.VSD	Sciences, Inc.
	Process Flow Diagram	Latest Revision Date: 6/1/96 11:55 AM	Coloriose, inc.

ATTACHMENT HG-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT HG-FE-4

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 62-296.310(3), 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-FE-5 FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT HG-FE-5 FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as "trivial activities" (as presented in EPA's memorandum, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995). 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 a manufacturing 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 No. 8. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

FPC has not identified fugitive emissions 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 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.

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

toluene

methyl ethyl ketone

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 are 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 (preceding page).

Regulated Toxic or Flammable Substances

The following regulated toxic or flammable substances are or may be present at the FPC 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-FE-11 IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

ATTACHMENT HG-FE-11 IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

The steam boiler units 1, 2, 3 currently are not in operation and have been placed in long-term reserve shutdown under Rule 62-210.300(2)(a)3.d



bcc: D. T. Buell G. E. Marks

Route: Hedrick/Osbourn/Morneault/Kennedy (last)

File: HIGA.1.1

January 13, 1994

Mr. J. Harry Kerns, P.E.
District Air Engineer
Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

Dear Mr. Kerns:

Re: Higgins Steam Units 1, 2, 3 Long-term Reserve Shutdown (Permit Nos. A052-216382, -216383, -216384)

Florida Power Corporation is providing the Department of Environmental Protection notification that the units referenced above will be placed in long-term reserve shutdown on January 24, 1994.

To the best of my knowledge, these units are currently operating in compliance with all applicable air pollution rules and air operation permit conditions.

Please contact Mr. Mike Kennedy at (813) 866-4344 if you have any questions.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Acting Director, Environmental Services Department

cc: Mr. Gary Robbins, Pinellas County

ATTACHMENT HG-FE-12 COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT HG-FE-12

Compliance Assurance Monitoring Plan to be submitted to the implementing agency by required date.

ATTACHMENT HG-FE-14 COMPLIANCE REPORT AND PLAN

COMPLIANCE REPORT AND PLAN

The facility and emissions units identified in this application are in compliance with the Applicable Requirements identified in Sections B and D of the application form and attachments referenced in Section E. 11. and L. 12. (if included). Compliance is certified as of the date this application and is submitted to the Florida Department of Environmental Regulation as required in Rule 62-213.420(1)(a) F.A.C. Compliance will be certified no less frequently than annually or as required by the applicable requirement.

ATTACHMENT HG-FE-15 COMPLIANCE STATEMENT

ATTACHMENT HG-FE-15

COMPLIANCE STATEMENT

I, the undersigned, am the responsible official as defined in Chapter 62-213, 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

Date

Jeffery Pardue, C.E.P., Director, Environmental Engineering Dept.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	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.	
2.	Single Process, Group of Processes, or Fugitive Only? 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 whi has at least one definable emission point (stack or vent).	ch
[] 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.	;

Emissions	Unit	Information	Section	1	of	8	

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1.	Description of Emission Peaking Gas Turbine Un	s Unit Addressed in This Section it 1	(limit to 60 characters):
2.	Emissions Unit Identific	ation Number: [] No Corre	esponding ID [] Unknown
3.	Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code: 49
6.	Emissions Unit Commen	t (limit to 500 characters):	

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

B.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

Emissions Unit Information Section	1 of	8
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C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: 15 Mar 1969

2. Long-term Reserve Shutdown Date:

3. Package Unit:
 Manufacturer: Pratt & Whitney

4. Generator Nameplate Rating:

5. Incinerator Information:
 Dwell Temperature:
 Dwell Time:
 seconds
 Incinerator Afterburner Temperature:
 "F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:

2. Maximum Incineration Rate:

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate:

5. Operating Capacity Comment (limit to 200 characters):

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

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:							
24	hours/day	7	days/week				
52	weeks/yr	8,760	hours/yr				

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable	
ý.	

Emissions Unit Information Section	1	of 8	Peaking Gas Turbine Unit 1
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<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment HG-EU1-D	
•	
	•

DEP Form No. 62-210.900(1) - Form

Effective: 03-21-96

Emissions	Unit	Information	Section	1	of	8

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

Emission Point Description and Type

1.	l Identification of Point on Plot Plan or Flow Diagram: EU1										
2.	Emission Point	Ту	pe Code:								
	[x]1	[] 2		[] 3			[] 4	
3.	Descriptions of to 100 character			ints C	om	prisin	ng thi	s E	Emiss	ions Unit for VE Trac	king (limit
	Gas turbine gas	ses	exhaust th	rough	as	single	stac	k p	er tu	rbine unit	
				ž.							
4.	ID Numbers or Not Applicable	De	escriptions	of Em	issi	on U	nits v	/it	h this	Emission Point in Co	mmon:
5.	Discharge Type [] D [] R	[ode:]F x]V	[]	H W		Γ.] P		
6.	Stack Height:								55	feet	
7.	Exit Diameter:								15.1	feet	
8.	Exit Temperatu	re:							850	°F	

Source Information Section	1	of	8	
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9.	Actual Volumet	ric Flow Rate	e :	1,000,000	acfm	
10.	Percent Water V	/apor:	· · · · · · · · · · · · · · · · · · ·		%	
11.	Maximum Dry S	Standard Flow	v Rate:		dscfm	
12.	Nonstack Emiss	ion Point He	ight:		feet	
13.	Emission Point 1	UTM Coordi	nates:			
	Zone: 17	East (km):	336.5	North	(km): 3098.4	
14.	Emission Point	Comment (lir	nit to 200 char	acters):		
					Ó	

Emissions	Unit	Information	Section	1	of	8	
	CHIL	AIIIVI IIIALIVII	Section	<u> </u>	. 01		

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ____

 Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): 							
Internal Combustion Electric Generation	n Dist. Oil/Diesel Turbine						
2 Source Classification Code (SCC):	· ·						
2. Source Classification Code (SCC): 2-01-001-01							
	<u> </u>						
3. SCC Units:							
Thousand Gallons Burned							
4. Maximum Hourly Rate:	5. Maximum Annual Rate:						
4.101	35,929						
6. Estimated Annual Activity Factor:							
•							
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:						
0.5	0.1						
9. Million Btu per SCC Unit:							
	138						
10. Segment Comment (limit to 200 chara	acters):						
Heat content-HHV							
Heat content-filly							

Emissions Unit Information Section Segment Description and Rate: Segmen	
Segment Description (Process/Fuel Ty (limit to 500 characters): Internal Combustion Electric Generation	pe and Associated Operating Method/Mode) 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: 4,958
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	1,000

Hourly fuel rate - permit limit.

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Cod
SO2 PM			EL NS
PM10			NS
NOx			NS
CO			NS
VOC			NS
H133 HAPS			ns ns
nars			142
*			
		e	

Emissions	Unit	Inform	nation	Section	1	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: SO2
2. Total Percent Efficiency of Control: 0 %
3. Potential Emissions: 287.1 lb/hour 1,258 tons/year
4. Synthetically Limited? [] Yes [x] No
5. Range of Estimated Fugitive/Other Emissions:
[] 1 [] 2 [] 3 to tons/yr
6. Emission Factor: 0.5 %sulfur
Reference: AO Permit limit
7. Emissions Method Code:
[x]0 []1 []2 []3 []4 []5
8. Calculation of Emissions (limit to 600 characters):
See Attachment HG-EU1-H8
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):
Permit limit based on AP-42 emission factor.
· · · · · · · · · · · · · · · · · · ·

Emissions Unit Information Section	1	of _	8
Allowable Emissions (Pollutant ident	ified on	fron	t page)

A.	wable Emissions (Pollutant identified on)	<u>iront</u>	<u>page)</u>		
1.	Basis for Allowable Emissions Code: OTHER				
2.	Future Effective Date of Allowable Emission	ons:			
3.	Requested Allowable Emissions and Units:		_		
	0.5 percent sulfur				
4.	Equivalent Allowable Emissions:	287.1	lb/hour	1,258 tons/year	
5.	Method of Compliance (limit to 60 characte	ers):			
	Fuel oil analysis during compliance test				
6.	Pollutant Allowable Emissions Comment (I (limit to 200 characters):	Desc.	of Related C	perating Method/Mode)	
	AO Permit limit				
В.					
1.	Basis for Allowable Emissions Code:				
2.	Future Effective Date of Allowable Emission	ons:			
3.	Requested Allowable Emissions and Units:				
4.	Equivalent Allowable Emissions:		lb/hour	tons/year	_

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode)

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

(limit to 200 characters):

5. Method of Compliance (limit to 60 characters):

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

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: EPA Method 9, annual compliance test
5.	Visible Emissions Comment (limit to 200 characters): Rule 62-296.310(2)(a)
⁷ isi <u>k</u>	ole Emissions Limitations: Visible Emissions Limitation 2 of 2
⁷ isit 1.	<u>Die Emissions Limitations</u> : Visible Emissions Limitation 2 of 2 Visible Emissions Subtype: VE
1.	Visible Emissions Subtype: VE
1. 2.	Visible Emissions Subtype: VE Basis for Allowable Opacity: [x] Rule [] Other Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 %
1. 2. 3.	Visible Emissions Subtype: VE Basis for Allowable Opacity: [x] Rule [] Other Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour Method of Compliance:
1. 2. 3.	Visible Emissions Subtype: VE Basis for Allowable Opacity: [x] Rule [] Other Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour Method of Compliance: EPA Method 9, annual compliance test.

6/1/96

30

Emissions Unit Information Section of of	Emissions Unit Information Section	of	8	Peaking Gas Turbine Unit 1
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

Emissions	Unit	Informa	ation	Section	1	of	8	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

Increment Consuming for Particulate Matter or Sulfur Dioxide? 1.

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- 1 The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment. The facility addressed in this application is classified as an EPA major ſ source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment. The facility addressed in this application is classified as an EPA major source and ſ the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment. For any facility, the emissions unit began (or will begin) initial operation after
- December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, the baseline emissions of the emissions unit are [x] nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM] C] E [X] Unknown SO₂] E 1 C [x] Unknown NO_2 1 C] E [x] Unknown Baseline Emissions: 4 PM lb/hour tons/year SO₂ lb/hour tons/year NO_2 tons/year 5. PSD Comment (limit to 200 characters): Baseline emissions not known.

33

6/9/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: HG-EU1-L1 [] Not Applicable	[] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: HG-EU1-L2 [] Not Applicable	[] Waiver Requested
3.	Detailed Description of Control Equipment	
	[] Attached, Document ID:	[] Waiver Requested
4.	Description of Stack Sampling Facilities	
	Attached, Document ID:	[] Waiver Requested
5.	Compliance Test Report	
	[] Attached, Document ID:	[] Not Applicable
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: HG-EU1-L6	[] Not Applicable
7.	Operation and Maintenance Plan	•
	[] Attached, Document ID:	[X] Not Applicable
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

34

Emissions Unit Information Section	1	of	8	
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Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation
	[X] Attached, Document ID: HG-EU1-L10 [] 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-EU1-L12 [] Not Applicable
13.	Compliance Assurance Monitoring Plan
	[X] Attached, Document ID: HG-EU1-L13 [] Not Applicable
14.	Acid Rain Permit 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:
	[x] Not Applicable

ATTACHMENT HG-EU1-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU1-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU1: Peaking Units Gas Turbine 1- FPC Higgins Plant

FDEP Rules:

Stationary Sources-General:

62-210.700(1)

62-210.700(4)

- Maintenance

62-210.700(6)

Stationary Sources-Emission Standards/RACT:

62-296.320(4)(b)(State Only) - General VE

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)(e) - Records and Inspection

Stationary Sources-Emission Monitoring:

62-297.310(2)(a) - Operating Rate; reserved for CTs

62-297.310(4)(a)2. - Applicable Test Procedures; Sampling time

62-297.310(5) - Determination of Process Variables 62-297.310(7)(a)3. - Permit Renewal Test Required

62-297.310(7)(a)4.

62-297.310(7)(a)8 - CT exemption if < 400 hrs/yr; VE test once every 5 years

62-297.310(7)(a)9. - FDEP Notification - 15 days

62-297.310(8) - Test Reports

^{*} It is the position of the applicant that the use of very low sulfur oil and natural gas meets the requirements of this rule.

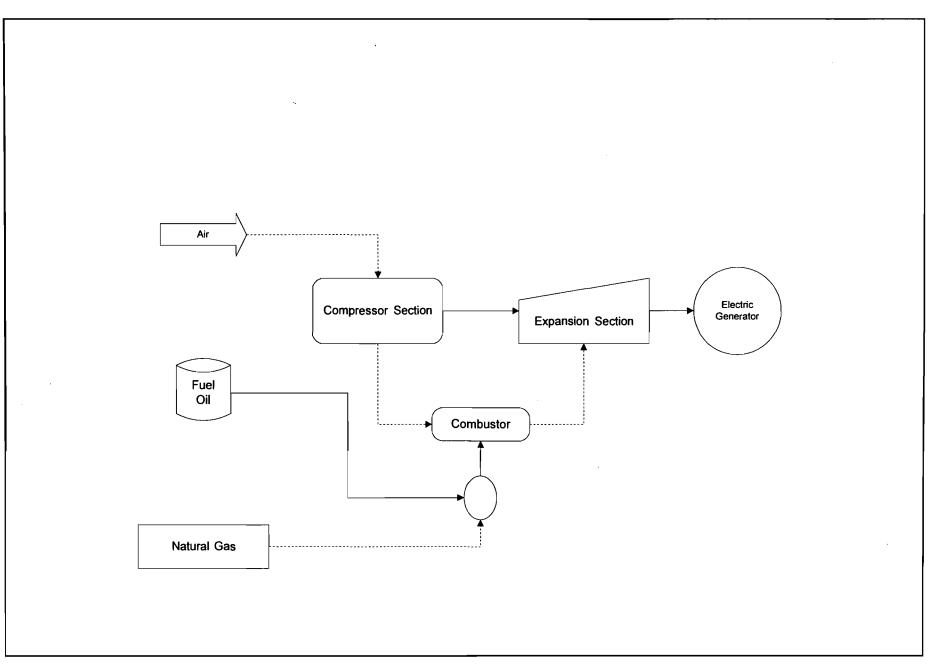
ATTACHMENT HG-EU1-H8 CALCULATION OF EMISSIONS

Table !. Maximum Estimated Emissions for Emissions Limited Pollutants, Gas Turbine Peaking Units (Fuel Oil), Higgins Plant

	Gas Turbine	
Pollutant/Units	P-1, P-2	P-3, P-4
dours of Operation	8,760	8,760
Annual Capacity Factor (%)	100	100
ulfur-Dioxide (lb/hr) = Emission factor (lb/1,000 gal.) x sulfur of	ontent (%) x Fuel usage (gal/hr)	
Basis (1)	AO Permit/AP-42	AO Permit/AP-42
Emision factor (lb/1,000 gal. x sulfur content)	140 x s	140 x s
Sulfur content (%)	0.50	0.50
Fuel usage (1,000 gal/hr)	4.101	4.572
Emission rate (lb/hr)	287.1	320
(TPY)	1257.4	1401.8

Source: FDEP Permit AO52-216420, 216421, 216422, and 216423.

ATTACHMENT HG-EU1-L1 PROCESS FLOW DIAGRAM



Gas Flow
Solid / Liquid Flow

Process Flow Legend

Florida Power
Corporation,
Higgins Plant
Process Flow Diagram

Emission Unit: Peaking Gas Turbine No. 1, 2, 3, 4

Process Area: Overall Plant

Filename: FPCHG.VSD

Latest Revision Date: 11/13/95 02:20 PM



Engineering and Applied Sciences, Inc.

ATTACHMENT HG-EU1-L2 FUEL ANALYSIS OR SPECIFICATION

Page 1 of 2

Attachment HG-EU1-L2

Fuel Analysis

No. 2 Fuel Oil

<u>Parameter</u>	Typical Value	Max Value
API gravity @ 60 F	30^{1}	<u>-</u>
Relative density	7.1 lb/gal ²	
Heat content	19,500 Btu / lb (HHV)	
% sulfur	0.12^2	0.5^{3}
% nitrogen	0.025 - 0.030	
% ash	negligible	0.1 1

Note: The values listed are "typical" values based upon 1) information gathered by laboratory analysis, and 2) FPC's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data taken from the FPC fuel procurement specification

² Data from laboratory analysis

³ Data from current air permit.

Page 2 of 2

Attachment HG-EUI-I2

Fuel Analysis

Natural Gas Analysis

<u>Parameter</u>	Typical Value	Max Value
Relative density	0.58 (compared to air)	
heat content	950 - 1124 Btu/cu ft.	
% sulfur	0.43 grains/CCF ¹	1 grain/100 CF
% nitrogen	0.8% by volume	_
% ash	negligible	

Note: The values listed are "typical" values based upon information supplied to FPC by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data from laboratory analysis

ATTACHMENT HG-EU1-L6 STARTUP AND SHUTDOWN PROCEDURES

ATTACHMENT HG-EU1-L6 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 that 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-L10 ALTERNATIVE METHODS OF OPERATION

ATTACHMENT HG-EU1-L10 ALTERNATIVE METHODS OF OPERATION

Each combustion turbine unit consists of two Pratt & Whitney jet engines that can fire natural gas or new No. 2 fuel oil.

ATTACHMENT HG-EU1-L12 ADDITIONAL APPLICABLE REQUIREMENTS

0

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations).



Florida Department of Environmental Protection

Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619 813-744-6100

Virginia B. Wetherell Secretary

RECEIVED

OCT 29 1993

Environmental Svcs Department

NOTICE OF PERMIT AMENDMENT ISSUANCE

CERTIFIED MAIL

Mr. W. J. Pardue, Manager Environmental Programs Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733 DER File No.: A052-216420

County: Pinellas

Enclosed is Amended Permit Number A053-216420 to operate Higgins Peaking Unit No. 1, issued pursuant to Section 403.087, Florida Statutes and Florida Administrative Code Rules 17-200 through 297 & 17-4.

A person whose substantial interests are affected by this permit amendment may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee 32399-2400, within 14 days of receipt of this permit amendment. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

Mr. W. J. Pardue St. Petersburg, FL 33733

- (d) A statement of the material facts disputed by petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends required reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit amendment will not be effective until further Order of the Department.

When the Order (Permit Amendment) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

George W. Richardson Air Permitting Engineer Southwest District

3804 Coconut Palm Drive Tampa, FL 33619-8318 (813)744-6100, Ext. 420

cc: Pinellas County Department of Environmental Management Albert W. Morneault, P.E., Florida Power Corporation

Attachment:

CERTIFICATE OF SERVICE

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to Section 120.52(10), Florida Statutes, with the designated Deputy Department Clerk, receipt of which is hereby acknowledged.

Clerk OCT 27 1993
Date



Florida Department of Environmental Protection

Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619 813-744-6100

Virginia B. Wetherell Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042
St. Petersburg, FL 33733 /

PERMIT/CERTIFICATION

Permit No: A052-216420 County: Pinellas

Expiration Date: 11-10-97
Project: Higgins Peaking

Unit No. 1

This permit amendment is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-200 through 297 & 17-4. 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 Department and made a part hereof and specifically described as follows:

For the operation of Higgins Peaking Unit No. 1. This unit is fired with natural gas or new No. 2 fuel oil. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.5% by weight. This unit is a gas turbine unit consisting of two Pratt & Whitney jet engines. This unit is rated at 37.0 MW/hour having a maximum heat input rate of 566 MMBTU/hour. The maximum fuel usage rate is 0.57 MMCF/hour of natural gas or 96.0 BBL/hour of new No. 2 fuel oil. This unit's daily maximum performance is a function of ambient temperature, as shown in the attached graph of heat input versus ambient temperature.

Location: Booth Road, Oldsmar, Pinellas County

UTM: 17-336.5 E 3098.3 N NEDS NO: 0012 Point ID: 04

Replaces Permit No.: A052-137555

Permit No.: A052-216420 Project: Higgins Peaking

Unit No. 1

SPECIFIC CONDITIONS:

- 1. A part of this permit is the attached 15 General Conditions.
- 2. Visible emissions from Higgins Peaking Unit No. 1 shall not be equal to or greater than 20% opacity (Rule 17-296.310(2)(a), F.A.C.).
- Test Higgins Peaking Unit No. 1 for visible emissions annually within 60 days prior to January 7. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if it is not expected to be used to fire this peaking unit for more than 400 hours during the next 12 months. Florida Power Corporation shall maintain records on site for the hours this peaking unit operates. Each year, when the VE test is due, a letter must be sent to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, stating that the above limitations for the waiver have been satisfied. fuel usage, a VE test shall be required and conducted during the 6 month period prior to the submittal of an operation permit renewal application. The test report shall be submitted within 45 days of testing to the Air Section of the Department's renewal application. Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division (Rule 17-297.340, F.A.C.).
- 4. Compliance with the visible emission limitation of Specific Condition No. 2 shall be determined using DER Method 9 contained in Rule 17-297, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The minimum requirements for source emission test procedures and reporting shall be in accordance with Rule 17-297, F.A.C.
- 5. Testing of emissions shall be conducted under the conditions as outlined by Florida Power Corporation in the letter submitted to the Department dated March 29, 1993. The submitted graph for Peaking Unit No. 1 is made a part of this permit. A copy of the submitted graph noting the maximum heat input versus ambient temperature during the compliance test shall be included in the compliance test report (Rule 17-4.070(3), F.A.C.).
- 6. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which the compliance test is to begin (Rule 17-297.340(1)(i), F.A.C.).

Permit No.: A052-216420 Project: Higgins Peaking

Unit No. 1

7. Higgins Peaking Unit No. 1 is permitted to operate at the following parameters:

A. Process Parameters:

- Maximum Load Rate 37.0 MW/hour
- 2. Maximum Heat Input Rate: 566.0 MMBTU/hour
- 3. Maximum Fuel Usage: 0.57 MMCF/hour natural gas, 96.0 BBL/hour new No. 2 fuel oil having a maximum sulfur content not to exceed 0.5% by weight
- 8. The BTU heating value, sulfur content (% by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis. This average shall be used to calculate the sulfur dioxide emissions for the Annual Operating Report. To ensure the vendor's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the 12 month period. Records must be kept for a minimum of two years and be made available for inspection upon request.
- 9. Submit to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DER Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year (Rule 17-210.370(2)(a)1., F.A.C.).
- 10. Based on the original permit application, dated 9/8/77, and AP 42 emission factors, the following are the maximum potential emission rates expected from this peaking unit, and are included for informational purposes only:

	<u>pounds/hour</u>	
Particulate	34.53	151.22
Carbon Monoxide	62.26	272.70
Sulfur Dioxide	2.82	12.36
Nitrogen Oxides	395.07	1,730.40
voc	23.94	104.86

11. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 17-200 through 17-299, or any other requirements under federal, state or local law (Rule 17-210.300, F.A.C.).

Permit No.: A052-216420 Project: Higgins Peaking

Unit No. 1

12. Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions, for the Annual Operating Report, by multiplying the fuel use by the following emission factors:

	No. 2 Fuel Oil <u>Pounds/MMBTU</u>	Natural Gas <u>Pounds/MMBTU</u>
Particulate Carbon Monoxide Nitrogen Oxides	0.061 0.048 0.698	0.0419 0.11 0.44
-	No. 2 Fuel Oil Pounds/10 ³ Gallons	Natural Gas Pounds/10 ⁶ ft ³
Sulfur Dioxide	140s 5.57	940s 42

s denotes sulfur content, % by weight

Emission factors for PM, CO, & NOx from AP 42, Table 3.1-1 (10/92). Emission factors for SO2 & VOC from AP 42 tables prior to 10/92.

13. Two applications for the renewal of this operating permit shall be submitted to the Air Section of the Department's Southwest District Office and one copy of the application shall be submitted to the Pinellas County Department of Environmental Management, Air Quality Division, at least 60 days prior to the expiration date of this permit (Rule 17-4.090(1), F.A.C.).

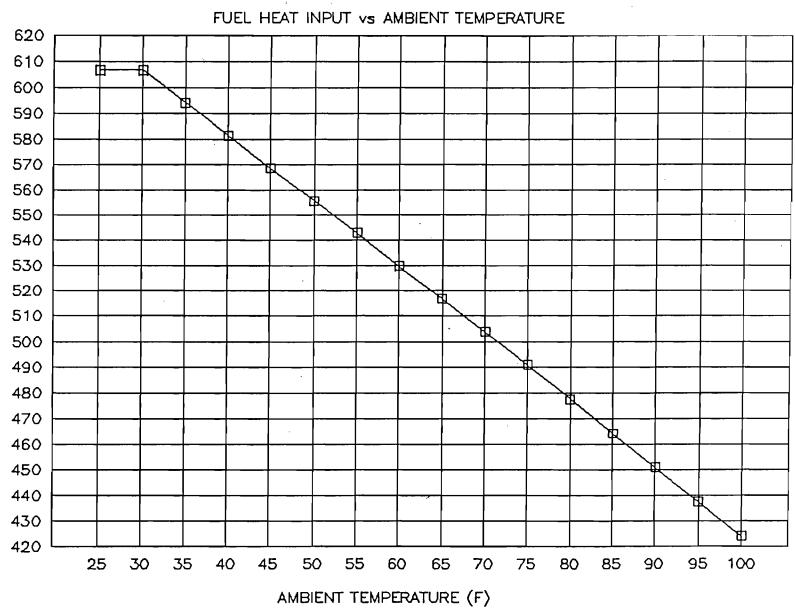
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Dr. Richard D. Garrity, Ph.D. Director of District Management

Southwest District

3804 Coconut Palm Drive Tampa, FL 33619-8318 (813)744-6100

HIGGINS P1 COMBUSTION TURBINE



PEAK

ATTACHMENT - GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

GENERAL CONDITIONS:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. a description of and cause of non-compliance; and
 - b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

GENERAL CONDITIONS:

- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Compliance with New Source Performance Standards (NSPS)

"OR"

- 14. OR 13. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.
- 15. OR 14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

ATTACHMENT HG-EU1-L13 COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT HG-EU1-L13

COMPLIANCE ASSURANCE MONITORING PLAN

Compliance Assurance Monitoring Plan will be submitted to the implementing agency by required date.

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III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	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.
2.	Single Process, Group of Processes, or Fugitive Only? 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

Emissions	Unit	Informat	ion S	ection	2	of

Peaking Gas Turbine Unit 2

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

Description of Emission Peaking Gas Turbine Un	s Unit Addressed in This Section it 2	(limit to 60 characters):
 Emissions Unit Identific 005 	ation Number: [] No Corre	esponding ID [] Unknown
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Commen	t (limit to 500 characters):	

Emissions Unit Control Equipment Information

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1.]	Description	(limit to	200	characters)	:
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2. Control Device or Method Code:

B. •

1.	Description	(limit t	to 200	characters))
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2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

<u>Visible Emissions Limitations</u>: 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: EPA Method 9
5.	Visible Emissions Comment (limit to 200 characters): Rule 62-296.310(2)(a)
Visible	e Emissions Limitations: Visible Emissions Limitation 2 of 2
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: EPA Method 9
5.	Visible Emissions Comment (limit to 200 characters): 1. Rule 62-210.700(1); excess emissions from startup, shutdown and malfunction, not to exceed 2 hr in 24 hr

Emissions Unit Information Section	2	of	8	Peaking Gas Turbine Unit 2
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Cont	inuous Monitoring System Continuou	is Monitor of			
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement: [] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:			
5.	Installation Date:				
6.	Performance Specification Test Date:	·			
7.	Continuous Monitor Comment (limit to	o 200 characters):			
<u>Cont</u>	inuous Monitoring System Continuou	as Monitor of			
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement: [] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:			
5.	Installation Date:				
6.	Performance Specification Test Date:				
7.	7. Continuous Monitor Comment (limit to 200 characters):				

Emissions	Unit	Information	Section	2	of	8	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
 [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
 [] The facility addressed in this application is classified as an EPA major source and
- The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- [] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM] C [X] Unknown] E SO₂] C] E [x] Unknown NO₂ 1 C] E [x] Unknown 4 Baseline Emissions: PM lb/hour tons/year lb/hour tons/year SO_2 NO_2 tons/year 5. PSD Comment (limit to 200 characters): Baseline emissions not known.

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram			
	[X] Attached, Document ID: HG-EU1-L1 [Not Applicable	[]	Waiver Requested	
2.	Fuel Analysis or Specification	ь ,		
	1 del 7 dialysis of Specification			
	[x] Attached, Document ID: HG-EU1-L2			
	[] Not Applicable	[]	Waiver Requested	
3.	Detailed Description of Control Equipment			
	[] Attached, Document ID:			
	[x] Not Applicable	r 1	Waiver Requested	
4.	Description of Stack Sampling Facilities		•	
	Attached, Document ID:	r 1	117 ° D	
	[x] Not Applicable	[]	Waiver Requested	
5.	Compliance Test Report			
	Attached, Document ID:	[]	Not Applicable	
	[X] Previously Submitted, Date: 12 Jan 1992		1 P	
6.	Procedures for Startup and Shutdown		· · · · · · · · · · · · · · · · · · ·	
	[x] Attached, Document ID: HG-EU1-L6	<u> </u>	Not Applicable	
7.	Operation and Maintenance Plan			
	[] Attached, Document ID:	[x]	Not Applicable	
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	

Emissions Unit Information Section	2	of 8	
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Peaking Gas Turbine Unit 2

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation		
	[X] Attached, Document ID: HG-EU1-L10 [] 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-EU2-L12 [] Not Applicable		
13.	Compliance Assurance Monitoring Plan		
	[] Attached, Document ID: [x] Not Applicable		
14.	Acid Rain Permit 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:		
	[x] Not Applicable		

DEP Form No. 62-210.900(1) - Form

ATTACHMENT HG-EU2-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU2-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU2: Peaking Units Gas Turbine No. 2 - FPC Higgins Plant

FDEP Rules:

Stationary Sources-General:

62-210.700(1)

62-210.700(4)

- Maintenance

62-210.700(6)

Stationary Sources-Emission Standards/RACT:

62-296.320(4)(b)(State Only) - General VE

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)(e) - Records and Inspection

Stationary Sources-Emission Monitoring:

•	
62-297.310(2)(a)	- Operating Rate; reserved for CTs
62-297.310(4)(a)2.	- Applicable Test Procedures; Sampling time
62-297.310(5)	- Determination of Process Variables
62-297.310(7)(a)3.	- Permit Renewal Test Required

62-297.310(7)(a)4.

62-297.310(7)(a)8 - CT exemption if < 400 hrs/yr; VE test once every 5 years

62-297.310(7)(a)9. - FDEP Notification - 15 days

62-297.310(8) - Test Reports

^{*} 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-L12 ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations).

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Governor

Florida Department of Environmental Protection

Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619 813-744-6100

Virginia B. Wetherell Secretary

PERMITTEE:

Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733 /

PERMIT/CERTIFICATION

Permit No: A052-216421 County: Pinellas

Expiration Date: 11-10-97 Project: Higgins Peaking

Unit No. 2

This permit amendment is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-200 through 297 & 17-4. 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 Department and made a part hereof and specifically described as follows:

For the operation of Higgins Peaking Unit No. 2. This unit is fired with natural gas or new No. 2 fuel oil. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.5% by weight. This unit is a gas turbine unit consisting of two Pratt & Whitney jet engines. This unit is rated at 37.0 MW/hour having a maximum heat input rate of 566 MMBTU/hour. The maximum fuel usage rate is 0.57 MMCF/hour of natural gas or 96.0 BBL/hour of new No. 2 fuel oil. This unit's daily maximum performance is a function of ambient temperature, as shown in the attached graph of heat input versus ambient temperature.

Location: Booth Road, Oldsmar, Pinellas County

UTM: 17-336.5 E 3098.3 N NEDS NO: 0012 Point ID: 05

Replaces Permit No.: A052-137556

Permit No.: A052-216421
Project: Higgins Peaking
Unit No. 2

SPECIFIC CONDITIONS:

- 1. A part of this permit is the attached 15 General Conditions.
- 2. Visible emissions from Higgins Peaking Unit No. 2 shall not be equal to or greater than 20% opacity (Rule 17-296.310(2)(a), F.A.C.).
- Test Higgins Peaking Unit No. 2 for visible emissions annually within 60 days prior to January 7. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if it is not expected to be used to fire this peaking unit for more than 400 hours during the next 12 months. Florida Power Corporation shall maintain records on site for the hours this peaking unit Each year, when the VE test is due, a letter must be sent to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, stating that the above limitations for the waiver have been satisfied. Regardless of fuel usage, a VE test shall be required and conducted during the 6 month period prior to the submittal of an operation permit renewal application. The test report shall be submitted within 45 days of testing to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division (Rule 17-297.340, F.A.C.).
- 4. Compliance with the visible emission limitation of Specific Condition No. 2 shall be determined using DER Method 9 contained in Rule 17-297, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The minimum requirements for source emission test procedures and reporting shall be in accordance with Rule 17-297, F.A.C.
- 5. Testing of emissions shall be conducted under the conditions as outlined by Florida Power Corporation in the letter submitted to the Department dated March 29, 1993. The submitted graph for Peaking Unit No. 2 is made a part of this permit. A copy of the submitted graph noting the maximum heat input versus ambient temperature during the compliance test shall be included in the compliance test report (Rule 17-4.070(3), F.A.C.).
- 6. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which the compliance test is to begin (Rule 17-297.340(1)(i), F.A.C.).

Permit No.: A052-216421
Project: Higgins Peaking
Unit No. 2

7. Higgins Peaking Unit No. 2 is permitted to operate at the following parameters:

A. Process Parameters:

1. Maximum Load Rate: 37.0 MW/hour

Maximum Heat Input Rate: 566 MMBTU/hour

3. Maximum Fuel Usage: 0.57 MMCF/hour of natural gas,
96 BBL/hour of new No. 2 fuel oil
having a maximum sulfur content
not to exceed 0.5% by weight

- 8. The BTU heating value, sulfur content (% by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis. This average shall be used to calculate the sulfur dioxide emissions for the Annual Operating Report. To ensure the vendor's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the 12 month period. Records must be kept for a minimum of two years and be made available for inspection upon request.
- 9. Submit to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DER Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year (Rule 17-210.370(2)(a)1., F.A.C.).
- 10. Based on the original permit application, dated 9/8/77, and AP 42 emission factors, the following are the maximum potential emission rates expected from this peaking unit, and are included for informational purposes only:

pounds/hour		tons/year
34.53		151.22
62.26		272.70
2.82		12.36
395.07		1,730.40
23.94		104.86
	34.53 62.26 2.82 395.07	34.53 62.26 2.82 395.07

11. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 17-200 through 17-299, or any other requirements under federal, state or local law (Rule 17-210.300, F.A.C.).

Permit No.: A052-216421 Project: Higgins Peaking

Unit No. 2

12. Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions, for the Annual Operating Report, by multiplying the fuel use by the following emission factors:

	No. 2 Fuel Oil Pounds/MMBTU	Natural Gas Pounds/MMBTU
Particulate	0.061	0.0419
Carbon Monoxide	0.048	0.11
Nitrogen Oxides	0.698	0.44
	No. 2 Fuel Oil Pounds/10 ³ Gallons	Natural Gas Pounds/10 ⁶ ft ³
Sulfur Dioxide VOC	140s 5.57	940s 42

s denotes sulfur content, % by weight

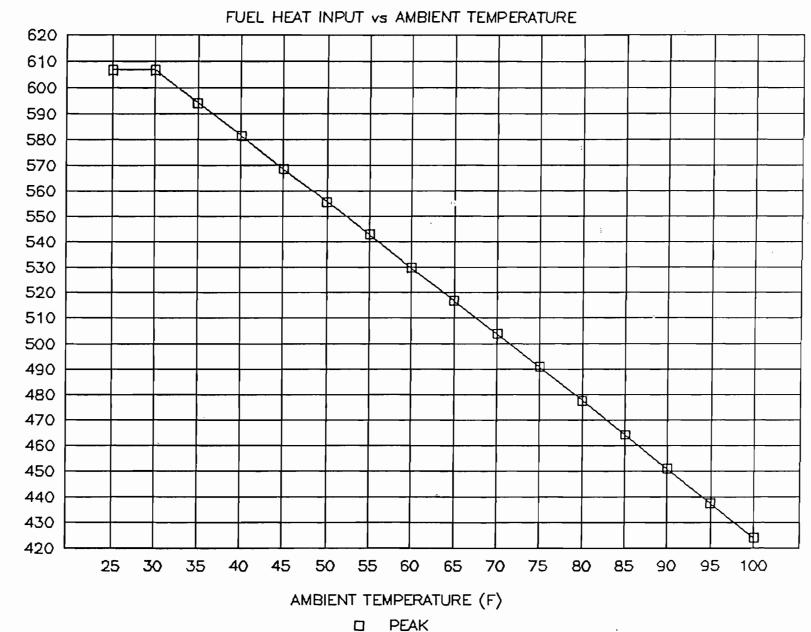
Emission factors for PM, CO, & NOx from AP 42, Table 3.1-1 (10/92). Emission factors for SO2 & VOC from AP 42 tables prior to 10/92.

13. Two applications for the renewal of this operating permit shall be submitted to the Air Section of the Department's Southwest District Office and one copy of the application shall be submitted to the Pinellas County Department of Environmental Management, Air Quality Division, at least 60 days prior to the expiration date of this permit (Rule 17-4.090(1), F.A.C.).

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Dr. Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

3804 Coconut Palm Drive Tampa, FL 33619-8318 (813)744-6100



FUEL FLOW (MBTU/HOUR)

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: 12 Apr 1969

2. Long-term Reserve Shutdown Date:

3. Package Unit:
 Manufacturer: Pratt & Whitney

4. Generator Nameplate Rating:

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

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:

2. Maximum Incineration Rate:

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate:

5. Operating Capacity Comment (limit to 200 characters):

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

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24 hours/day

7 days/week

52 weeks/yr

8,760 hours/yr

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable		

Emissions Unit Information Section	2	of	8	
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<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

	<u> </u>	 	,	 	
ı	See Attachment HG-EU2-D				
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Emissions Unit Information Section	2	of	8
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E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

1.	Identification of	f Po	oint on Plo	t Plan	or	Flov	w Dia	gra.	m:		
2.	Emission Point	Ту	pe Code:								
	[x]1	[] 2		[] 3			[] 4	
3.	Descriptions of to 100 characte			ints C	Com	pris	ing th	is F	Emiss	sions Unit for VE Tracking (limit	
	Gas turbine gas	ses	exhaust th	ırougl	n a :	sing	le sta	ck p	oer tu	urbine unit	
			. -				_				
4.		De	escriptions	of En	iissi	ion (Units	wit	h this	is Emission Point in Common	
	Not Applicable										
5.	Discharge Type	C	ode:								
	[]D []R	[] F v 1 V	[]	H W		[] P	D	
_			. v] .	L						Carl	
6.	Stack Height:								56	feet	
7.	Exit Diameter:								15.1	.1 feet	
8.	Exit Temperatu	re:							850	o °F	

Source Information Section	2	of	8	
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9.	Actual Volumeti	ric Flow Rate		1,000,000	acfm
10.	Percent Water V	apor:			%
11.	Maximum Dry S	tandard Flov	v Rate:		dscfm
12.	Nonstack Emissi	on Point He	ght:		feet
13.	Emission Point U	JTM Coordi	nates:		
	Zone: 17	East (km):	336.5	North	(km): 3098.4
14.	Emission Point (Comment (lin	nit to 200 char	acters):	

Emissions	Unit	Information	Section	2	of	8	
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F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ___2

1. Segment Description (Process/Fuel Ty (limit to 500 characters):	pe and Associated Operating Method/Mode)						
Internal Combustion Electric Generation	Internal Combustion Electric Generation Dist. Oil/Diesel-Turbine						
2. Source Classification Code (SCC):	-01-001-01						
3. SCC Units:	<i>₽</i>						
Thousand Gallons Burned							
4. Maximum Hourly Rate:	5. Maximum Annual Rate:						
4.101	35,929						
6. Estimated Annual Activity Factor:							
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:						
0.5	0.1						
9. Million Btu per SCC Unit:							
	138						
10. Segment Comment (limit to 200 chara	acters):						
Heat content-HHV							
	e e						

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel	Type and	Associated	Operating	Method/Mode)
(limit to 500 characters):				

Internal Combustion 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:

4,958

- 6. Estimated Annual Activity Factor:
- 7. Maximum Percent Sulfur:
- 8. Maximum Percent Ash:
- 9. Million Btu per SCC Unit:

1,000

10. Segment Comment (limit to 200 characters):

Hourly fuel rate - permit limit

DEP Form No. 62-210.900(1) - Form

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

SO2 PM PM10 NOx CO VOC H133 HAPS	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code		
	.**		EL NS NS NS NS NS		
	÷				

Emissions	Unit	Information	Section	2	of	8
	CILL	IIIOI III IIIIIIII				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: SO2						
2. Total Percent Efficiency of Co	2. Total Percent Efficiency of Control: 0 %					
3. Potential Emissions:	287.1 lb/hour	1,258 tons/year				
4. Synthetically Limited? [] Yes [x] No					
5. Range of Estimated Fugitive/Other Emissions:						
[]1 []2 [] 3 to	tons/yr				
6. Emission Factor:	0.5 %sulfur					
Reference: AO Permit limit		o-				
7. Emissions Method Code:						
[x]0 []1 []2 []3 []4	[]5				
8. Calculation of Emissions (limit	to 600 characters):					
See Attachment HG-EU1-H8						
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):						
Permit limit based on AP-42 emis	sion factor.					

28

6/3/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

Emissions Unit Information Section 2 of 8 Allowable Emissions (Pollutant identified on front page)

Α.	
1.	Basis for Allowable Emissions Code: OTHER
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
	0.5 percent sulfur
4.	Equivalent Allowable Emissions: 287.1 lb/hour 1,258 tons/year
5.	Method of Compliance (limit to 60 characters):
	Fuel oil analysis during compliance test
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	Permit limit
1	

B.

Basis for Allowable Emissions Code	e:	
2. Future Effective Date of Allowable	Emissions:	
3. Requested Allowable Emissions and	l Units:	
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60	characters):	
6. Pollutant Allowable Emissions Com (limit to 200 characters):	nment (Desc. of Related Operatir	ng Method/Mode)

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

6/3/96

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	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.
2.	Single Process, Group of Processes, or Fugitive Only? 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.

Emissions	Unit	Inform	ation	Section	3	of	8	

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1.	Description of Emission Peaking Gas Turbine Un	s Unit Addressed in This Section it 3	(limit to 60 characters):
2.	Emissions Unit Identific	ation Number: [] No Corre	esponding ID [] Unknown
3.	Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code: 49
6.	Emissions Unit Commen	t (limit to 500 characters):	

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

6/1/96

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

Initial Startup Date: 1 Dec 1970

 Long-term Reserve Shutdown Date:

 Package Unit:
 Manufacturer: Pratt & Whitney

Model Number:

4. Generator Nameplate Rating: 43 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

٥F

Incinerator Afterburner Temperature:

Emissions Unit Operating Capacity

- 3. Maximum Process or Throughput Rate:
- 4. Maximum Production Rate:
- 5. Operating Capacity Comment (limit to 200 characters):

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

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24 hours/day 7 days/week

52 weeks/yr **8,760** hours/yr

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable	

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment HG-EU3-D		-	
		0	
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Emissions	Unit	Information	Section	3	of	

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

Emission Point Description and Type

1.	Identification of	f Point on Plo	t Plan or Flow	v Diagram:	
2.	Emission Point	Type Code:			
	[x]1	[]2	[]3	[]4	ļ
3.	Descriptions of to 100 characte		oints Comprisi	ng this Emission	s Unit for VE Tracking (limit
	Gas turbine gas	ses exhaust t	nrough a singl	e stack per turbi	ne unit
	ID Numbers or	Descriptions	of Emission I	Inita with this E	mission Point in Common
4.	Not Applicable	Descriptions	of Emission C	ints with this El	mission Point in Common:
	• •				
5.	Discharge Type		. 177	f 15	
	[]D []R	[]F [x]V	[]H []W	[]P	
6.	Stack Height:			55	feet
7.	Exit Diameter:			15.1	feet
8.	Exit Temperatu	re:		850	°F

Source Information Section	3	of	8
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	A street Malesmant	nia Elass Data		4 222 222	
J 9.	Actual Volumet	nc Flow Kate	3 :	1,000,000	acım
10.	Percent Water V	Vapor:	-		%
11.	Maximum Dry S	Standard Flov	v Rate:		dscfm
<u> </u>					
12.	Nonstack Emiss	ion Point Hei	ght:		feet
13.	Emission Point	UTM Coordi	nates:		
	Zone: 17	East (km):	336.5	North	(km): 3098.4
14.	Emission Point	Comment (lin	nit to 200 chara	acters):	
	See Attachment	HG-EU1-H8			
			٤		

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ____

 Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): 					
Internal Combustion Electric Generation Dist. Oil/Diesel Turbine					
•					
2. Source Classification Code (SCC):	04 004 04				
	-01-001-01				
3. SCC Units:					
Thousand Gallons Burned	<i>⊙</i>				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:				
4.572	40,055				
6. Estimated Annual Activity Factor:					
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:				
0.5	0.1				
9. Million Btu per SCC Unit:					
	138				
10. Segment Comment (limit to 200 chara	acters):				
Heat content-HHV					

25

6/9/96 14424Y/F1/TVEU3SI

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):					
Internal Combustion 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 Percent Sulfur:	8. Maximum Percent Ash:				
9. Million Btu per SCC Unit:	1,000				
10. Segment Comment (limit to 200 chara Hourly fuel rate - permit limit	acters):				

26

DEP Form No. 62-210.900(1) - Form

Effective: 03-21-96

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
PM			NS
PM10			NS
NOx			NS
CO			NS
VOC H133	<i></i>		NS NS
HAPS			NS
	٤		
•			
·			

Emissions	Unit	Inform	ation	Section	3	of	8	

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: SO2					
2. Total Percent Efficiency of C	Control:	0 %			
3. Potential Emissions:	320 lb/hour	1,402 tons/year			
4. Synthetically Limited? [] Yes [x] No				
5. Range of Estimated Fugitive	/Other Emissions:				
[]1 []2 []3	_ to tons/yr			
6. Emission Factor:	0.5 %sulfur				
Reference: AO Permit limit					
7. Emissions Method Code:		,			
[x]0 []1 []2 []3	[]4 []5			
8 Calculation of Emissions (lim	oit to 600 characters):				
8. Calculation of Emissions (limit to 600 characters):					
See Attachment HG-EU1-H8					
•					
·		·			
•					
O Dellutent Detential/Estimated Emissions Comment (limit to 200 share store):					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):					
Permit limit based on AP-42 em	ission factor.				

Emissions Unit Information Section	3	of _	8 .
Allowable Emissions (Pollutant ident	ified	on front	page)

llowable	Emissions	(Pollutant	identified	on	front	pa
A.						

1.	Basis for Allowable Emissions Code: OTHER
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
	0.5 percent sulfur
4.	Equivalent Allowable Emissions: 320 lb/hour 1,402 tons/year
5.	Method of Compliance (limit to 60 characters):
	Fuel oil analysis during compliance test
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	AO Permit limit

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emis	sions:	
3. Requested Allowable Emissions and Uni	ts:	·
4. Equivalent Allowable Emissions:	lb/hour	tons/year
5. Method of Compliance (limit to 60 chara	acters):	
6. Pollutant Allowable Emissions Comment (limit to 200 characters):	(Desc. of Related Operation	ng Method/Mode)

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 2 **VE20** 1. Visible Emissions Subtype: 2. Basis for Allowable Opacity: [x] Rule 1 Other Requested Allowable Opacity 3. Normal Conditions: 20 % **Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: **EPA Method 9 during compliance test** 5. Visible Emissions Comment (limit to 200 characters): Rule 62-296.310(2)(a) <u>Visible Emissions Limitations</u>: Visible Emissions Limitation ² of ² 1. Visible Emissions Subtype: **VE** [x] Rule 2. Basis for Allowable Opacity:] Other Requested Allowable Opacity 3. 100 % Normal Conditions: **Exceptional Conditions:** Maximum Period of Excess Opacity Allowed: 60 min/hour 4. Method of Compliance: **EPA Method 9** Visible Emissions Comment (limit to 200 characters): 5. 1. Rule 62-210.700(1); excess emissions from startup, shutdown and malfunction, not to exceed 2 hr in 24 hr

30

DEP Form No. 62-210.900(1) - Form

Emissions Unit Information Section	3	of	8	Peaking Gas Turbine Unit 3

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM 1 C]E [X] Unknown SO₂ 1 C [x] Unknown 1 E [x] Unknown NO₂ 1 C] E Baseline Emissions: PM lb/hour tons/year SO₂ lb/hour tons/year NO₂ tons/year 5. PSD Comment (limit to 200 characters): Baseline emissions not known.

33

6/9/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

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

Supplemental Requirements for All Applications

[X] Attached, Document ID: HG-EU1-L1 [] Not Applicable [] Waiver Requested	
2. Fuel Analysis or Specification	
[x] Attached, Document ID: HG-EU1-L2 [] 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:	
5. Compliance Test Report	
[] Attached, Document ID: [] Not Applicable [x] Previously Submitted, Date:	
6. Procedures for Startup and Shutdown	
[x] Attached, Document ID: HG-EU1-L6 [] Not Applicable	
7. Operation and Maintenance Plan	
[] Attached, Document ID: [x] Not Applicable	
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	

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation		
	[x]	Attached, Document ID: HG-EU1-L10 [] Not Applicable	
11.	Alternative Modes of Operation (Emissions Trading)		
	[]	Attached, Document ID: [x] Not Applicable	
12.	Identif	fication of Additional Applicable Requirements	
	[x]	Attached, Document ID: HG-EU3-L12 [] Not Applicable	
13.	Comp	liance Assurance Monitoring Plan	
	[x]	Attached, Document ID: HG-EU1-L13 [] Not Applicable	
14.	Acid Rain Permit 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:	
	[x]	Not Applicable	

DEP Form No. 62-210.900(1) - Form

ATTACHMENT HG-EU3-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU3-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU3: Unit 1(FFSG) - FPC Higgins Plant

FDEP Rules:

62-296.700(6)(e)

Air Pollution Control-General Provisions:		
62-204.800(12) (State Only)		
62-204.800(13) (State Only)		
62-204.800(13) (State Only)	- Acid Rain Program Monitoring	
02-204.800(14) (State Only)	- Acid Rain i rogram Womtoring	
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 Sta	andards/RACT:	
62-296.320(4)(b) (State Only)	- General VE	
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	

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

- Records and Inspection

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(a)	- Operating Rate; reserved for CTs
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)(a)2.	- Applicable Test Procedures; Sampling time
62-297.310(4)(b)	- Sample Volume
62-297.310(4)(c)	- Required Flow Rate Range-PM/H ₂ SO 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)8	- CT exemption if < 400 hrs/yr; VE test once every 5 years
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:	
redetal 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

- SO₂ Allowances-no deduction for 72.9(c)(1)(i) 40 CFR 72.9(c)(5) 40 CFR 72.9(e) - Excess Emission Requirements - Recordkeeping and Reporting 40 CFR 72.9(f) - Liability 40 CFR 72.9(g) - Designated Representative; required 40 CFR 72.20(a) - Designated Representative; legally binding 40 CFR 72.20(b) - Designated Representative; certification requirements 40 CFR 72.20(c) - Submissions 40 CFR 72.21 - Alternate Designated Representative 40 CFR 72.22 40 CFR 72.23 - Changing representatives; owners - Requirements to Apply (operate) 40 CFR 72.30(a) - Requirements to Apply (reapply before expiration) 40 CFR 72.30(c) - Requirements to Apply (submittal requirements) 40 CFR 72.30(d)

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 40 CFR 75.5 40 CFR 75.10(a)(1) 40 CFR 75.10(a)(2)	- Compliance Dates - Prohibitions - Primary Measurement; SO ₂ ; except 75.11&.16; Subpart D - 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
10 0110 (2)(1)	Transaction of the state of the
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

Appendix C-2. Appendix F - Missing Data; Load-Based Procedure; NO _x & flow - Conversion Procedures	Appendix A-6. Appendix B - Certification Tests and Procedures - QA/QC Procedures	Appendix A-6. Appendix B Appendix C-1. Appendix C-2. Appendix F Appendix G-2.	 Reporting Requirements-Certification/Recertification Reporting Requirements-Quarterly reports; submission Reporting Requirements-Quarterly reports; DR statem Rep. Req.; Quarterly reports; Compliance Certification Rep. Req.; Quarterly reports; Electronic format Opacity Reports Performance Specifications Data Handling and Acquisition Systems Calibration Gases Certification Tests and Procedures QA/QC Procedures Missing Data; SO₂/NOx for controlled sources Missing Data; Load-Based Procedure; NO_x & flow Conversion Procedures Determination of CO₂; from combustion sources
••	Appendix C-2 Missing Data; Load-Based Procedure; NO _x & flow		•
Appendix A-6. Appendix B - Certification Tests and Procedures - QA/QC Procedures		Appendix A-4.	Performance SpecificationsData Handling and Acquisition Systems
Appendix A-4. Appendix A-5. Appendix A-6. Appendix B - Data Handling and Acquisition Systems - Calibration Gases - Certification Tests and Procedures - QA/QC Procedures	Appendix A-4 Data Handling and Acquisition Systems	* *	
40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-5. Appendix A-6. Appendix B - Opacity Reports - Performance Specifications - Data Handling and Acquisition Systems - Calibration Gases - Certification Tests and Procedures - QA/QC Procedures	40 CFR 75.65 - Opacity Reports Appendix A-3 Performance Specifications Appendix A-4 Data Handling and Acquisition Systems	40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statem
40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-5. Appendix A-6. Appendix B - Reporting Requirements-Quarterly reports; DR statem - Rep. Req.; Quarterly reports; Compliance Certification - Rep. Req.; Quarterly reports; Electronic format - Opacity Reports - Performance Specifications - Data Handling and Acquisition Systems - Calibration Gases - Certification Tests and Procedures - QA/QC Procedures	40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.65 Appendix A-3. Appendix A-4. - Reporting Requirements-Quarterly reports; DR states of the sequence o	40 CFR 75.63	- Reporting Requirements-Certification/Recertification
- Reporting Requirements-Certification/Recertification - Reporting Requirements-Quarterly reports; submissio - Reporting Requirements-Quarterly reports; Submissio - Reporting Requirements-Quarterly reports; DR staten - Rep. Req.; Quarterly reports; Compliance Certification - Rep. Req.; Quarterly reports; Electronic format - Opacity Reports - Opacity Reports - Performance Specifications - Performance Specifications - Data Handling and Acquisition Systems - Calibration Gases - Certification Tests and Procedures - QA/QC Procedures	- Reporting Requirements-Certification/Recertificat 40 CFR 75.64(a) - Reporting Requirements-Quarterly reports; submit 40 CFR 75.64(b) - Reporting Requirements-Quarterly reports; DR sta 40 CFR 75.64(c) - Rep. Req.; Quarterly reports; Compliance Certificat 40 CFR 75.64(d) - Rep. Req.; Quarterly reports; Electronic format 40 CFR 75.65 - Opacity Reports - Opacity Reports - Performance Specifications - Performance Specification Systems		- Reporting Requirements-General
- 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 statem 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	- Reporting Requirements-Notification cert/recertification CFR 75.63 - Reporting Requirements-Certification/Recertification/Re		•
40 CFR 75.55 40 CFR 75.56 40 CFR 75.60 40 CFR 75.61 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-5. Appendix B - Monitoring Plan - Certification; QA/QC Provisions - Reporting Requirements-General - Reporting Requirements-Notification cert/recertification - Reporting Requirements-Certification/Recertification - Reporting Requirements-Quarterly reports; submission - Reporting Requirements-Quarterly reports; DR staten - Reporting Requirements-Pount of Procedures - Reporting Requirements-Pount of Pro	40 CFR 75.55 40 CFR 75.56 40 CFR 75.60 40 CFR 75.61 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c)	40 CFR 75.54(e)	- Recordkeeping-CO ₂
40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.55 40 CFR 75.56 40 CFR 75.60 40 CFR 75.60 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.65 40 CFR 75.64(d) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.65 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.64(d)	40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.55 40 CFR 75.60 40 CFR 75.60 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(d) 40 CFR 75.65 Appendix A-3. Appendix A-4. - Recordkeeping-CO ₂ - Recordkeeping-Opacity - Recordkeeping-CO ₂ - Recordkeeping-CO ₂ - Recordkeeping-CO ₂ - Recordkeeping-Opacity - Recordkeeping-CO ₂ - Recordkeeping-CO ₂ - Recordkeeping-CO ₂ - Recordkeeping-Opacity - Nonitoring Plan - Certification; QA/QC Provisions - Reporting Requirements-General - Reporting Requirements-Certification/Recert	40 CFR 75.54(c)	- Recordkeeping-SO ₂
40 CFR 75.54(c) 40 CFR 75.54(d) 40 CFR 75.54(e) 40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.55 40 CFR 75.55 40 CFR 75.60 40 CFR 75.60 40 CFR 75.61 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.66(b) 40 CFR 75.66(c) 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c) 40 CFR 75.65 40 CFR 75.64(c)	40 CFR 75.54(c) 40 CFR 75.54(d) 40 CFR 75.54(e) 40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.55 40 CFR 75.55 40 CFR 75.60 40 CFR 75.60 40 CFR 75.60 40 CFR 75.60 40 CFR 75.61 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(c) 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.65 40 CFR 75.65 40 CFR 75.64(d) 40 CFR 75.65(d) 40 CFR 75.65(d) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.65(d) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.64(d) 40 CFR 75.65(d) 40 CFR 75.64(d) 40 CFR 75.65(d) 40 C		

^{*} 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-L12 ADDITIONAL APPLICABLE REQUIREMENTS



Florida Department of Environmental Protection

Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619 813-744-6100

Virginia B. Wetherell Secretary

PERMITTEE:

Florida Power Corporation Post Office Box 14042 St. Petersburg, FL 33733 /

PERMIT/CERTIFICATION

Permit No: A052-216422

County: Pinellas
Expiration Date: 11-10-97

Project: Higgins Peaking

Unit No. 3

This permit amendment is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-200 through 297 & 17-4. 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 Department and made a part hereof and specifically described as follows:

For the operation of Higgins Peaking Unit No. 3. This unit is fired with natural gas or new No. 2 fuel oil. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.5% by weight. This unit is a gas turbine unit consisting of two Pratt & Whitney jet engines. This unit is rated at 42.9 MW/hour having a maximum heat input rate of 631 MMBTU/hour. The maximum fuel usage rate is 0.63 MMCF/hour of natural gas or 107.0 BBL/hour of new No. 2 fuel oil. This unit's daily maximum performance is a function of ambient temperature, as shown in the attached graph of heat input versus ambient temperature.

Location: Booth Road, Oldsmar, Pinellas County

UTM: 17-336.5 E 3098.3 N NEDS NO: 0012 Point ID: 06

Replaces Permit No.: A052-137557

Permit No.: A052-216422
Project: Higgins Peaking
Unit No. 3

SPECIFIC CONDITIONS:

- 1. A part of this permit is the attached 15 General Conditions.
- 2. Visible emissions from Higgins Peaking Unit No. 3 shall not be equal to or greater than 20% opacity (Rule 17-296.310(2)(a), F.A.C.).
- Test Higgins Peaking Unit No. 3 for visible emissions annually within 60 days prior to January 7. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if it is not expected to be used to fire this peaking unit for more than 400 hours during the next 12 months. Florida Power Corporation shall maintain records on site for the hours this peaking unit operates. Each year, when the VE test is due, a letter must be sent to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, stating that the above limitations for the waiver have been satisfied. Regardless of fuel usage, a VE test shall be required and conducted during the 6 month period prior to the submittal of an operation permit The test report shall be submitted within renewal application. 45 days of testing to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division (Rule 17-297.340, F.A.C.).
- 4. Compliance with the visible emission limitation of Specific Condition No. 2 shall be determined using DER Method 9 contained in Rule 17-297, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The minimum requirements for source emission test procedures and reporting shall be in accordance with Rule 17-297, F.A.C.
- 5. Testing of emissions shall be conducted under the conditions as outlined by Florida Power Corporation in the letter submitted to the Department dated March 29, 1993. The submitted graph for Peaking Unit No. 3 is made a part of this permit. A copy of the submitted graph noting the maximum heat input versus ambient temperature during the compliance test shall be included in the compliance test report (Rule 17-4.070(3), F.A.C.).
- 6. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which the compliance test is to begin (Rule 17-297.340(1)(i), F.A.C.).

Permit No.: A052-216422 Project: Higgins Peaking

Unit No. 3

7. Higgins Peaking Unit No. 3 is permitted to operate at the following parameters:

A. <u>Process Parameters:</u>

1. Maximum Load Rate: 42.9 MW/hour

2. Maximum Heat Input Rate: 631 MMBTU/hour

. Maximum Fuel Usage: 0.63 MMCF/hour of natural gas,
107.0 BBL/hour of new No. 2 fuel
oil having a maximum sulfur
content not to exceed 0.5% by
weight

- 8. The BTU heating value, sulfur content (% by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis. This average shall be used to calculate the sulfur dioxide emissions for the Annual Operating Report. To ensure the vendor's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the 12 month period. Records must be kept for a minimum of two years and be made available for inspection upon request.
- 9. Submit to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DER Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year (Rule 17-210.370(2)(a)1., F.A.C.).
- 10. Based on the original permit application, dated 9/8/77, and AP 42 emission factors, the following are the maximum potential emission rates expected from this peaking unit, and are included for informational purposes only:

	pounds/hour	tons/year
Particulate	38.49	168.59
Carbon Monoxide	69.41	304.42
Sulfur Dioxide	3.15	13.78
Nitrogen Oxides	440.44	1,929.12
voc	26.46	115.89

11. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 17-200 through 17-299, or any other requirements under federal, state or local law (Rule 17-210.300, F.A.C.).

Permit No.: A052-216422 Project: Higgins Peaking

Unit No. 3

12. Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions, for the Annual Operating Report, by multiplying the fuel use by the following emission factors:

	No. 2 Fuel Oil <u>Pounds/MMBTU</u>	Natural Gas Pounds/MMBTU
Particulate	0.061	0.0419
Carbon Monoxide	0.048	0.11
Nitrogen Oxides	0.698	0.44
	No. 2 Fuel Oil Pounds/10 ³ Gallons	
Sulfur Dioxide VOC	140s	940s 42
V U C	5.57	42

s denotes sulfur content, % by weight

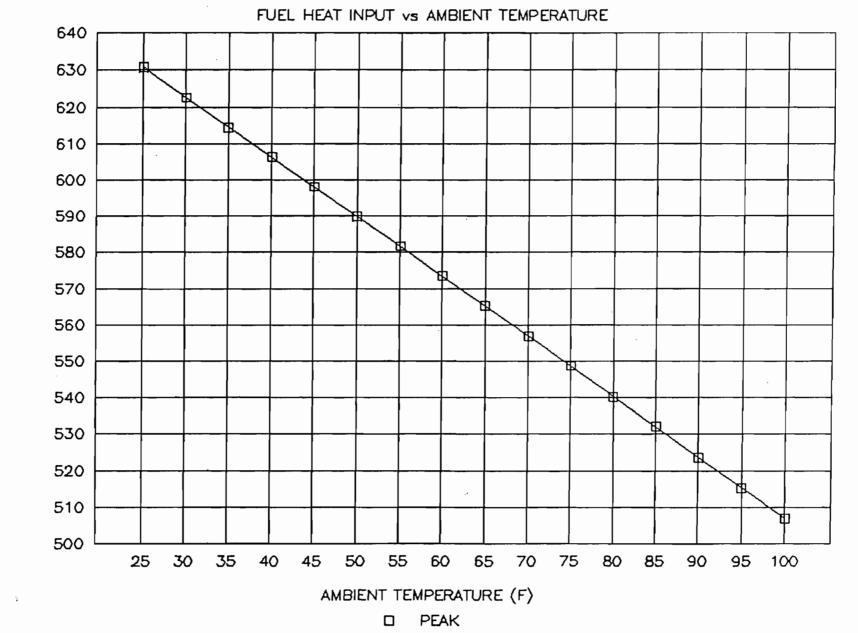
Emission factors for PM, CO, & NOx from AP 42, Table 3.1-1 (10/92). Emission factors for SO2 & VOC from AP 42 tables prior to 10/92.

13. Two applications for the renewal of this operating permit shall be submitted to the Air Section of the Department's Southwest District Office and one copy of the application shall be submitted to the Pinellas County Department of Environmental Management, Air Quality Division, at least 60 days prior to the expiration date of this permit (Rule 17-4.090(1), F.A.C.).

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Dr. Richard D. Garrity, Ph.D. Director of District Management Southwest District

3804 Coconut Palm Drive Tampa, FL 33619-8318 (813)744-6100



FUEL FLOW (MBTU/HOUR)

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	R	egulated 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.
2.	Si	ngle Process, Group of Processes, or Fugitive Only? 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.

17

DEP Form No. 62.210.900(1) - Form

Effective: 03-21-96

Emissions	Unit 1	Information	Section	4	of	8	

Peaking Gas Turbine Unit 4

B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

 Description of Emissions Unit Addressed in This Section (limit to 60 characters): Peaking Gas Turbine Unit 4 				
2. Emissions Unit Identific	ation Number: [] No Corre	esponding ID [] Unknown		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [X] No	5. Emissions Unit Major Group SIC Code: 49		
6. Emissions Unit Commen	t (limit to 500 characters):			

6/1/96

Emissions Unit Control Equipment Information

4	L	
Æ	٠	

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C...

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

Model Number:
43 MW
-
°F seconds °F

Emissions Unit Operating Capacity

Emissions emit Operating Capacity		
Maximum Heat Input Rate:	631	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Ra	te:	
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit t	o 200 characters):	
Maximum heat input based on permit of ambient temperature(per permit co	-	ax heat input function

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:					
24	hours/day	7	days/week		
52	weeks/yr	8,760	hours/yr		

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable		
	1000000000 <u>.</u>	

Emissions	Unit Information Section	on 4	of 8
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Peaking Gas Turbine Unit 4

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment HG-EU4-D	

Emissions	Unit Information	Section	4	of	8	

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

Emission Point Description and Type

1.	Identification of	f Po	oint on Plot P	an o	or Flo	w Diagra	ım:	
2.	Emission Point	Туј	pe Code:					-
	[x]1	[] 2	[[]:	3	[]] 4
3.	Descriptions of to 100 characte			s Co	mpri	sing this	Emissi	ons Unit for VE Tracking (limit
	Gas turbine gas	ses	exhaust thro	ıgh	a sing	gle stack	per tur	bine unit
4.	ID Numbers or Not Applicable	De	escriptions of	Emi	ssion	Units wi	th this	Emission Point in Common:
5.	Discharge Type			_		_		
	[]D []R] F x] V] H] W	Ĺ] P	
6.	Stack Height:						55	feet
7.	Exit Diameter:						15.1	feet
8.	Exit Temperatu	re:	_			_	850	°F

Source Information	Section	4	οf	8
Source iniormation	Section		UI	-

Peaking Gas Turbine Unit 4

9.	Actual Volumetric Flow Rate	e :	1,000,000	acfm
10.	Percent Water Vapor:			%
11.	Maximum Dry Standard Flov	w Rate:		dscfm
12.	Nonstack Emission Point He	ight:		feet
13.	Emission Point UTM Coordi	nates:		
	Zone: 17 East (km):	336.5	North	(km): 3098.4
14.	Emission Point Comment (lin	nit to 200 char	acters):	
	See Attachment HG-EU1-H8			
				Ø.

Emissions	Unit	Information	Section	4	of	8

Peaking Gas Turbine Unit 4

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ____

 Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): 				
Internal Combustion Electric Generation	Dist. Oil/Diesel Turbine			
2. Source Classification Code (SCC):	04 004 04			
2	-01-001-01			
3. SCC Units:				
Thousand Gallons Burned				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:			
4.572	40,055			
6. Estimated Annual Activity Factor:				
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:			
0.5	0.1			
9. Million Btu per SCC Unit:				
	138			
10. Segment Comment (limit to 200 chara	acters):			
Heat content-HHV				

DEP Form No. 62-210.900(1) - Form

Segment Description and Rate: Segment 2 of 2

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Internal Combustion 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 Percent Sulfur:	8. Maximum Percent Ash:				
9. Million Btu per SCC Unit:	1,000				
10. Segment Comment (limit to 200 chara Hourly fuel rate - permit limit.	acters):				

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
PM PM10			ns ns
NOX			NS NS
CO			NS
VOC H133			ns ns
HAPS			NS
		<u>ව</u>	
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		·	

Emissions	Unit	Information Section	4	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: SO2
2. Total Percent Efficiency of Control: 0 %
3. Potential Emissions: 320 lb/hour 1,402 tons/year
4. Synthetically Limited? [] Yes [x] No
5. Range of Estimated Fugitive/Other Emissions:
[]1 []2 []3totons/yr
6. Emission Factor: 0.5 %sulfur
Reference: AO Permit limit
7. Emissions Method Code:
[x]0 []1 []2 []3 []4 []5
8. Calculation of Emissions (limit to 600 characters): See Attachment HG-EU1-H8
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Permit limit based on AP-42 emission factor.

Emissions Unit Information Section	4	_ of _	8
Allowable Emissions (Pollutant iden	tified or	ı front	page)

Α.	
1.	Basis for Allowable Emissions Code: OTHER
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
	0.5 percent sulfur
4.	Equivalent Allowable Emissions: 320 lb/hour 1,402 tons/year
5.	Method of Compliance (limit to 60 characters):
	Fuel oil analysis during compliance test
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	AO Permit limit

В.

1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emission	s:	
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters	s):	
6.	Pollutant Allowable Emissions Comment (De (limit to 200 characters):	esc. of Related Operat	ing Method/Mode)

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

<u>Visible Emissions Limitations</u> : 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: EPA Method 9 during compliance test	
5.	Visible Emissions Comment (limit to 200 characters): Rule 62-296.310(2)(a)	
<u>Visible</u>	Emissions Limitations: Visible Emissions Limitation 2 of 2	
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: EPA Method 9	
5.	Visible Emissions Comment (limit to 200 characters): 1. Rule 62-210.700(1); excess emissions from startup, shutdown and malfunction, not to exceed 2 hr in 24 hr	

DEP Form No. 62-210.900(1) - Form

Emissions Unit Information Section	4	of	8	Peaking Gas Turbine Unit
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor of					
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement: [] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:			
5.	Installation Date:	<i>₩</i>			
6.	Performance Specification Test Date:				
7.	Continuous Monitor Comment (limit to	200 characters):			
	· · ·				
Cont	inuous Monitoring System Continuou	s Monitor of			
1.	Parameter Code:	2. Pollutant(s):			
3.	CMS Requirement: [] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:			
5.	Installation Date:				
6.	Performance Specification Test Date:				
7.	Continuous Monitor Comment (limit to	o 200 characters):			

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
 [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM [X] Unknown] C] E [x] Unknown SO₂] C] E NO₂] C] E [x] Unknown 4. Baseline Emissions: PM lb/hour tons/year SO₂ lb/hour tons/year NO_2 tons/year 5. PSD Comment (limit to 200 characters): Baseline emissions not known.

33

6/9/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: HG-EU1-L1 [] Not Applicable	[] Waiver Requested
2.	Fuel Analysis or Specification	
	[x] Attached, Document ID: HG-EU1-L2 [] Not Applicable	[] Waiver Requested
3.	Detailed Description of Control Equipment	
	[] Attached, Document ID:	[] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[] Attached, Document ID:	[] Waiver Requested
5.	Compliance Test Report	
	Attached, Document ID: [x] Previously Submitted, Date: 12 Jan 1992	[] Not Applicable
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: HG-EU1-L6	[] Not Applicable
7.	Operation and Maintenance Plan	
	[] Attached, Document ID:	[x] Not Applicable
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

Additional Supplemental Requirements for Category I Applications Only

10.	Alterna	ative Methods of Operation
	[x]	Attached, Document ID: HG-EU1-L10 [] Not Applicable
11.	Alterna	ative Modes of Operation (Emissions Trading)
	[]	Attached, Document ID: [x] Not Applicable
12.	Identif	ication of Additional Applicable Requirements
	[x]	Attached, Document ID: HG-EU4-L12 [] Not Applicable
13.	Compl	liance Assurance Monitoring Plan
	[x]	Attached, Document ID: HG-EU1-L13 [] Not Applicable
14.	Acid R	Rain Permit 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:
	[x]	Not Applicable

DEP Form No. 62-210.900(1) - Form

ATTACHMENT HG-EU4-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU4-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU4: Unit 2(FFSG) - FPC Higgins Plant

FDEP Rules:

62-296.700(6)(e)

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 Sta	andards/PACT		
62-296.320(4)(b) (State Only)	- General VE		
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		
02 270.700(0)(d)	1 05511 1 doi 5 dediti Gonerators		

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

- Records and Inspection

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(4)(a)2.	- Applicable Test Procedures; Sampling time
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 ₂ SO 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)8	- CT exemption if < 400 hrs/yr; VE test once every 5 years
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
To down! Dulon.	
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
(

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- Alternate Designated Representative

- Changing representatives; owners

- Requirements to Apply (operate)

- Submissions

- Permit Shield

- Designated Representative; certification requirements

- Requirements to Apply (reapply before expiration)

- Requirements to Apply (submittal requirements)

40 CFR 72.20(c)

40 CFR 72.30(a)

40 CFR 72.30(c)

40 CFR 72.30(d)

40 CFR 72.32

40 CFR 72.21

40 CFR 72.22 40 CFR 72.23

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) 40 CFR 75.54(b) 40 CFR 75.54(c) 40 CFR 75.54(d) 40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.56 40 CFR 75.60 40 CFR 75.61 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-5.	 Recordkeeping-general Recordkeeping-SO₂ Recordkeeping-NO_x Recordkeeping-CO₂ Recordkeeping-Opacity Monitoring Plan Certification; QA/QC Provisions Reporting Requirements-General Reporting Requirements-Notification cert/recertification Reporting Requirements-Certification/Recertification Reporting Requirements-Quarterly reports; submission Reporting Requirements-Quarterly reports; DR statement Rep. Req.; Quarterly reports; Compliance Certification Rep. Req.; Quarterly reports; Electronic format Opacity Reports Performance Specifications Data Handling and Acquisition Systems Calibration Gases
• •	•
Appendix A-5. Appendix A-6. Appendix B Appendix C-1. Appendix C-2. Appendix F Appendix G-2. Appendix H	 Calibration Gases Certification Tests and Procedures QA/QC Procedures Missing Data; SO₂/NOx for controlled sources Missing Data; Load-Based Procedure; NO_x & flow Conversion Procedures Determination of CO₂; from combustion sources Traceability Protocol

^{*} 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-L12 ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations).



Governor

Florida Department of Environmental Protection

Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619 813-744-6100

Virginia B. Wetherell Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042
St. Petersburg, FL 33733 /

PERMIT/CERTIFICATION

Permit No: A052-216423

County: Pinellas

Expiration Date: 11-10-97 Project: Higgins Peaking

Unit No. 4

This permit amendment is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-200 through 297 & 17-4. 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 Department and made a part hereof and specifically described as follows:

For the operation of Higgins Peaking Unit No. 4. This unit is fired with natural gas or new No. 2 fuel oil. The maximum sulfur content of the new No. 2 fuel oil shall not exceed 0.5% by weight. This unit is a gas turbine unit consisting of two Pratt & Whitney jet engines. This unit is rated at 42.9 MW/hour having a maximum heat input rate of 631 MMBTU/hour. The maximum fuel usage rate is 0.63 MMCF/hour of natural gas or 107.0 BBL/hour of new No. 2 fuel oil. This unit's daily maximum performance is a function of ambient temperature, as shown in the attached graph of heat input versus ambient temperature.

Location: Booth Road, Oldsmar, Pinellas County

UTM: 17-336.5 E 3098.3 N NEDS NO: 0012 Point ID: 07

Replaces Permit No.: A052-137554

Permit No.: A052-216423 Project: Higgins Peaking

Unit No. 4

SPECIFIC CONDITIONS:

- 1. A part of this permit is the attached 15 General Conditions.
- 2. Visible emissions from Higgins Peaking Unit No. 4 shall not be equal to or greater than 20% opacity (Rule 17-296.310(2)(a), F.A.C.).
- Test Higgins Peaking Unit No. 4 for visible emissions annually within 60 days prior to January 7. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if it is not expected to be used to fire this peaking unit for more than 400 hours during the next 12 months. Florida Power Corporation shall maintain records on site for the hours this peaking unit operates. Each year, when the VE test is due, a letter must be sent to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, stating that the above limitations for the waiver have been satisfied. Regardless of fuel usage, a VE test shall be required and conducted during the 6 month period prior to the submittal of an operation permit renewal application. The test report shall be submitted within 45 days of testing to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division (Rule 17-297.340, F.A.C.).
- 4. Compliance with the visible emission limitation of Specific Condition No. 2 shall be determined using DER Method 9 contained in Rule 17-297, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The minimum requirements for source emission test procedures and reporting shall be in accordance with Rule 17-297, F.A.C.
- 5. Testing of emissions shall be conducted under the conditions as outlined by Florida Power Corporation in the letter submitted to the Department dated March 29, 1993. The submitted graph for Peaking Unit No. 4 is made a part of this permit. A copy of the submitted graph noting the maximum heat input versus ambient temperature during the compliance test shall be included in the compliance test report (Rule 17-4.070(3), F.A.C.).
- 6. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which the compliance test is to begin (Rule 17-297.340(1)(i), F.A.C.).

Permit No.: A052-216423 Project: Higgins Peaking

Unit No. 4

7. Higgins Peaking Unit No. 4 is permitted to operate at the following parameters:

A. Process Parameters:

1. Maximum Load Rate: 42.9 MW/hour

2. Maximum Heat Input Rate: 631 MMBTU/hour

3. Maximum Fuel Usage: 0.63 MMCF/hour of natural gas, 107.0 BBL/hour of new No. 2 fuel oil having a maximum sulfur content not to exceed 0.5% by weight

- 8. The BTU heating value, sulfur content (% by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis. This average shall be used to calculate the sulfur dioxide emissions for the Annual Operating Report. To ensure the vendor's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the 12 month period. Records must be kept for a minimum of two years and be made available for inspection upon request.
- 9. Submit to the Air Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DER Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year (Rule 17-210.370(2)(a)1., F.A.C.).
- 10. Based on the original permit application, dated 9/8/77, and AP 42 emission factors, the following are the maximum potential emission rates expected from this peaking unit, and are included for informational purposes only:

	pounds/hour	tons/year
Particulate	38.49	168.59
Carbon Monoxide	69.41	304.42
Sulfur Dioxide	3.15	13.78
Nitrogen Oxides	440.44	1,929.12
voc	26.46	115.89

11. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 17-200 through 17-299, or any other requirements under federal, state or local law (Rule 17-210.300, F.A.C.).

Permit No.: A052-216423 Project: Higgins Peaking

Unit No. 4

12. Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions, for the Annual Operating Report, by multiplying the fuel use by the following emission factors:

	No. 2 Fuel Oil <u>Pounds/MMBTU</u>	Natural Gas <u>Pounds/MMBTU</u>
Particulate	0.061	0.0419
Carbon Monoxide	0.048	0.11
Nitrogen Oxides	0.698	0.44
	No. 2 Fuel Oil Pounds/10 ³ Gallons	
Sulfur Dioxide	140s	940s
VOC	5.57	42

s denotes sulfur content, % by weight

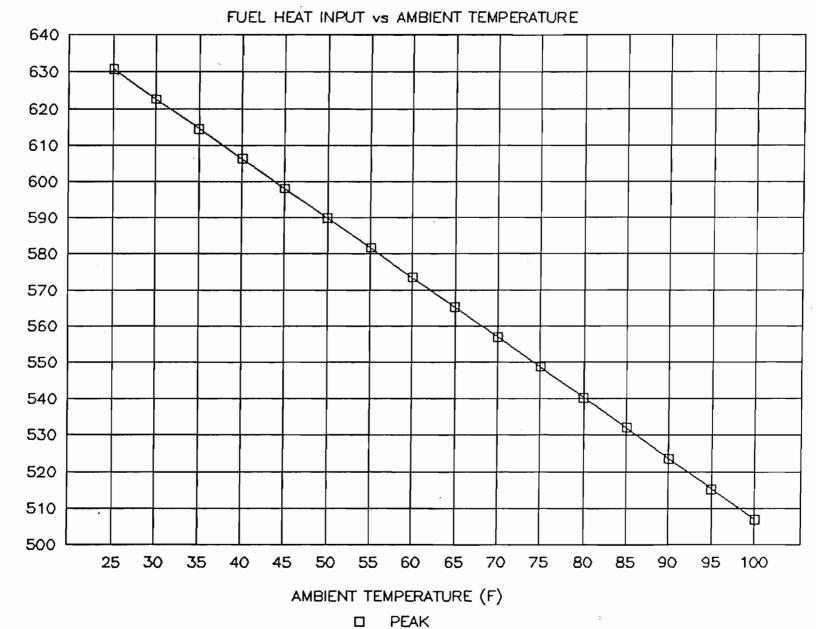
Emission factors for PM, CO, & NOx from AP 42, Table 3.1-1 (10/92). Emission factors for SO2 & VOC from AP 42 tables prior to 10/92.

13. Two applications for the renewal of this operating permit shall be submitted to the Air Section of the Department's Southwest District Office and one copy of the application shall be submitted to the Pinellas County Department of Environmental Management, Air Quality Division, at least 60 days prior to the expiration date of this permit (Rule 17-4.090(1), F.A.C.).

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Dr. Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

3804 Coconut Palm Drive Tampa, FL 33619-8318 (813)744-6100



FUEL FLOW (MBTU/HOUR)

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section

1.	Regulated or Unregulated Emissions Unit? Check one:
[x	[7] 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.
2.	Single Process, Group of Processes, or Fugitive Only? 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.

Emissions Unit Information Section	5	_ of <u>8</u> _	Fossil Fired Steam Boiler No 1
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B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

 Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fossil Fired Steam Boiler No. 1 			
2. Emissions Unit Identific 001	ation Number: [] No Corre	esponding ID [] Unknown	
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [x] Yes [] No	5. Emissions Unit Major Group SIC Code: 49	
6. Emissions Unit Commen	t (limit to 500 characters):		
		⇒	

18

Effective: 03-21-96

Emissions Unit Control Equipment Information

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Δ.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

19

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: 6 Jun 1951

2. Long-term Reserve Shutdown Date: 24 Jan 1994

3. Package Unit:
Manufacturer: Model Number:

4. Generator Nameplate Rating: 43 MW

5. Incinerator Information:
Dwell Temperature: °F
Dwell Time: seconds

٥F

Emissions Unit Operating Capacity

Incinerator Afterburner Temperature:

1. Maximum Heat Input Rate:

2. Maximum Incineration Rate:

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate:

5. Operating Capacity Comment (limit to 200 characters):

1. Maximum heat input based on permit firing No. 6 fuel oil.

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24 hours/day

7 days/week

52 weeks/yr

8,760 hours/yr

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable		
	0	
	×	

Emissions Unit Information Section	5	of	8	
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Fossil Fired Steam Boiler No 1

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

	See Attachment HG-EU5-D				
				.÷	
			•		

Emissions Unit Information Section	ot _	
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E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

Emission Point Description and Type

1.	1. Identification of Point on Plot Plan or Flow Diagram: EU5	
2.	2. Emission Point Type Code:	
	[x]1 []2 []3 [] 4
3.	3. Descriptions of Emissions Points Comprising this Emiss to 100 characters per point):	ions Unit for VE Tracking (limit
	Boiler gases exhaust through a single stack	
	÷	
4.	4. ID Numbers or Descriptions of Emission Units with this	Emission Point in Common:
	Not Applicable	
-5	5 Discharge Type Code:	
٥.	5. Discharge Type Code: [] D	
	[]R [x]V []W	
6.	6. Stack Height: 174	feet
7.	7. Exit Diameter: 12.5	feet
8.	8. Exit Temperature: 312	°F

Source Information Section	5	of	8
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Fossil Fired Steam Boiler No 1

9. Actual Volumetric Flow Rate:	204,000 acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rat	e: dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates	:
Zone: 17 East (km): 336.	North (km): 3098.4
14. Emission Point Comment (limit to	200 characters):
	·

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment _ 1 of 4

(limit to 500 characters):	pe and Associated Operating Method/Mode)		
Ext Comb Boiler Electric Generation Residual Oil No. 6 Normal Firing			
•	•		
	ω.		
2. Source Classification Code (SCC):			
	-01-004-01		
3. SCC Units:			
Thousand Gallons Burned			
4. Maximum Hourly Rate:	5. Maximum Annual Rate:		
3.605	31,582		
6. Estimated Annual Activity Factor:			
•			
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:		
2.5	0.1		
9. Million Btu per SCC Unit:			
	152		
10. Segment Comment (limit to 200 chara	acters):		
1. Unit is front fired. 2. Heat content-l	HV		
1. Olik is from fried. 2. Fleat Content-i			

Emissions Unit Information Section Segment Description and Rate: Segment	
Segment Description (Process/Fuel Ty (limit to 500 characters): Ext Comb Boiler Electric Generation Dist	pe and Associated Operating Method/Mode) tillate Oil No. 1 and No. 2 oil
2. Source Classification Code (SCC):	1-01-005-01
3. SCC Units: Thousand Ga	llons Burned
4. Maximum Hourly Rate: 3.971	5. Maximum Annual Rate: 34,786
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 0.5	8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit:	138
10. Segment Comment (limit to 200 char. 1. Distillate fuel oil is used as a pilot f content-HHV.	acters): fuel for startup, shutdown, and malfunction. 2. Heat

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):				
Ext Comb Boiler Electric Generation Na	itural Gas			
2. Source Classification Code (SCC):				
	-01-006-01			
3. SCC Units:	-			
Million Cubic Feet Burned				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:			
0.522	4,572			
6. Estimated Annual Activity Factor:				
	 			
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:			
O Millia Di man COCILIA				
9. Million Btu per SCC Unit:	1,050			
10. Segment Comment (limit to 200 char				
,	,			
Maximum Percent Sulfur - 1.0 grain/10	JO CF natural gas. Heat input-HHV.			

DEP Form No. 62-210.900(1) - Form

Segment Description (Process/Fuel Ty (limit to 500 characters):	rpe and Associated Operating Method/Mode)
On - specification used oil	
2. Source Classification Code (SCC):	1-01-013-02
3. SCC Units: Thousand Ga	illons Burned
4. Maximum Hourly Rate: 3.971	5. Maximum Annual Rate: 3,479
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 2.5	8 Maximum Percent Ash: 0.9
9. Million Btu per SCC Unit:	138
10. Segment Comment (limit to 200 char- Heat content - HHV. Limited to 10% a	

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Pollutant Emitted	Primary Control Device Code	Secondary Control Device Code	4. Pollutant Regulatory Cod
400			77
SO2 PM			EL EL
PM10			NS
NOx			NS
CO			NS
VOC			ns ns
H133 HAPS			NS NS
	.**		

Effective: 03-21-96

6/3/96

Emissions	Unit	Information	Section	5	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: so2				
2. Total Percent Efficiency of Control: 0 %				
3. Potential Emissions: 1,507 lb/hour 6,600.7 tons/year				
4. Synthetically Limited? [] Yes [x] No				
5. Range of Estimated Fugitive/Other Emissions:				
[] 1 [] 2 [] 3totons/yr				
6. Emission Factor: 2.75 lb/MMBtu				
Reference: FDEP Rule 62-296.405				
7. Emissions Method Code:				
[x]0 []1 []2 []3 []4 []5				
8. Calculation of Emissions (limit to 600 characters):				
See Attachment HG-EU5-H8				
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):				
Firing No.6 fuel oil. Permit limits maximum sulfur content to 2.5%.				
· · · · · · · · · · · · · · · · · · ·				

Fossil Fired Steam Boiler No 1 Sulfur Dioxide

Emissions	Unit Inform	nation Sec	ction	5	of _	8
Allowable	Emissions ((Pollutant	identifie	d on	front	page)

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F	٦	١	_

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 lb/hour 6,600.7 tons/year				
5.	Method of Compliance (limit to 60 characters):				
	Fuel analysis during annual compliance test.				
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):				
	No. 6 fuel oil. Rule 62-296.405(1). Current limit - 1% sulfur content oil based on 5-29-92 stack test; higher sulfur content allowed if PM and VE tests performed.				

В.

1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emiss	ions:	
3.	Requested Allowable Emissions and Units	X.	
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 charac	ters):	
6.	Pollutant Allowable Emissions Comment (limit to 200 characters):	(Desc. of Related Operating	ng Method/Mode)

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

Emissions	Unit	Information	Section	5	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: PM				
2. Total Percent Efficiency	of Control:	0 %		
3. Potential Emissions:	164.4 lb/hour	300 tons/year		
4. Synthetically Limited?	[] Yes [x] No			
5. Range of Estimated Fug	gitive/Other Emissions:			
[]1 []2	[]3	to tons/yr		
6. Emission Factor:	0.3 lb/MMBtu			
Reference: FDEP Rule 62-2	210.700			
7. Emissions Method Code	e:			
[x]0 []1	[]2 []3	[]4 []5		
8. Calculation of Emissions	(limit to 600 characters):			
See Attachment HG-EU	5-H8			
		'		
9. Pollutant Potential/Estin	nated Emissions Comment ((limit to 200 characters):		
Potential lb/hr - soot-blowing while oil firing. Potential TPY - 0.125 lb/MMBtu, 24 hr (0.1 during normal operations, 21 hr; 0.3 during soot blowing, 3 hr).				

Fossil Fired Steam Boiler No 1 Particulate Matter - Total

Emissions Unit Information Section ____ of ___ 8 Allowable Emissions (Pollutant identified on front page)

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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.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	
	1. Based on oil-firing during normal operations. 2. Rule 62-210.700.	
В.		
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. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
 - 1. Based on soot-blowing while oil firing (3 hours in 24 hours). 2. Rule 62-210.700.

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

V ISIDI	e Emissions Limitations: Visible Emissions Limitation of
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): 1. Visible emission limit at steady state. 2. Rule 62-296.405(1) and OGC File No. 86-1580
	e Emissions Limitations: 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): 1. 60% opacity during and load changing and boiler cleaning for 3 hr in 24 hr; Unlimited opacity allowed for 4 six-minute periods during 3 hrs. 2. Rule 62-210.700(3).

DEP Form No. 62-210.900(1) - Form

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

<u>Visib</u>	le Emissions Limitations: 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 operation practice
5.	Visible Emissions Comment (limit to 200 characters): 1. Not to exceed 2 hr in 24 hr for malfunction. 2. Rule 62-210.700(1).
<u>Visib</u>	le Emissions Limitations: 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 operation practice
5.	Visible Emissions Comment (limit to 200 characters): Excess emissions for startup, shutdown. Rule 62-210.700(2).

DEP Form No. 62-210.900(1) - Form

Emissions Unit Information Section	5	of	8	Fossil Fired Steam Boiler No 1
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM 1 C] E [X] Unknown [x] Unknown SO₂ 1 C] E NO₂ [x] Unknown 1 C 4. Baseline Emissions: PM lb/hour tons/year SO₂ lb/hour tons/year NO₂ tons/year PSD Comment (limit to 200 characters): 5. Baseline emissions not known.

33

6/3/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram
	[X] Attached, Document ID: HG-EU5-L1 [] Not Applicable [] Waiver Requested
2.	Fuel Analysis or Specification
	[x] Attached, Document ID: HG-EU5-L2 [] Not Applicable [] Waiver Requested
3.	Detailed Description of Control Equipment
	[] Attached, Document ID:
4.	Description of Stack Sampling Facilities
	[X] Attached, Document ID: HG-EU5-L4 [] Not Applicable [] Waiver Requested
5.	Compliance Test Report
	[X] Attached, Document ID: HG-EU5-L5 [] Not Applicable [] Previously Submitted, Date:
6.	Procedures for Startup and Shutdown
	[x] Attached, Document ID: HG-EU5-L6 [] Not Applicable
7.	Operation and Maintenance Plan
	[X] Attached, Document ID: HG-EU5-L7 [] Not Applicable
8.	Supplemental Information for Construction Permit Application
	[] Attached, Document ID: [x] Not Applicable
9.	Other Information Required by Rule or Statute
	[X] Attached, Document ID: HG-EU5-L9 [] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Altern	ative Methods of Operation
	[x]	Attached, Document ID: HG-EU5-L10 [] Not Applicable
11.	Altern	ative Modes of Operation (Emissions Trading)
	[]	Attached, Document ID: [x] Not Applicable
12.	Identif	fication of Additional Applicable Requirements
	[x]	Attached, Document ID: HG-EU5-L12 [] Not Applicable
13.	Comp	liance Assurance Monitoring Plan
	[x]	Attached, Document ID: HG-EU5-L13 [] Not Applicable
14.	Acid I	Rain Permit Application (Hard Copy Required)
	[x]	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: HG-EU5-L14
	[]	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:
	[]	Not Applicable
	,	

ATTACHMENT HG-EU5-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU5-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU5: Unit 1 (FFSG) - FPC Higgins Plant

FDEP Rules:

TDEI Ruics.				
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			
• / • / • / • / • / • / • / • / • / • /	č č			
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			
62-214.430	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

$02^{2}297.310(2)(0)$	- Operating Rate, other than C1s
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 ₂ SO 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 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

- Operating Rate; other than CTs

62-297.310(2)(b)

40 CFR 72.22

40 CFR 72.23

40 CFR 72.30(a)

40 CFR 72.30(c)

40 CFR 72.30(d) 40 CFR 72.32

40 CFR 72.33(b)

40 CFR 72.33(c)

40 CFR 72.33(d)

Requirements to Apply (reapply before expiration)Requirements to Apply (submittal requirements)

- Alternate Designated Representative

Dispatch System ID; unit/system IDDispatch System ID; ID requirements

- Dispatch System ID; ID change

2

- Changing representatives; owners

- Requirements to Apply (operate)

- Permit Shield

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
10 0110 10110(4)(1)	· · · · · · · · · · · · · · · · · · ·
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) 40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.56 40 CFR 75.60 40 CFR 75.61 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-5. Appendix A-6.	 Recordkeeping-NO_x Recordkeeping-CO₂ Recordkeeping-Opacity Monitoring Plan Certification; QA/QC Provisions Reporting Requirements-General Reporting Requirements-Notification cert/recertification Reporting Requirements-Certification/Recertification Reporting Requirements-Quarterly reports; submission Reporting Requirements-Quarterly reports; DR statement Rep. Req.; Quarterly reports; Compliance Certification Rep. Req.; Quarterly reports; Electronic format Opacity Reports Performance Specifications Data Handling and Acquisition Systems Calibration Gases Certification Tests and Procedures
Appendix A-3.	- Performance Specifications
• •	
Appendix C-1. Appendix C-2. Appendix F Appendix G-2. Appendix H	 Missing Data; SO₂/NOx for controlled sources Missing Data; Load-Based Procedure; NO_x & flow Conversion Procedures Determination of CO₂; from combustion sources Traceability Protocol

4

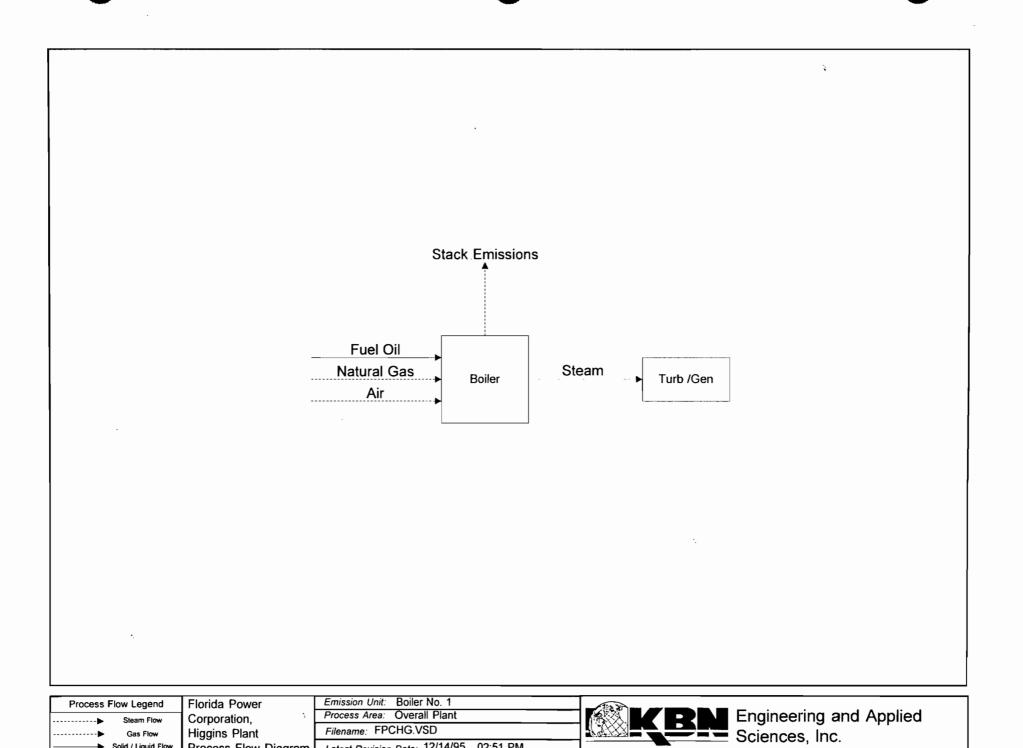
ATTACHMENT HG-EU5-H8 CALCULATION OF EMISSIONS

Table 1. 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 l						
Sulfur Dioxide (lb/hr) (Gas)= Fuel sulfur content (Per					2522	
Basis	DEP Rules 2.75	1 gr S/100 cf	DEP Rules	1 gr S/100 cf	DEP Rules 2.75	1 gr S/100 e
EF (lb/MMBtu)	548		523		548	
HIR (MMBtu/hr) Sulfur content (gr/100 cf)	340	1	323	1	546	
Fuel consumptiom (100 cf/hr)		5,219.0		4,981.0		5,219.
lb/hr	1507.0	1.5	1438.3	1.4	1507.0	3,219.
TPY	6600.7	6.5	6299.5	6.2	6600.7	6.
EF (lb/MMBtu) or (lb/MMcf) EF (lb/MMBtu) (Oil; normal/sootblowing; annual) HIR (MMBtu/hr) Fuel consumptiom (MMcf/hr) lb/hr TPY	0.3 0.125 548 164:4 300.0	3 548 0.52 1.6 6.9	0.3 0.125 523 156.9 286.3	523 0.50 1.5 6.5	0.3 0.125 548 164.4 300.0	548 0.52 1.6
Particulate Matter (PM-10)(lb/hr) (Oil)= EF (lb/MMF Particulate Matter (PM-10)(lb/hr) (Gas)= EF (lb/fuel	Btu) x Heat Input Ra	ite (MMBtu/hr)	200.3	0.5	300.0	0.3
Basis (1)	DEP Rules	AP-42	DEP Rules	AP-42	DEP Rules	AP-4
EF (lb/MMBtu) or (lb/MMcf)	0.3	3	0.3	3	0.3	
EF (lb/MMBtu) (Oil; normal/sootblowing; annual)	0.125		0.125		0.125	
HIR (MMBtu/hr)	548	548	523	523	548	54
Fuel consumptiom (MMcf/hr)		0.52		0.50		0.5
lb/hr	164.4	1.6	156.9	1.5	164.4	1.
TPY	300.0	6.9	286.3	6.5	300.0	6.

⁽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, 1994, AP-42, Table 1.4-1.

ATTACHMENT HG-EU5-L1 PROCESS FLOW DIAGRAM



Process Flow Diagram Latest Revision Date: 12/14/95 02:51 PM

ATTACHMENT HG-EU5-L2 FUEL ANALYSIS OR SPECIFICATION

Page 1 of 4

Attachment HG-EU5-L2

Fuel Analysis

Natural Gas Analysis

<u>Parameter</u>	Typical Value	Max Value
Relative density	0.58 (compared to air)	
heat content	950 - 1124 Btu/cu ft.	
% sulfur	0.43 grains/CCF ¹	1 grain/100 CF
% nitrogen	0.8% by volume	_
% ash	negligible	

Note: The values listed are "typical" values based upon information supplied to FPC by Florida Gas Transmission (FGT). However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data from laboratory analysis

Attachment HG-EU5-L2

Fuel Analysis

No. 6 Fuel Oil

<u>Parameter</u>	Typical Value	Max Value
API gravity @ 60 F	81	-
Relative density	8.2 lb/gal ²	
Heat content	18,300 Btu / lb (HHV)	
% sulfur	0.04 ²	2.5^{3}
% nitrogen	0.25 - 0.50	0.10
% ash	0.06 - 0.10	0.1^{-1}

Note: The values listed are "typical" values based upon 1) information gathered by laboratory analysis, and 2) FPC's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data taken from the FPC fuel procurement specification

² Data from laboratory analysis

³ Data from current air permit.

Attachment HG-EU5-L2

Fuel Analysis

No. 2 Fuel Oil

<u>Parameter</u>	Typical Value	Max Value
API gravity @ 60 F	281	-
Relative density	7.1 lb/gal ²	
Heat content	19,500 Btu / lb (LHV)	
% sulfur	0.04 ²	0.5^{-3}
% nitrogen	0.025 - 0.030	
% ash	negligible	0.1

Note: The values listed are "typical" values based upon 1) information gathered by laboratory analysis, and 2) FPC's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data taken from the FPC fuel procurement specification

² Data from laboratory analysis

³ Data from current air permit.

Page 4 of 4

Attachment HG-EU5-L2

Fuel Analysis

On - Spec Used Oil

Parameter	Typical Value	Max Value
API gravity @ 60 F	281	-
Relative density	7.4 lb/gal ²	
Heat content	18,700 Btu / lb (LHV)	138,000
% sulfur	0.3 - 0.5	2.5
% nitrogen	0.3	
% ash	0.4 - 0.9	

Note: The values listed are "typical" values based upon 1) information gathered by laboratory analysis, and 2) FPC's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

¹ Data taken from the FPC fuel procurement specification

² Data from laboratory analysis

³ Data from current air permit.

ATTACHMENT HG-EU5-L4 DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT HG-EU5-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

The Higgins Plant Steam Generator Unit No. 1 and 2 are required by Permit AO52-216382 and AO52-216383 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to FAC 62-297.345, 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 FAC 297-345 (3)(a)(3) 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, extends 180 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.

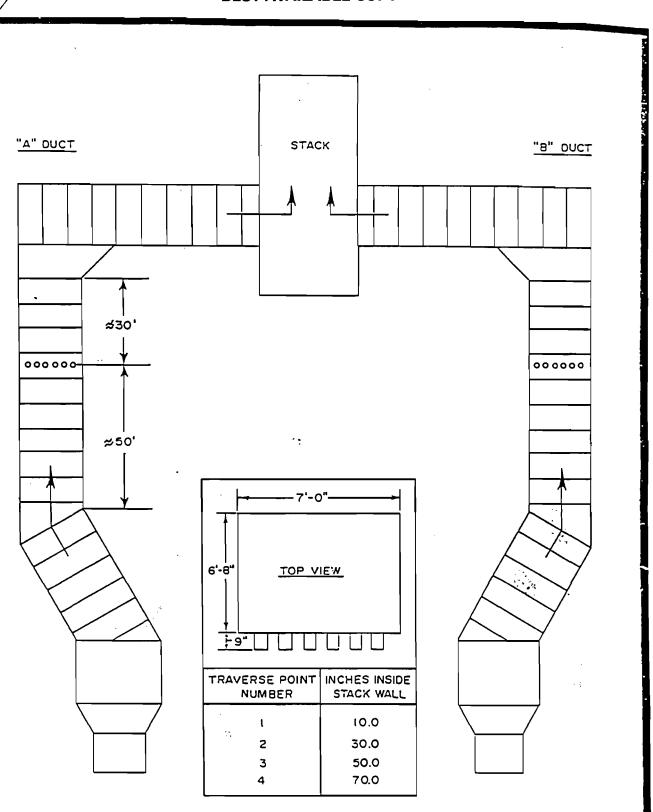


FIGURE I.
FLUE GAS EXHAUST SYSTEM SCHEMATIC
UNITS I AND 2
FPC HIGGINS PLANT
OLDSMAR, FLORIDA

AIR CONSULTING and ENGINEERING

ATTACHMENT HG-EU5-L5 COMPLIANCE TEST REPORT

ATTACHMENT HG-EU5-L5

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.

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ATTACHMENT HG-EU5-L6 STARTUP AND SHUTDOWN PROCEDURES

ATTACHMENT HG-EU5-L6

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, CO₂, 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.

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ATTACHMENT HG-EU5-L7

OPERATION AND MAINTENANCE PLAN

(See Air Operating Permit for Higgins Unit 1, AO52-216382, Specific Condition No. 15; See Attachment HG-EU5-L12)

ATTACHMENT HG-EU5-L9

OTHER INFORMATION REQUIRED BY RULE OR STATUTE



bcc: D. T. Buell G. E. Marks

Route: Hedrick/Osbourn/Morneault/Kennedy (last)

File: HIGA.1.1

January 13, 1994

Mr. J. Harry Kerns, P.E.
District Air Engineer
Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, FL 33619

Dear Mr. Kerns:

Re: Higgins Steam Units 1, 2, 3 Long-term Reserve Shutdown (Permit Nos. A052-216382, -216383, -216384)

Florida Power Corporation is providing the Department of Environmental Protection notification that the units referenced above will be placed in long-term reserve shutdown on January 24, 1994.

To the best of my knowledge, these units are currently operating in compliance with all applicable air pollution rules and air operation permit conditions.

Please contact Mr. Mike Kennedy at (813) 866-4344 if you have any questions.

Sincerely,

W. Jeffrey Pardue, C.E.P.

Acting Director, Environmental Services Department

cc: Mr. Gary Robbins, Pinellas County

ATTACHMENT HG-EU5-L10 ALTERNATIVE METHODS OF OPERATION

ATTACHMENT HG-EU5-L10 ALTERNATIVE METHODS OF OPERATION

The boiler units currently are not in operation and have been place 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-L12 ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations).



Florida Department of Environmental Regulation

Southwest District

Lawton Chiles, Governor

3804 Coconut Palm 813-744-6100

Tampa, Florida 33619

Virginia B. Wetherell, Secretary

NOTICE OF PERMIT RE-ISSUANCE

CERTIFIED MAIL

In the Matter of an Application for permit by:

DER File No.: A052-216382 County: Pinellas

Mr. W.J. Pardue, Manager Environmental Programs Florida Power Corporation P.O. Box 14042 St. Petersburg, Florida 33733

Enclosed is revised Permit Number A052-216382 to operate the Higgins Unit No. 1 located in Oldsmar, issued pursuant to Section 403, Florida Statutes. This permit has been revised as a result the FPC comments submitted on March 17, 1993 and subsequent discussions between FPC and DER staff. Please replace the previously received version of permit number A052-216382 with this revised version.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57 Florida Statutes.

The Petition shall contain the following information;

- (a) The name, address, and the telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

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- (d) A statement of the material facts disputed by petitioner, if any;
- (e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any rights such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Street Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

David R. Zell

Air Permitting Engineer 3804 Coconut Palm Drive Tampa Florida 33619-8318 Phone (813) 744-6100 Ext. 412

DRZ/ Attachment

cc: Gary Robbins, Pinellas Co. Dept. of Environmental Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT RE-ISSUANCE and all copies were mailed by certified mail before the close of business on APR 26 1993 to the listed persons.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

APR 26 1993

·k ' Date



Florida Department of Environmental Regulation

Southwest District

Lawton Chiles, Governor

3804 Coconut Palm

813-744-6100

Tampa, Florida 33619

Virginia B. Wetherell, Secretary

PERMITTEE:

Florida Power Corporation Higgins Plant P.O. Box 14042 St. Petersburg, FL 33733 PERMIT/CERTIFICATION:

Permit No: A052-216382

County: Pinellas

Expiration Date: 09/16/97
Project: Steam Generator

Higgins Unit No. 1

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. 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 department and made a part hereof and specifically described as follows:

For the operation of Higgins Unit No. 1, a fossil fuel fired electric utility steam generator rated at 43 MW/hour. The unit is fired with No. 6 fuel oil, with a maximum sulfur content of 2.5% by weight, at a maximum heat input rate of 548 MMBtu/hour (87 BBL/hour, 3,654 gallons/hour). As an alternate fuel when available, the unit can also be fired on natural gas at a maximum rate of 0.5×10^6 ft³/hour.

Location: Higgins Plant, Shore Drive, Oldsmar

UTM: 17-336.54 E 3098.25 N NEDS No: 0012 Point ID No: 01

Replaces Permit No.: A052-137124

(Note: This permit also replaces the 1st version of

AO52-216382 issued January 26, 1993)

Page 1 of 9



PERMIT/PROJECT:
Permit No.: A052-216382
County: Pinellas

Project: Higgins Unit 1

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions. [Rule 17-4.160, F.A.C.].

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 17-200 through 17-299, or any other requirements under federal, state or local law. [Rule 17-210.300, F.A.C.].

Operational and Emission Limitations

- 3. This boiler is permitted for continuous operation (8,760 hours per year).
 [As requested by applicant].
- 4. This boiler shall be fired with No. 6 fuel oil, with natural gas as an alternate fuel when available. The maximum heat input rate to this boiler shall not exceed 548 MMBtu/hr (3,654 gallons/hour when firing No. 6 fuel oil). If firing 100% natural gas, the maximum heat input rate shall not exceed 525 MMBtu/hr (0.5 MMCF/hour). [Previous permits and information supplied with application].
- 5. Sulfur content of the No. 6 fuel oil fired in this boiler shall not exceed 2.5% sulfur by weight.* In no case shall sulfur dioxide emissions from this boiler exceed 2.75 pounds/MMBtu of heat input nor 1,507 pounds per hour at the maximum heat input rate.

 (* See also Specific Condition No. 14.)

 [Previous permits and Rule 17-296.405(1)(c)1.k., F.A.C.].
- 6. <u>Particulate emissions</u> from this boiler shall be limited as follows:
 - A. During <u>normal operations</u>, particulate emissions shall not exceed 0.10 pounds/MMBtu, 54.8 pounds per hour, nor 240 tons per year;
 - B. During <u>boiler cleaning</u> (sootblowing) and <u>load changes</u> particulate matter emissions shall not exceed 0.30 pounds/MMBtu, nor 164.4 pounds per hour, and provided that best operational practices are adhered to minimize the magnitude and duration of the excess emissions.

[Rules 17-296.702(2)(a) and 17-210.700(3), F.A.C.].

PERMIT/PROJECT:
Permit No.: A052-216382
County: Pinellas
Project: Higgins Unit 1

SPECIFIC CONDITIONS:

- 7. Visible emissions from this boiler shall be limited as follows:
 - A. During <u>normal operations</u>, visible emissions shall not exceed 40% opacity;
 - B. During boiler cleaning (sootblowing) and load changes visible emissions shall not exceed 60% opacity, provided that the duration of such excess emissions shall not exceed a total of 3 hours in any 24 hour period, and provided that best operational practices are adhered to minimize the magnitude and duration of the excess emissions.

[Rules 17-296.702(2)(b), 17-296.405(1)(a) and 17-210.700(3), F.A.C. and OGC Order File No. 86-1580, December 11, 1986].

8. Excess emissions resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized. Excess emissions resulting from malfunctions are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized, but in no case exceeds two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operations, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited. (See also Specific Condition No. 19). [Rules 17-210.700(1) and (2), F.A.C.].

Testing and Compliance Documentation Requirements

- 9. Test the emissions from the boiler for the following pollutants annually * within one month of the base date of May 5. A report of the test data shall be submitted to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management within 45 days of the testing. The test report shall include a statement of the boiler O₂ levels during the test, the fuel firing rate (in gallons/hour and MMBtu/hr) and the results of the fuel oil analysis (See Specific Condition No. 12).
 - (X) Particulate matter (PM) (steady state and sootblowing)
 - (X) Visible emissions (VE) (steady state and sootblowing)

(* Note: This source was authorized by Order of the Department Secretary dated December 11, 1986 (OGC File No. 86-1580) to test (continued)

PERMIT/PROJECT:
Permit No.: A052-216382
County: Pinellas
Project: Higgins Unit 1

SPECIFIC CONDITIONS:

9. (continued)

particulate matter emissions and visible emissions annually with a 40% opacity limit. Failure of this source to meet either the particulate standard or the opacity standard in the future shall constitute grounds for revocation of this authorization and a return to more frequent testing.)
[Rules 17-297.340 and 17-297.570, F.A.C. and OGC Order File No. 86-1577].

10. The permittee shall notify the Air Quality Division of the Pinellas County Department of Environmental Management in writing 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.

[Rule 17-297.340(1)(i), F.A.C.].

11. Compliance with the emission limitations of Specific Condition Nos. 5, 6 and 7 shall be determined using the following methods contained in Rule 17-297, F.A.C. or in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297, F.A.C.:

Pollutant Test Method

Visible emissions DER Method 9

Particulate Matter EPA Method 5

or

EPA Method 17 (only if stack temperature is less than 375 °F)

Sulfur dioxide (& %S) Fuel analysis (EPA Method 19)

The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60, Appendix A.

12. Compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be demonstrated during <u>all</u> particulate and VE compliance tests based on analysis of an as-fired oil sample taken during the testing. Results of this analysis, and calculation of the resulting pound/MMBtu sulfur dioxide emission rate, shall be submitted with the test report.

[Rule 17-4.070(3), F.A.C.].

PERMIT/PROJECT:
Permit No.: A052-216382

County: Pinellas

Project: Higgins Unit 1

SPECIFIC CONDITIONS:

Documentation of ongoing compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be demonstrated through fuel analysis on a monthly basis. The permittee shall take a daily as-fired fuel oil sample for each day of operation and, on a monthly basis, analyze the monthly composite fuel oil sample for sulfur content and heat content (See O&M Plan, Specific Condition No. 15.B.5.). Based on the results of this monthly analysis, the permittee shall calculate the monthly average pound/MMBtu sulfur dioxide emission rate. fuel analysis results and the monthly sulfur dioxide emission rate calculation shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a two year period. (See also Specific Condition No. 17 for quarterly reporting requirements.) [Rule 17-4.070(3), F.A.C.].

Approved compliance testing of emissions must be conducted while firing No. 6 fuel oil operating within 90-100% of the permitted rates as stated in the Process Parameters Section of Specific Condition No. 15. However, based on the rate at which the May 1992 stack test was conducted, the maximum permitted fuel oil sulfur content for this boiler is currently limited to 1.0 % S by weight. A compliance test submitted at an operating rate less than 90% of the permitted rates will automatically constitute an amended permit at the lesser rate until another test, showing compliance at a higher rate, is submitted. Any time the above permitted fuel oil sulfur content (monthly average) is exceeded by more than 10% for two consecutive months or 20% for any single month then particulate and visible emissions compliance tests, conducted while using the higher sulfur content fuel oil, shall be performed within 45 days of the end of the month that triggers this requirement. The test results shall be submitted to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management 45 days of such testing. Acceptance of the test by the Department will constitute an amended permit at the tested higher sulfur content, not to exceed a maximum sulfur content Failure to submit the fuel oil firing rate and of 2.5 %S by weight. sulfur content, or operating at conditions during the test which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.].

PERMITTEE:

Florida Power Corp. Higgins Plant Oldsmar PERMIT/PROJECT:

Permit No.: A052-216382

County: Pinellas

Project: Higgins Unit 1

SPECIFIC CONDITIONS:

Operation and Maintenance Plan

15. The following is the specified Operation and Maintenance Plan for Particulate Control as required by Rule 17-296.700(6), F.A.C. (Particulate Matter RACT).

A. <u>Process Parameters</u> (Rule 17-296.700(6)(d), F.A.C.)

1. Heat Input Rate: 548 MMBtu/hour (maximum)

2. Fuel: No. 6 Fuel oil with a max. sulfur

content of 2.5% (also natural gas

when available).

3. Fuel Firing Rate: 3,654 gallons/hour (87 BBL/hour) of

No. 6 oil (maximum),

0.5 MMCF/hour of natural gas (max.)

4. Ash content: as sampled

5. Steam Temperature: 950 °F6. Steam Pressure: 1,315 psi

7. Steam Flow Rate: 450,000 pounds/hour

8. Stack Height 174 feet

9. Boiler Manufacturer: Babcock and Wilcox

10. Burner Arrangement: Front fired

B. Inspection and Maintenance Program

- 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.
- 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
 - q. steam pressure

PERMIT/PROJECT:

Permit No.: A052-216382

County: Pinellas

Project: Higgins Unit 1

SPECIFIC CONDITIONS:

- 4. Plant operators are to monitor, adjust and record the following operating parameters at least once per day to assure efficient plant operation:
 - a. temperatures (superheat, fuel)
 - b. flows (steam, feedwater, fuel)
 - c. unit load
- 5. Fuel oil quality is to be checked prior to delivery and a daily sample taken each day that the facility is operated for a monthly composite sample analysis. Fuel oil analysis (by ASTM Methods) is to be analyzed for the following:
 - a. heat content (Btu/gallon)
 - b. sulfur content (%S by weight)
 - c. density
 - d. API gravity
- C. <u>Recordkeeping</u> (Rule 17-296.700(6)(e), F.A.C.)
 Records of inspection, maintenance, and performance
 parameters shall be retained for a minimum of two years and
 shall be made available to the Department or the Pinellas
 County Department of Environmental Management upon request.

[Rule 17-296.700(6), F.A.C.].

16. Based on the original permit application received by the Department and information submitted by the permittee with subsequent applications, the following are the maximum potential emission rates from this source based upon which this permit is issued:

Pollutant	pounds/hour	tons/year
Particulate (PM)	54.8	240.0
Sulfur dioxide (SO2)	1,507.0	6,600.7
Carbon Monoxide (CO)	20.0	87.6
Nitrogen Oxides (NOx)	383.7	1,680.0
Volatile Organics (VOC)	2.9	12.2

PERMIT/PROJECT:

Permit No.: A052-216382

County: Pinellas

Project: Higgins Unit 1

SPECIFIC CONDITIONS:

Reporting Requirements

17. Compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be documented by the permittee through submittal of quarterly reports of the Higgins Plant monthly average fuel oil sulfur content, heat content, and the resulting sulfur dioxide emission rate in pounds/MMBtu of heat input. These quarterly reports shall be submitted within 30 days of the end of each calendar quarter to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management. [Rule 17-4.070(3), F.A.C.].

- 18. Submit to the Southwest District Office of the Department and to the Pinellas County Department of Environmental Management each calendar year on or before March 1, an emission report for this source for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), F.S.:
 - A. Annual amount of materials and/or fuels utilized;
 - B. Annual emissions of PM, SO₂, NOx and hydrocarbons based on fuel use, operating hours and fuel analysis. Until further notice by the Department the permittee shall calculate PM emissions by multiplying the PM stack test results by the hours of operation. Other annual emissions shall be determined by multiplying the annual fuel use times the following emission factors:

Pollutant	No. 6 Oil Ef (lb/1000 gal)	Natural Gas Ef (lb/MMCF)
SO2	157 (S)	0.6
CO	· 5	5
NOx	105	550
voc	0.76	1.4

(Provide calculation sheets to document calculation method)

C. Any changes in the information contained in the permit application.

PERMIT/PROJECT:

Permit No.: A052-216382

County: Pinellas

Project: Higgins Unit 1

SPECIFIC CONDITIONS:

19. Excess emission notification. In the event that the permittee is unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Air Quality Division of the Pinellas County Department of Environmental Management.

Notification shall be conducted in accordance with General Condition No. 8 of this permit. (See attached General Conditions.) In the case of excess emissions resulting from malfunctions, a full written report on the malfunction shall be submitted in a quarterly report if so requested by the Department.

[Rule 17-210.700(6), F.A.C.].

Permit Renewal

20. Three applications to renew this operating permit shall be submitted to the Southwest District Office of the Department, with an additional copy sent to the Air Quality Division of the Pinellas County Department of Environmental Management, no later than July 17, 1997 (60 days prior to the expiration date of this permit). [Rule 17-4.090(1), F.A.C. and Pinellas County Ordinance 89-70, as amended, Subpart 2.210].

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Richard D. Garrity, Ph.D.

Director of District Management

TTACHMENT - GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit;
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- On the service of this permit, the permittee understands and agrees that all cords, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

This	permit	also	constitutes:
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- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standard
- 14. The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of:

Petition for Reduction in
Semiannual Particulate
Emissions Compliance Testing,
Higgins Unit No. 1;
Florida Power Corporation

)

Petitioner.

OGC File No. 86-1580

ORDER

On February 18, 1986, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel steam generating unit:

Higgins Unit No.1

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since May 12; 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing in GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1986 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from the first annual test. Failure of Higgins Unit No.1 to meet

either the particulate standard or the 40% opacity standard in the future shall constitute grounds for revocation of this authorization.

Persons whose substantial interests are affected by the above proposed agency action have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests will be affected by any decision of the Department have the right to intervene in the proceeding. A petition for the intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitues a

BEST AVAILABLE COPY

waiver of any right such person determination (hearing) under DONE AND ORDERED this	Section 120.57, Florida Statutes.
FILING AND ACKNOWLEDGEMENT FILED, on this date, persuent to \$120.52 Fluido Statister, with the designated Department Clerk, receipt of which is hereby acknowledged. C. Hutchicas 10-10-86 Clerk Date	STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION VICTORIA J. TSCHINKEL Secretary Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

9

CERTIFICATE OF SERVICE

> E. Gary Early Assistant General Counsel

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

ATTACHMENT HG-EU5-L13 COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT HG-EU5-L13

Compliance Assurance Monitoring Plan to be submitted to the implementing agency by required date.

ATTACHMENT HG-EU5-L14 ACID RAIN PERMIT APPLICATION

Phase II Permit Application

Page 1

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

	Co	Plan		
а	b	c	ď	e
Boiler ID#	Unit Will Hold Allow- ances in Accordance		New Units	New Units
	with 40 CFF 72.9(c)(1)		Commence Operation Date	Monitor Certification Deadline
1	Yes	No		•
2	Yes	No		
3	Yes	No		
	Yes			

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.

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

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

Plant Name (from Step 1) Higgins Plant

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.
 - (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;
- 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:

 - (ii) 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
- (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.
- 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 Attache	Date 12/14/95

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

AIRS		
FINDS		

Best Available Copy

- United Lates **Environmental Protection Agency** Acid Rain Program

OMB No 2060-0221 Expires 6-30-95



Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24 पान के प्राप्त कर के प्राप्त के किया है। 50551 This submission is: New X Revised ا ان پ 12 124

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

ولمتهيرين

FL 630 Higgins Plant Name State ORIS Code 2000

STEP 2 Enter requested Information for the designated representative

Name	W. Jeffrey Pardue				
Address	Florida Power Corporation 3201 - 34th Street South St. Petersburg, FL 33711	MAC H2G			
Phone Num	_{ber} (813) 866-4387	Fax Number	(813)	866-4926	

STEP 3 Enter requested Information for the alternate designated representative (optional)

<u> </u>
ax Number

STEP 4 Complete Step 5, read the certifications and sign and date

I certify that I was selected as the designated representative or elternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have given notice of the agreement, selecting me as the designated representative or alternate designated representative, as applicable for the affected source and each effected unit at the source identified in this certificate of representation, daily for a period of one week in a newspaper of general circulation in the area where the source is located or in a State publication designed to give general public notice.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner end operator shall be fully bound by my ections, inactions, or submissions.

I certify that I shall abide by any fiduciary responsibilities imposed by the agreement by which I was selected as designated representative or alternate designated representative, as applicable.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the parmitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unic, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement or, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be helf or distributed in accordance with the contract.

The agreement by which I was schooled as the alternate designated representative includes a procedure for the owners and operators at the source and affected units at the source to authorize the alternate designates representative to act in heal of the designated representative.

BEST AVAILABLE COPY

Plant Name (f	rom Step 1)	Higgins			a de la composition della comp	2000
Cartification						STATE OF THE PROPERTY OF THE P
am authorized	to make this a	iubmission on b	wo edj. to tlene	ners and opera	itors of the affe	cted source or
examined, and	am familiar wit	h; the statemen	nts and informa	pomindusinou	in this docume	nt and all its
annuisata tandu	and a second	and the state	an ara al anifica	et papalting for	Sitt Kilo Wibada	and belief true.
information or				Including the	possibility of fin	e statements ar emocinamino e
	ignated represe		11)			11/5/94
Signature (alte					Data	
Name		a Power Co			X Owner	X Operator
, reginis						
10# 1	_{ID#} 2	_{1D} # 3	1D#	10#	10#	10#
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Regulatory Au	thorities	Florida Pu	ıblic Serv	ice Commi:	ssion	
	talian salah s			and the state of t		
Name					Owner -	Operator
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Name					Cwner	Operator
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Regulatory Au	thorities					
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Regulatory Au						!

584 Form 7610 : 411 321

STEP 5

owner

Provide the name of every owner and operator of the source

and each affected unit at the source, identify the units they own

and/or operate by boiler ID# from NADB. For owners only, identify each state or local utility regulatory authority with jurisdiction over each

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

1. 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.
2. Single Process, Group of Processes, or Fugitive Only? 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.

Emissions Unit Information Section 6 of 8 Fossil Fired Ste	am Boiler No
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B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1.	Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fossil Fired Steam Boiler No. 2						
2.	2. Emissions Unit Identification Number: [] No Corresponding ID [] Unknown 002						
3.	Emissions Unit Status Code:	4. Acid Rain Unit? [x] Yes [] No	5. Emissions Unit Major Group SIC Code: 49				
6.	Emissions Unit Commen	t (limit to 500 characters):					

2

Emissions Unit Control Equipment Information

	٨	
t	3	١.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: 30 Jun 1953

2. Long-term Reserve Shutdown Date: 24 Jan 1994

3. Package Unit:

Manufacturer: NA

Model Number: NA

4. Generator Nameplate Rating: 42 MW

5. Incinerator Information:

Dwell Temperature:

٥F

٥F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: 523 mmBtu/hr

2. Maximum Incineration Rate: lbs/hr tons/day

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate:

5. Operating Capacity Comment (limit to 200 characters):

1. Maximum heat input based on permit limit firing No. 6.

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24 hours/day

7 days/week

52 weeks/yr

8,760 hours/yr

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

 Not Applicable				
	•			
			·	
٠				

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment HG-EU6-D	
···	
; ·	

Emissions Unit Information Section 01	Emissions	on b of b	Emissions Unit Information Section
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Fossil Fired Steam Boiler No 2

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

Emission Point Description and Type

1.	Identification of	f Po	oint on Plot	Plan	or	Flow	Diagra	ım:	
2.	Emission Point	Ту	pe Code:					_	
	[x]1	[] 2		[] 3		[]	4
3.	Descriptions of to 100 characte			ints C	Com	prisin	g this l	Emissi	ons Unit for VE Tracking (limit
	Boiler gases ex	cha	ust through	a sir	ıgle	stack	ζ.		
				-					
4.	ID Numbers or Not Applicable	De	escriptions	of En	nissi	ion U	nits wit	h this	Emission Point in Common:
	пострривале								
5.	Discharge Type	C							
	[]D []R	[] F [x] V	[]	H W	L] P	
6.	Stack Height:						-	174	feet
7.	Exit Diameter:							12.5	feet
8.	Exit Temperatu	re:						310	°F

Source Information Section	6	of	8	Fossil Fired Steam Boiler No 2
Source information Section.		UI _		

9.	Actual Volumetric Flow Rate	> :	206,000	acfm
10.	Percent Water Vapor:			%
11.	Maximum Dry Standard Flov	v Rate:		dscfm
12.	Nonstack Emission Point He	ight:		feet
13.	Emission Point UTM Coordi	nates:		
	Zone: 17 East (km):	336.5	North	(km): 3098.4
14.	Emission Point Comment (lin	nit to 200 charac	ters):	
				e e

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment _ 1 of 4

 Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): 				
Ext Comb Boiler Electric Generation Re	sidual Oil No. 6			
2. Source Classification Code (SCC):				
	-01-004-01			
3. SCC Units:				
Thousand Gallons Burned				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:			
3.441	30,141			
6. Estimated Annual Activity Factor:				
7. Maximum Percent Sulfur:	8. Maximum Percent Ash			
2.5	0.1			
9. Million Btu per SCC Unit:				
	152			
10. Segment Comment (limit to 200 chara	acters):			
1. Heat content-HHV				
1. Heat content-inte				
•				

25

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

14424Y/F1/TVEU6SI

6/9/96

26

DEP Form No. 62-210.900(1) - Form

Effective: 03-21-96

14424Y/F1/TVEU6SI

6/3/96

Emissions	Unit l	Information	Section	6	of	8
			~			

Fossil Fired Steam Boiler No 2

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ___4

 Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): 				
Ext Comb Boiler Electric Generation Dis	stillate Oil No. 1 & No. 2 oil			
2. Source Classification Code (SCC):				
	-01-005-01			
3. SCC Units:				
Thousand Gallons Burned				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:			
3.79	33,199			
6. Estimated Annual Activity Factor:				
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:			
0.5	0.1			
9. Million Btu per SCC Unit:				
	138			
10. Segment Comment (limit to 200 chara	acters):			
Distillate fuel oil used as a pilot fuel fo	or startup, shutdown, and malfunction. Heat			
content-HHV.	,			

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
PM			EL
PM10			NS
NOx	•		NS
CO VOC			ns ns
H133			ns ns
HAPS			NS
••			
		•	

27

DEP Form No. 62-210.900(1) - Form

Effective: 03-21-96

Emissions	Unit	Information	Section	6	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: so2	
2. Total Percent Efficiency of Control:	0 %
3. Potential Emissions: 1,438.3 lb/hour	6,299.5 tons/year
4. Synthetically Limited? [] Yes [x] No	
5. Range of Estimated Fugitive/Other Emissions:	
[]1 []2 []3	_ to tons/yr
6. Emission Factor: 2.75 lb/MMBtu	
Reference: FDEP Rule 62-296.405	
7. Emissions Method Code:	
[]0 []1 [x]2 []3	[]4 []5
8. Calculation of Emissions (limit to 600 characters): See HG-EU5-H8 9. Pollutant Potential/Estimated Emissions Comment (Firing No.6 fuel oil. Permit limits maximum sulfur contents):	

28

6/1/96

Emissions Unit Information Section 6 of 8 Allowable Emissions (Pollutant identified on front page)

1	١.
1	7.

Basis for Allowable Emissions Code: RULE
Future Effective Date of Allowable Emissions:
Requested Allowable Emissions and Units:
2.75 lb/MMBtu
Equivalent Allowable Emissions: 1,438.3 lb/hour 6,299.5 tons/year
Method of Compliance (limit to 60 characters):
Fuel analysis during annual compliance test.
Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
Firing No. 6 fuel oil. Rule 62-296.405(1). Current limit - 1% sulfur content oil based on 5/29/92 stack test; higher sulfur content allowed if PM and VE tests performed.

B.

1.	Basis for Allowable Emissions Code:		
2.	Future Effective Date of Allowable Emissions:		
3.	Requested Allowable Emissions and Units:		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):	.: 	
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Operating Met	hod/Mode)

29

Emissions	Unit	Information Section	6	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

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? [] Yes [x] No					
5. Range of Estimated Fugitive/Other Emissions:					
[] 1					
6. Emission Factor: 0.3 lb/MMBtu					
Reference: FDEP Rule 62-210.700					
7. Emissions Method Code:					
[x]0 []1 [.]2 []3 []4 []5					
8. Calculation of Emissions (limit to 600 characters):					
See Attachment HG-EU5-H8					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):					
Potential lb/hr - soot-blowing while oil firing. 2. Potential TPY - 0.125 lb/MMBtu, 24 hr (0.1 during normal operations, 21 hr; 0.3 during soot blowing, 3 hr).					

28

6/1/96

Fossil Fired Steam Boiler No 2

Particulate Matter - Total

Emissions	Unit Inform	nation Sec	ction	6	_ of _	. 8
<u>Allowable</u>	Emissions	(Pollutant	identif	ied or	fron	t page)

1	۱		
_	3	١	•

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.	Pollutant Allowable Emissions Comment (Desc (limit to 200 characters):	. (of Related Oper	ating Method/Mode)
	1. Based on oil-firing during normal operations.	2	. Rule 62-210.70	0.
	2			

B.

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.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

1. Based on soot-blowing while oil-firing (3 hours in 24 hours). 2. Rule 62-210.700.

29

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Visible Emissions Limitations:	Visible Emissions Limitation	1_	of _	4	

VE40 1. Visible Emissions Subtype: Basis for Allowable Opacity: [x] Rule 2. [] 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** Visible Emissions Comment (limit to 200 characters): 5. 1. Visible emission limit at steady state. 2. Rule 62-296.405(1) and OGC File NO. 86-1581 0

<u>Visible Emissions Limitations</u>: Visible Emissions Limitation 2 of 4

- 1. Visible Emissions Subtype: **VE60**
- 2. Basis for Allowable Opacity: [x] Rule
- 3. Requested Allowable Opacity

Normal Conditions: 60 %

Exceptional Conditions:

100 %

Maximum Period of Excess Opacity Allowed:

24 min/hour

] Other

4. Method of Compliance:

EPA Method 9

- 5. Visible Emissions Comment (limit to 200 characters):
 - 1. 60% opacity during load changing and boiler cleaning for 3 hr in 24 hr; Unlimited opacity allowed for 4 six-minute periods during 3 hr. 2. Rule 62-210.700(3).

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

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 operation practice
5.	Visible Emissions Comment (limit to 200 characters): 1. Not to exceed 2 hr in 24 hr for malfunction. 2. Rule 62-210.700(1).
Visib	
1.	Visible Emissions Limitations: Visible Emissions Limitation 4 of 4 Visible Emissions Subtype: VE
1.	Visible Emissions Subtype: VE
1.	Visible Emissions Subtype: VE Basis for Allowable Opacity: [x] Rule [.] Other Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 %

30

6/3/96

Emissions Unit Information Section	6	of	8	Fossil Fired Steam Boiler No 2
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

consumes increment.

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
 [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
 [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- [] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Increment Consuming/Expanding Code: 3. PM [X] Unknown 1 C] E SO₂ 1 C] E [x] Unknown NO_2 1 C] E [x] Unknown 4. Baseline Emissions: PM lb/hour tons/year SO₂ lb/hour tons/year NO₂ tons/year PSD Comment (limit to 200 characters): Baseline emissions not known.

33

DEP Form No. 62-210.900(1) - Form

Effective: 03-21-96

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: HG-EU5-L1 [] Not Applicable [] V	Vaiver Requested
2.	Fuel Analysis or Specification	
	[x] Attached, Document ID: HG-EU5-L2 [] Not Applicable [] V	Vaiver Requested
3.	Detailed Description of Control Equipment	· · · · · · · · · · · · · · · · · · ·
	[] Attached, Document ID:	Vaiver Requested
4.	Description of Stack Sampling Facilities	
	[X] Attached, Document ID: HG-EU5-L4 [] Not Applicable [] V	Vaiver Requested
5.	Compliance Test Report	
•	[X] Attached, Document ID: HG-EU5-L5 [] N Previously Submitted, Date:	Not Applicable
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: HG-EU5-L6 [] N	Not Applicable
7.	Operation and Maintenance Plan	
	[X] Attached, Document ID: HG-EU6-L7 [] N	Not Applicable
8.	Supplemental Information for Construction Permit Application	ion
	[] Attached, Document ID: [x] N	Not Applicable
9.	Other Information Required by Rule or Statute	
	[X] Attached, Document ID: HG-EU5-L9 [] N	Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation		
	[X] Attached, Document ID: HG-EU5-L10 [] 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-EU6-L12 [] Not Applicable		
13.	Compliance Assurance Monitoring Plan		
	[X] Attached, Document ID: HG-EU5-L13 [] Not Applicable		
14.	Acid Rain Permit Application (Hard Copy Required)		
	[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: HG-EU5-L14		
	[] 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:		
	[] Not Applicable		

ATTACHMENT HG-EU6-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU6-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU6: Unit 2 (FFSG) - FPC Higgins Plant

FDEP Rules:

62-296.700(6)(d)

62-296.700(6)(e)

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 (ii 21 ii iso)
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 St	
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

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

62-297.310(1) - Test Runs-Mass Emission

Fossil Fuel Steam GeneratorsRecords and Inspection

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 ₂ SO 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 CED 70 20(-)	Decisional to Amalia (normalia bottono cumination)

- General; multi-unit compliance options

Requirements to Apply (reapply before expiration)Requirements to Apply (submittal requirements)

- Dispatch System ID; ID change

- General; compliance plan

Dispatch System ID; unit/system IDDispatch System ID; ID requirements

- Permit Shield

40 CFR 72.30(c)

40 CFR 72.30(d)

40 CFR 72.33(c)

40 CFR 72.33(d)

40 CFR 72.40(a)

40 CFR 72.40(b)

40 CFR 72.32 40 CFR 72.33(b)

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) 40 CFR 75.54(e) 40 CFR 75.54(f) 40 CFR 75.55 40 CFR 75.56 40 CFR 75.60 40 CFR 75.61 40 CFR 75.63 40 CFR 75.63 40 CFR 75.64(a) 40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-6. Appendix B Appendix C-1. Appendix F Appendix F	 Recordkeeping-NO_x Recordkeeping-CO₂ Recordkeeping-Opacity Monitoring Plan Certification; QA/QC Provisions Reporting Requirements-General Reporting Requirements-Notification cert/recertification Reporting Requirements-Certification/Recertification Reporting Requirements-Quarterly reports; submission Reporting Requirements-Quarterly reports; DR statement Rep. Req.; Quarterly reports; Compliance Certification Rep. Req.; Quarterly reports; Electronic format Opacity Reports Performance Specifications Data Handling and Acquisition Systems Calibration Gases Certification Tests and Procedures QA/QC Procedures Missing Data; SO₂/NOx for controlled sources Missing Data; Load-Based Procedure; NO_x & flow Conversion Procedures
	<u> </u>
Appendix G-2.	- Determination of CO ₂ ; from combustion sources
Appendix H	- Traceability Protocol

4

ATTACHMENT HG-EU6-L7

OPERATION AND MAINTENANCE PLAN

(See Air Operating Permit for Higgins Unit 2, AO52-216383, Specific Condition No. 15; See Attachment HG-EU6-L12)

ATTACHMENT HG-EU6-L12 ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations).



Florida Department of Environmental Regulation

Southwest District

Lawton Chiles, Governor

3804 Coconut Palm

813-744-6100

Tampa, Florida 33619

Virginia B. Wetherell, Secretary

NOTICE OF PERMIT RE-ISSUANCE

CERTIFIED MAIL

In the Matter of an Application for permit by:

DER File No.: A052-216383 County: Pinellas

Mr. W.J. Pardue, Manager Environmental Programs Florida Power Corporation P.O. Box 14042 St. Petersburg, Florida 33733

Enclosed is revised Permit Number A052-216383 to operate the Higgins Unit No. 2 located in Oldsmar, issued pursuant to Section 403, Florida Statutes. This permit has been revised as a result the FPC comments submitted on March 17, 1993 and subsequent discussions between FPC and DER staff. Please replace the previously received version of permit number A052-216383 with this revised version.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57 Florida Statutes.

The Petition shall contain the following information;

- (a) The name, address, and the telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
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Environmental Svcs Department



- __ (d) A statement of the material facts disputed by petitioner, if any;
 - (e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action;
 - (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
 - (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to The petition must conform to the requirements the proceeding. specified above and be filed (received) within 14 days of receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any rights such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Street Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

David R. Zell

Air Permitting Engineer 3804 Coconut Palm Drive Tampa Florida 33619-8318

Phone (813) 744-6100 Ext. 412

DRZ/ Attachment

cc: Gary Robbins, Pinellas Co. Dept. of Environmental Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT RE-ISSUANCE and all copies were mailed by certified mail before the close of business on APR 26 1993 to the listed persons.

> FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.



Florida Department of Environmental Regulation

Southwest District

Lawton Chiles, Governor

3804 Coconut Palm

813-744-6100

Tampa, Florida 33619

Virginia B. Wetherell, Secretary

PERMITTEE:

Florida Power Corporation Higgins Plant P.O. Box 14042 St. Petersburg, FL 33733 PERMIT/CERTIFICATION:

Permit No: A052-216383

County: Pinellas

Expiration Date: 09/16/97
Project: Steam Generator

Higgins Unit No. 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. 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 department and made a part hereof and specifically described as follows:

For the operation of Higgins Unit No. 2, a fossil fuel fired electric utility steam generator rated at 43 MW/hour. The unit is fired with No. 6 fuel oil, with a maximum sulfur content of 2.5% by weight, at a maximum heat input rate of 523 MMBtu/hour (83 BBL/hour, 3,486 gallons/hour). As an alternate fuel when available, the unit can also be fired on natural gas at a maximum rate of 0.49 x 106 ft³/hour.

Location: Higgins Plant, Shore Drive, Oldsmar

UTM: 17-336.54 E 3098.25 N NEDS No: 0012 Point ID No: 02

Replaces Permit No.: A052-137125

(Note: This permit also replaces the 1st version of

A052-216383 issued January 26, 1993)

Page 1 of 9



PERMIT/PROJECT:
Permit No.: A052-216383
County: Pinellas
Project: Higgins Unit 2

SPECIFIC CONDITIONS:

- 1. A part of this permit is the attached 15 General Conditions. [Rule 17-4.160, F.A.C.].
- 2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 17-200 through 17-299, or any other requirements under federal, state or local law. [Rule 17-210.300, F.A.C.].

Operational and Emission Limitations

- 3. This boiler is permitted for continuous operation (8,760 hours per year).
 [As requested by applicant].
- 4. This boiler shall be fired with No. 6 fuel oil, with natural gas as an alternate fuel when available. The maximum heat input rate to this boiler shall not exceed 523 MMBtu/hr (3,486 gallons/hour when firing No. 6 fuel oil). If firing 100% natural gas, the maximum gas firing rate shall not exceed 0.49 MMCF/hour. [Previous permits and information supplied with application].
- 5. Sulfur content of the No. 6 fuel oil fired in this boiler shall not exceed 2.5% sulfur by weight.* In no case shall sulfur dioxide emissions from this boiler exceed 2.75 pounds/MMBtu of heat input nor 1,438 pounds per hour at maximum heat input rate.

 (* See also Specific Condition No. 14.)

 [Previous permits and Rule 17-296.405(1)(c)1.k., F.A.C.].
- 6. <u>Particulate emissions</u> from this boiler shall be limited as follows:
 - A. During <u>normal operations</u>, particulate emissions shall not exceed 0.10 pounds/MMBtu, 52.3 pounds per hour, nor 229 tons per year;
 - B. During boiler cleaning (sootblowing) and load changes particulate matter emissions shall not exceed 0.30 pounds/MMBtu, nor 156.9 pounds per hour, and provided that best operational practices are adhered to minimize the magnitude and duration of the excess emissions.

[Rules 17-296.702(2)(a) and 17-210.700(3), F.A.C., and previous permit].

Permit No.: A052-216383 County: Pinellas Project: Higgins Unit 2

SPECIFIC CONDITIONS:

- 7. Visible emissions from this boiler shall be limited as follows:
 - A. During <u>normal operations</u>, visible emissions shall not exceed 40% opacity;
 - B. During boiler cleaning (sootblowing) and load changes visible emissions shall not exceed 60% opacity, provided that the duration of such excess emissions shall not exceed a total of 3 hours in any 24 hour period, and provided that best operational practices are adhered to minimize the magnitude and duration of the excess emissions.

[Rules 17-296.702(2)(b), 17-296.405(1)(a) and 17-210.700(3), F.A.C. and OGC Order File No. 86-1581, December 11, 1986].

8. Excess emissions resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized. Excess emissions resulting from malfunctions are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized, but in no case exceeds two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operations, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited. (See also Specific Condition No. 19). [Rules 17-210.700(1) and (2), F.A.C.].

Testing and Compliance Documentation Requirements

- 9. Test the emissions from the boiler for the following pollutants annually * within one month of the base date of May 5. A report of the test data shall be submitted to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management within 45 days of the testing. The test report shall include a statement of the boiler O_2 levels during the test, the fuel firing rate (in gallons/hour and MMBtu/hr) and the results of the fuel oil analysis (See Specific Condition No. 12).
 - (X) Particulate matter (PM) (steady state and sootblowing)
 - (X) Visible emissions (VE) (steady state and sootblowing)

(* Note: This source was authorized by Order of the Department Secretary dated December 11, 1986 (OGC File No. 86-1580) to test (continued)

PERMIT/PROJECT:

Permit No.: A052-216383

County: Pinellas

Project: Higgins Unit 2

SPECIFIC CONDITIONS:

9. (continued)

particulate matter emissions and visible emissions annually with a 40% opacity limit. Failure of this source to meet either the particulate standard or the opacity standard in the future shall constitute grounds for revocation of this authorization and a return to more frequent testing.)
[Rules 17-297.340 and 17-297.570, F.A.C. and OGC Order File No. 86-1577].

- 10. The permittee shall notify the Air Quality Division of the Pinellas County Department of Environmental Management in writing 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.

 [Rule 17-297.340(1)(i), F.A.C.].
- 11. Compliance with the emission limitations of Specific Condition Nos. 5, 6 and 7 shall be determined using the following methods contained in Rule 17-297, F.A.C. or in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297, F.A.C.:

Pollutant Test Method

Visible emissions DER Method 9

Particulate Matter EPA Method 5

or

EPA Method 17 (only if stack temperature is less than 375 °F)

Sulfur dioxide (& %S) Fuel analysis (EPA Method 19)

The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60, Appendix A.

12. Compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be demonstrated during all particulate and VE compliance tests based on analysis of an as-fired oil sample taken during the testing. Results of this analysis, and calculation of the resulting pound/MMBtu sulfur dioxide emission rate, shall be submitted with the test report.

[Rule 17-4.070(3), F.A.C.].

PERMIT/PROJECT:
Permit No.: A052-216383

County: Pinellas

Project: Higgins Unit 2

SPECIFIC CONDITIONS:

13. Documentation of ongoing compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be demonstrated through fuel analysis on a monthly basis. The permittee shall take a daily as-fired fuel oil sample for each day of operation and, on a monthly basis, analyze the monthly composite fuel oil sample for sulfur content and heat content (See O&M Plan, Specific Condition No. 15.B.5.). Based on the results of this monthly analysis, the permittee shall calculate the monthly average pound/MMBtu sulfur dioxide emission rate. The fuel analysis results and the monthly sulfur dioxide emission rate calculation shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a two year period. (See also Specific Condition No. 17 for quarterly reporting requirements.)
[Rule 17-4.070(3), F.A.C.].

Approved compliance testing of emissions must be conducted while firing No. 6 fuel oil operating within 90-100% of the permitted rates as stated in the Process Parameters Section of Specific Condition No. 15. However, based on the rate at which the May 1992 stack test was conducted, the maximum permitted fuel oil sulfur content for this boiler is currently limited to 1.0 % S by weight. A compliance test submitted at an operating rate less than 90% of the permitted rates will automatically constitute an amended permit at the lesser rate until another test, showing compliance at a higher rate, is submitted. Any time the above permitted fuel oil sulfur content (monthly average) is exceeded by more than 10% for two consecutive months or 20% for any single month then particulate and visible emissions compliance tests, conducted while using the higher sulfur content fuel oil, shall be performed within 45 days of the end of the month that triggers this requirement. The test results shall be submitted to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management 45 days of such testing. Acceptance of the test by the Department will constitute an amended permit at the tested higher sulfur content, not to exceed a maximum sulfur content of 2.5 %S by weight. Failure to submit the fuel oil firing rate and sulfur content, or operating at conditions during the test which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.].

Permit No.: A052-216383
County: Pinellas

Project: Higgins Unit 2

SPECIFIC CONDITIONS:

Operation and Maintenance Plan

15. The following is the specified Operation and Maintenance Plan for Particulate Control as required by Rule 17-296.700(6), F.A.C. (Particulate Matter RACT).

A. <u>Process Parameters</u> (Rule 17-296.700(6)(d), F.A.C.)

Heat Input Rate: 523 MMBtu/hour (maximum)

2. Fuel: No. 6 Fuel oil with a max. sulfur

content of 2.5% (also natural gas

when available).

3. Fuel Firing Rate: 3,486 gallons/hour (83 BBL/hour) of

No. 6 oil (maximum),

0.49 MMCF/hr of natural gas (max.)

4. Ash content: as sampled

5. Steam Temperature: 950 °F6. Steam Pressure: 1,315 psi

7. Steam Flow Rate: 450,000 pounds/hour

8. Stack Height 174 feet

9. Boiler Manufacturer: 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.
- 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

PERMIT/PROJECT:

Permit No.: A052-216383

County: Pinellas

Project: Higgins Unit 2

SPECIFIC CONDITIONS:

- 4. Plant operators are to monitor, adjust and record the following operating parameters at least once per day to assure efficient plant operation:
 - a. temperatures (superheat, fuel)
 - b. flows (steam, feedwater, fuel)
 - c. unit load
 - 5. Fuel oil quality is to be checked prior to delivery and a sample taken each day that the facility is operated for a monthly composite sample analysis. Fuel oil analysis (by ASTM Methods) is to be analyzed for the following:
 - a. heat content (Btu/gallon)
 - b. sulfur content (%S by weight)
 - c. density
 - d. API gravity
- C. Recordkeeping (Rule 17~296.700(6)(e), F.A.C.)
 Records of inspection, maintenance, and performance
 parameters shall be retained for a minimum of two years and
 shall be made available to the Department or the Pinellas
 County Department of Environmental Management upon request.

[Rule 17-296.700(6), F.A.C.].

16. Based on the original permit application received by the Department and information submitted by the permittee with subsequent applications, the following are the maximum potential emission rates from this source based upon which this permit is issued:

Pollutant	pounds/hour	tons/year
Particulate (PM)	52.3	229.0
Sulfur dioxide (SO2)	1,438.3	6,299.5
Carbon Monoxide (CO)	19.6	85.9
Nitrogen Oxides (NOx)	366.0	1,603.2
Volatile Organics (VOC)	2.7	11.6

PERMIT/PROJECT:
Permit No.: A052-216383
County: Pinellas

Project: Higgins Unit 2

SPECIFIC CONDITIONS:

Reporting Requirements

- 17. Compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be documented by the permittee through submittal of quarterly reports of the Higgins Plant monthly average fuel oil sulfur content, heat content, and the resulting sulfur dioxide emission rate in pounds/MMBtu of heat input. These quarterly reports shall be submitted within 30 days of the end of each calendar quarter to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management. [Rule 17-4.070(3), F.A.C.].
- 18. Submit to the Southwest District Office of the Department and to the Pinellas County Department of Environmental Management each calendar year on or before March 1, an emission report for this source for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), F.S.:
 - A. Annual amount of materials and/or fuels utilized;
 - B. Annual emissions of PM, SO₂, NOx and VOC based on fuel use, operating hours and fuel analysis. Until further notice by the Department the permittee shall calculate PM emissions by multiplying the PM stack test results by the hours of operation. Other annual emissions shall be determined by multiplying the annual fuel use times the following emission factors:

Pollutant	No. 6 Oil Ef (lb/1000 gal)	Natural Gas Ef (1b/MMCF)
SO2	157(S)	0.6
co	5	5
NOx	105	550
voc	0.76	1.4

(Provide calculation sheets to document calculation method)

C. Any changes in the information contained in the permit application.

PERMIT/PROJECT:
Permit No.: A052-216383
County: Pinellas
Project: Higgins Unit 2

SPECIFIC CONDITIONS:

19. Excess emission notification. In the event that the permittee is unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Air Quality Division of the Pinellas County Department of Environmental Management.

Notification shall be conducted in accordance with General Condition No. 8 of this permit. (See attached General Conditions.) In the case of excess emissions resulting from malfunctions, a full written report on the malfunction shall be submitted in a quarterly report if so requested by the Department.

[Rule 17-210.700(6), F.A.C.].

Permit Renewal

20. Three applications to renew this operating permit shall be submitted to the Southwest District Office of the Department, with an additional copy sent to the Air Quality Division of the Pinellas County Department of Environmental Management, no later than July 17, 1997 (60 days prior to the expiration date of this permit). [Rule 17-4.090(1), F.A.C. and Pinellas County Ordinance 89-70, as amended, Subpart 2.210].

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Richard D. Garrity, Ph.D.

Director of District Management

Southwest District

ATTACHMENT - GENERAL CONDITIONS:

- The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

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- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit;
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- Q. In accepting this permit, the permittee understands and agrees that all cords, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

This	permit	also	consti	tutes:
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- Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- Compliance with New Source Performance Standard

14. The permittee shall comply with the following:

- Upon request, the permittee shall furnish all records and plans (a) required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- The permittee shall hold at the facility or other location designated (b) by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;6. the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of:

Petition for Reduction in)
Semiannual Particulate)
Emissions Compliance Testing,)
Higgins Unit No. 2;)
Florida Power Corporation)

Petitioner.

OGC File No. 86-1581

ORDER

On February 18, 1986, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel steam generating unit:

Higgins Unit No.2

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since April 27, 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing in GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1986 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from the first annual test. Failure of Higgins Unit No.2 to meet

either the particulate standard or the 40% opacity standard in the future shall constitute grounds for revocation of this authorization.

Persons whose substantial interests are affected by the above proposed agency action have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests will be affected by any decision of the Department have the right to intervene in the proceeding. A petition for the intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitues a

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waiver of any right such person has to an administrative	е
determination (hearing) under Section 120.57, Florida S	
DONE AND ORDERED this _//# day of	, in
Tallahassee, Florida.	

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

PLING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to \$120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

C. Hutchisco 12-12-86
Clerk Date

VICTORIA J. TSCHINKEL Secretary

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing ORDER has been furnished by United States Mail to J.A. Hancock, Vice President, Fossil Operations, Florida Power Corporation, Post Office Box 14042, St. Petersburg, Florida 33733; on this 12 day of December, 1986, in Tallahassee, Florida.

E. Gary Early

Assistant General Counsel

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Type of Emissions Unit Addressed in This Section
1. 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.
2. Single Process, Group of Processes, or Fugitive Only? 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.

Emissions Unit Information Section	_ 7	of	. 8	Fossil Fired Steam Boiler No
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B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1.	Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fossil Fired Steam Boiler No. 3			
2.	Emissions Unit Identific	ation Number: [] No Corre	esponding ID [] Unknown	
3.	Emissions Unit Status Code: A	4. Acid Rain Unit? [x] Yes [] No	5. Emissions Unit Major Group SIC Code: 49	
6.	Emissions Unit Commen	t (limit to 500 characters):		

Emissions Unit Control Equipment Information

1	١		
	3	L	•

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:

2. Maximum Incineration Rate:

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate:

5. Operating Capacity Comment (limit to 200 characters):

1. Maximum heat input based on permit limit firing No. 6 fuel oil.

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24 hours/day

7 days/week

52 weeks/yr

8,760 hours/yr

D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (Required for Category II Applications and Category III applications involving non Title-V sources. See Instructions.)

Not Applicable		
	·	

n 7 of 8

Fossil Fired Steam Boiler No 3

<u>List of Applicable Regulations</u> (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment HG-EU7-D	
	,

Emissions care information section or	Emissions	Unit	Information	Section	7	of	8	
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Fossil Fired Steam Boiler No 3

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

Emission Point Description and Type

1.	Identification of	f Pc	oint on Plo	t Plan	or	Flow I	Diagra	.m:	
2.	Emission Point	Ту	pe Code:						
	[x] 1	[] 2	_	[] 3		[]	4
3.	Descriptions of to 100 characte			ints C	Com	prising	g this I	Emissic	ons Unit for VE Tracking (limit
	Boiler gases ex	hau	ust through	n a sin	gle	stack			
4.	ID Numbers or	De	scriptions	of En	iissi	on Un	its wit	h this I	Emission Point in Common:
	Not Applicable								
					. ,	1			
5.	Discharge Type	Cc		ŗ	1	Н	г] P	
		[] F x] V	[_	W	L] r	
6.	Stack Height:							174	feet
							_		
7.	Exit Diameter:						_	12.5 	feet
8.	Exit Temperatu	re:						301	°F

Source Information Section 7	of	8	Fossil Fired Steam Boiler No 3

9.	Actual Volumetric Flow Rate:	180,500 acfm	
10.	Percent 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 ch	aracters):	

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode)							
Ext Comb Boiler Electric Generation Re	(limit to 500 characters):						
EXI Comb Boiler Electric Generation Res	siduai Oii No. 6						
2. Source Classification Code (SCC):							
1	-01-004-01						
3. SCC Units:							
Thousand Gallons Burned	<u>٠</u>						
4. Maximum Hourly Rate:	5. Maximum Annual Rate:						
3.605	31,582						
6. Estimated Annual Activity Factor:							
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:						
2.5	0.1						
9. Million Btu per SCC Unit:							
	152						
10. Segment Comment (limit to 200 characters):							
1. Maximum heat input based on oil firing. 2. Heat content-HHV.							
	*						

DEP Form No. 62-210.900(1) - Form

Effective: 03-21-96

Emissions Unit Information Section	7 0	f	8	Fossil Fired Steam Boiler No 3
Segment Description and Rate: Segmen	nt 2	_ of _	3	
Segment Description (Process/Fuel Ty (limit to 500 characters): Ext Comb Boiler Electric Generation Dist				
2. Source Classification Code (SCC):				1-01-005-01
3. SCC Units: Thousand Ga	illons B	urne	d	
4. Maximum Hourly Rate: 3.971	5.	Maxi	mum	Annual Rate: 34,786
6. Estimated Annual Activity Factor:				
7. Maximum Percent Sulfur: 0.5	8.	Maxi	mum	Percent Ash: 0.1
9. Million Btu per SCC Unit:				138
10. Segment Comment (limit to 200 charanter) Distillate fuel oil is used as a pilot fuel content-HHV.			, shut	down, and malfunction. Heat

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____3 of ___3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):						
On - specification used oil						
	-					
2. Source Classification Code (SCC):	-01-013-02					
3. SCC Units:						
Thousand Gallons Burned						
4. Maximum Hourly Rate:	5. Maximum Annual Rate:					
3.971	3,479					
6. Estimated Annual Activity Factor:	_					
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:					
2.5	0.9					
9. Million Btu per SCC Unit:	•					
	138					
10. Segment Comment (limit to 200 chara	acters):					
Heat content - HHV. Limited to 10% as	nnual heat input.					

10. Segment Comment (limit to 200 characters):

6/9/96

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Cod
•			
SO2			EL
PM			EL
PM10			NS
CO			ns ns
VOC			NS
H133			NS
HAPS			NS

Emissions	Unit	Information	Section	7	of	8

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: SO2 2. Total Percent Efficiency of Control: 3. Potential Emissions: 1,507 lb/hour 6,600.7 tons/year 4. Synthetically Limited? [] Yes [] No 5. Range of Estimated Fugitive/Other Emissions: [] 1 [] 2 [] 3totons/yr 6. Emission Factor: 2.75 lb/MMBtu Reference: FDEP Rule 62-296.405 7. Emissions Method Code: [x] 0 [] 1 [] 2 [] 3 [] 4 [] 5 8. Calculation of Emissions (limit to 600 characters):					
3. Potential Emissions: 1,507 lb/hour 6,600.7 tons/year 4. Synthetically Limited? [] Yes [] No 5. Range of Estimated Fugitive/Other Emissions: [] 1 [] 2 [] 3 to tons/yr 6. Emission Factor: 2.75 lb/MMBtu Reference: FDEP Rule 62-296.405 7. Emissions Method Code: [x] 0 [] 1 [] 2 [] 3 [] 4 [] 5					
4. Synthetically Limited? [] Yes [] No 5. Range of Estimated Fugitive/Other Emissions: [] 1 [] 2 [] 3					
5. Range of Estimated Fugitive/Other Emissions: [
[] 1 [] 2 [] 3					
6. Emission Factor: 2.75 lb/MMBtu Reference: FDEP Rule 62-296.405 7. Emissions Method Code: [x] 0 [] 1 [] 2 [] 3 [] 4 [] 5					
Reference: FDEP Rule 62-296.405 7. Emissions Method Code: [x] 0 [] 1 [] 2 [] 3 [] 4 [] 5					
7. Emissions Method Code: [x] 0 [] 1 [] 2 [] 3 [] 4 [] 5					
7. Emissions Method Code: [x] 0 [] 1 [] 2 [] 3 [] 4 [] 5					
8. Calculation of Emissions (limit to 600 characters):					
LA CARCHIAHOH OF CHUSSIONS CHIRIL TO OUV CHALAGICES)					
o. Calculation of Emissions (mine to 505 characters).					
See HG-EU5-H8					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):					
Permit limits maximum sulfur content to 2.5%. Firing No.6 fuel oil.					

28

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

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	_		_	Fossii Fired Steam Boiler No
Emissions Unit Information Section _	7	of _	8	Sulfur Dioxid
Allowable Emissions (Pollutant identi	<u>ified</u>	on front	page)	

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	lb/hour	6,600.7 tons/year
5.	Method of Compliance (limit to 60 characters):		
	Fuel analysis during annual compliance test.		
6.	Pollutant Allowable Emissions Comment (Desc. (limit to 200 characters):	of Related Op	erating Method/Mode)
	Firing No. 6 fuel oil. Rule 62-296.405(1). Current 5/29/92 stack test; higher sulfur content allowed i		
В.			
	Basis for Allowable Emissions Code:		
1.	Basis for Allowable Emissions Code: Future Effective Date of Allowable Emissions:		
2.			
1. 2. 3.	Future Effective Date of Allowable Emissions:	lb/hour	tons/year
 2. 3. 	Future Effective Date of Allowable Emissions: Requested Allowable Emissions and Units:	lb/hour	tons/year

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

Emissions	Unit	Information	Section	7	of	8	

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Pollutant Detail Information:

1. Pollutant Emitted: PM					
2. Total Percent Efficiency of Contro	ol: 0 %				
3. Potential Emissions:	164.4 lb/hour 300 tons/year				
4. Synthetically Limited? [] Y	res [x] No				
5. Range of Estimated Fugitive/Oth	er Emissions:				
[]1 []2 []3	to tons/yr				
6. Emission Factor: 0.3	lb/MMBtu				
Reference: FDEP Rule 62-210.700					
7. Emissions Method Code:					
[x]0 []1 []2	[]3 []4 []5				
8. Calculation of Emissions (limit to	600 characters):				
See Attachment HG-EU5-H8					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):					
Potential lb/hr - soot-blowing while oil firing. 2. Potential TPY - 0.125 lb/MMBtu, 24 hr (0.1 during normal operations, 21 hr; 0.3 during soot blowing, 3 hr).					
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Fossil Fired Steam Boiler No 3

Particulate Matter - Total

Emissions	Unit Inform	nation S	Section	7	of	8
<u>Allowable</u>	Emissions	(Pollutai	nt ident	ified	on fron	t page)

A	
	١.

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.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	1. Based on oil-firing during normal operations. 2. Rule 62-210.700.

B.

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.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	1. Based on soot-blowing while oil-firing (3 hours in 24 hours). 2. Rule 62-210.700.

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

E	miss	enois	Unit	Inform	nation	Section	7
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Fossil Fired Steam Boiler No 3

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Visible	Emissions Limitations: 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): 1. Visible emission limit at steady state. 2. Rule 62-296.405(1) and OGC File No. 86-1582
<u>Visible</u>	Emissions Limitations: Visible Emissions Limitation2 of4
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): 1. 60% opacity during load changing and boiler cleaning for 3 hr in 24 hr; Unlimited opacity allowed for 4 six-minute periods during 3 hr. 2. Rule 62-210.700(3).

30

6/3/96

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Visible Emissions Limitations:	Visible Emissions Limitation	3	of	4
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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 operation practice
5.	Visible Emissions Comment (limit to 200 characters): 1. Not to exceed 2 hr in 24 hr for malfunction. 2. Rule 62-210.700(1).

<u>Visible Emissions Limitations</u>: Visible Emissions Limitation 4 of 4

Excess emissions for startup, shutdown. Rule 62-210.700(2).

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 operation practice
5.	Visible Emissions Comment (limit to 200 characters):

Effective: 03-21-96

DEP Form No. 62-210.900(1) - Form

Emissions Unit Information Section	7	of	8	Fossil Fired Steam Boiler No
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J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM] C [X] Unknown JΕ] E [x] Unknown SO₂] C NO₂ 1 C JΕ [x] Unknown 4. Baseline Emissions: PM lb/hour tons/year SO₂ lb/hour tons/year NO₂ tons/year 5. PSD Comment (limit to 200 characters): Baseline emissions not known.

33

6/3/96

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram
	[X] Attached, Document ID: HG-EU7-L1 [] Not Applicable [] Waiver Requested
2.	Fuel Analysis or Specification
	[x] Attached, Document ID: HG-EU5-L2 [] 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-L4 [] Not Applicable [] Waiver Requested
5.	Compliance Test Report
	[X] Attached, Document ID: HG-EU5-L5 [] Not Applicable Previously Submitted, Date:
6.	Procedures for Startup and Shutdown
	[x] Attached, Document ID: HG-EU5-L6 [] Not Applicable
7.	Operation and Maintenance Plan
	[X] Attached, Document ID: HG-EU7-L7 [] Not Applicable
8.	Supplemental Information for Construction Permit Application
	[] Attached, Document ID: [x] Not Applicable
9.	Other Information Required by Rule or Statute
	[X] Attached, Document ID: HG-EU5-L9 [] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation		
	[X] Attached, Document ID: HG-EU5-L10 [] 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-EU7-L12 [] Not Applicable		
13.	Compliance Assurance Monitoring Plan		
	[X] Attached, Document ID: HG-EU5-L13 [] Not Applicable		
14.	Acid Rain Permit Application (Hard Copy Required)		
	[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: HG-EU5-L14		
	[] 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:		
	[] Not Applicable		

DEP Form No. 62-210.900(1) - Form

ATTACHMENT HG-EU7-D EMISSIONS UNIT REGULATIONS

ATTACHMENT HG-EU7-D EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU7: Unit 3 (FFSG) - FPC Higgins Plant

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)		
	1 1 0 4 0 7		
Stationary Sources-Emission St			
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		

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

62-297.310(1) - Test Runs-Mass Emission

62-296.700(6)(e)

- Records and Inspection

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 ₂ SO 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
\-\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	,

- Submissions

- Permit Shield

40 CFR 72.21

40 CFR 72.22

40 CFR 72.23 40 CFR 72.30(a)

40 CFR 72.32

40 CFR 72.30(c) 40 CFR 72.30(d)

40 CFR 72.33(b)

40 CFR 72.33(c)

40 CFR 72.33(d)

- Dispatch System ID; ID change

- Dispatch System ID; unit/system ID

- Dispatch System ID; ID requirements

- Alternate Designated Representative

- Requirements to Apply (reapply before expiration)

- Requirements to Apply (submittal requirements)

- Changing representatives; owners

- Requirements to Apply (operate)

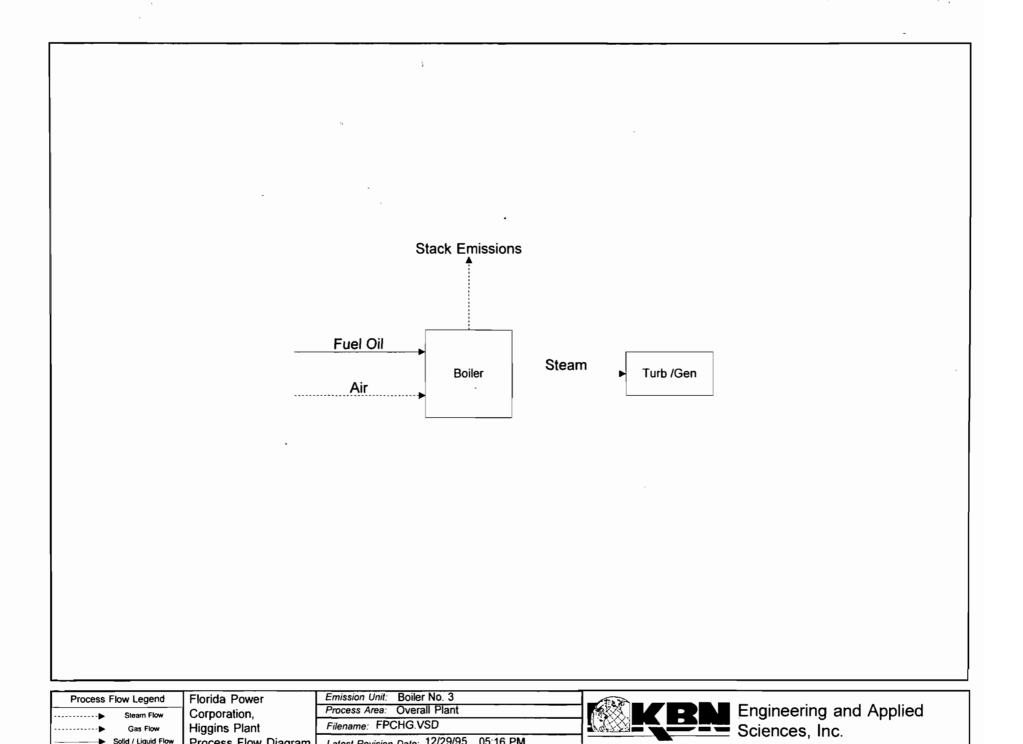
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield
40 CFR 72.90	- Annual Compliance Certification

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) 40 CFR 75.54(e) 40 CFR 75.55(f) 40 CFR 75.55 40 CFR 75.60 40 CFR 75.61 40 CFR 75.63 40 CFR 75.64(a)	 Recordkeeping-NO_x Recordkeeping-CO₂ Recordkeeping-Opacity Monitoring Plan Certification; QA/QC Provisions Reporting Requirements-General Reporting Requirements-Notification cert/recertification Reporting Requirements-Certification/Recertification Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b) 40 CFR 75.64(c) 40 CFR 75.64(d) 40 CFR 75.65 Appendix A-3. Appendix A-4. Appendix A-6. Appendix B Appendix C-1. Appendix C-2. Appendix F Appendix G-2. Appendix H	 Reporting Requirements-Quarterly reports; DR statement Rep. Req.; Quarterly reports; Compliance Certification Rep. Req.; Quarterly reports; Electronic format Opacity Reports Performance Specifications Data Handling and Acquisition Systems Calibration Gases Certification Tests and Procedures QA/QC Procedures Missing Data; SO₂/NOx for controlled sources Missing Data; Load-Based Procedure; NO_x & flow Conversion Procedures Determination of CO₂; from combustion sources Traceability Protocol

ATTACHMENT HG-EU7-L1 PROCESS FLOW DIAGRAM



Latest Revision Date: 12/29/95 05:16 PM

Process Flow Diagram

► Solid / Liquid Flow

ATTACHMENT HG-EU7-L4 DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT HG-EU7-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

The Higgins Plant Steam Generator Unit No. 3 is required by Permit AO52-216384 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to FAC 62-297.345, 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 FAC 297-345 (3)(a)(3) 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, extends 180 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.

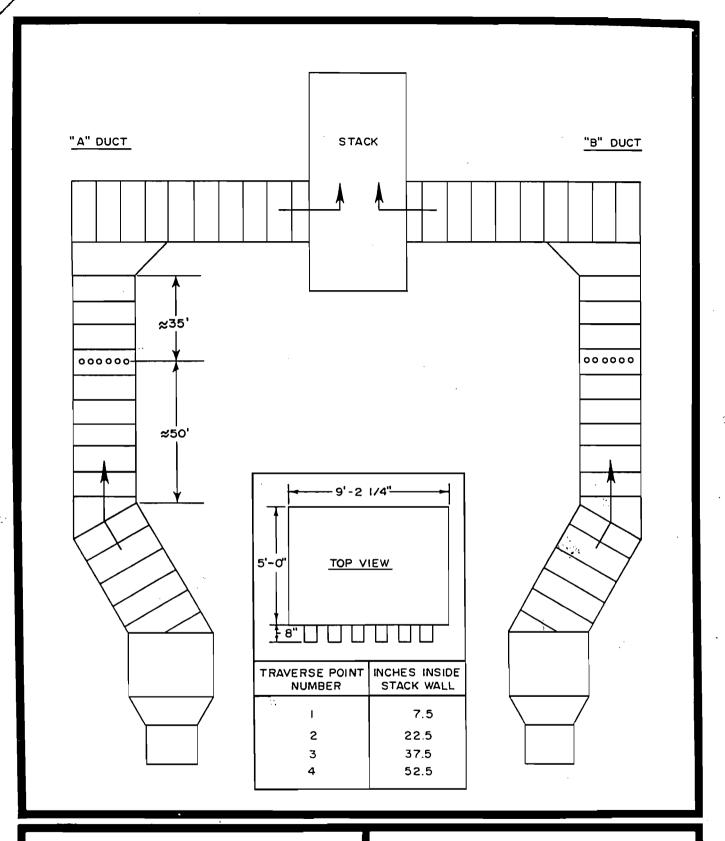


FIGURE I.
FLUE GAS EXHAUST SYSTEM SCHEMATIC
UNIT 3
FPC HIGGINS PLANT
OLDSMAR, FLORIDA

AIR CONSULTING and ENGINEERING

ATTACHMENT HG-EU7-L7

OPERATION AND MAINTENANCE PLAN

(See Air Operating Permit for Higgins Unit 3, AO52-216384, Specific Condition No. 15; See Attachment HG-EU7-L12)

ATTACHMENT HG-EU7-L12 ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations).



Florida Department of Environmental Regulation

Southwest District

Lawton Chiles, Governor

3804 Coconut Palm

813-744-6100

Tampa, Florida 33619

Virginia B. Wetherell, Secretary

NOTICE OF PERMIT RE-ISSUANCE

CERTIFIED MAIL

In the Matter of an Application for permit by:

DER File No.: A052-216384 County: Pinellas

Mr. W.J. Pardue, Manager
Environmental Programs
Florida Power Corporation
P.O. Box 14042
St. Petersburg, Florida 33733

Enclosed is revised Permit Number A052-216384 to operate the Higgins Unit No. 3 located in Oldsmar, issued pursuant to Section 403, Florida Statutes. This permit has been revised as a result the FPC comments submitted on March 17, 1993 and subsequent discussions between FPC and DER staff. Please replace the previously received version of permit number A052-216384 with this revised version.

A person whose substantial interests are affected by this permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this permit. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57 Florida Statutes.

The Petition shall contain the following information;

- (a) The name, address, and the telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

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APR 2 7 1993

Environmental Svcs Department



- __ (d) A statement of the material facts disputed by petitioner, if any;
 - (e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action;
 - (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
 - (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice, in the Office of General Counsel at the above address of the Department. Failure to petition within the allotted time frame constitutes a waiver of any rights such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Street Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

David R. Zell /

Air Permitting Engineer 3804 Coconut Palm Drive Tampa Florida 33619-8318 Phone (813) 744-6100 Ext. 412

DRZ/ Attachment

cc: Gary Robbins, Pinellas Co. Dept. of Environmental Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT RE-ISSUANCE and all copies were mailed by certified mail before the close of business on APR 26 1993 to the listed persons.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Section 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk APR 26 1993

Date



Florida Department of Environmental Regulation

Southwest District

Lawton Chiles, Governor

3804 Coconut Palm

813-744-6100

Tampa, Florida 33619

Virginia B. Wetherell, Secretary

PERMITTEE:

Florida Power Corporation Higgins Plant P.O. Box 14042 St. Petersburg, FL 33733 PERMIT/CERTIFICATION:

Permit No: A052-216384

County: Pinellas

Expiration Date: 09/16/97 Project: Steam Generator

Higgins Unit No. 3

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. 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 department and made a part hereof and specifically described as follows:

For the operation of Higgins Unit No. 3, a fossil fuel fired electric utility steam generator rated at 43 MW/hour. The unit is fired with No. 6 fuel oil, with a maximum sulfur content of 2.5% by weight, at a maximum heat input rate of 548 MMBtu/hour (87 BBL/hour, 3,654 gallons/hour).

Location: Higgins Plant, Shore Drive, Oldsmar

UTM: 17-336.54 E 3098.25 N NEDS No: 0012 Point ID No: 03

Replaces Permit No.: A052-137126

(Note: This permit also replaces the 1st version of

A052-216384 issued January 26, 1993)

....

PERMITTEE:
Florida Power Corp.
Higgins Plant
Oldsmar, FL

PERMIT/PROJECT:

Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions. [Rule 17-4.160, F.A.C.].

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 17-200 through 17-299, or any other requirements under federal, state or local law. [Rule 17-210.300, F.A.C.].

Operational and Emission Limitations

- 3. This boiler is permitted for continuous operation (8,760 hours per year).
 [As requested by applicant].
- 4. This boiler shall be fired with No. 6 fuel oil at a maximum heat input rate not to exceed 548 MMBtu/hr (3,654 gallons/hour). [Previous permits and information supplied with application].
- 5. Sulfur content of the No. 6 fuel oil fired in this boiler shall not exceed 2.5% sulfur by weight.* In no case shall sulfur dioxide emissions from this boiler exceed 2.75 pounds/MMBtu of heat input nor 1,507 pounds per hour at maximum heat input rate.

 (* See also Specific Condition No. 14.)

 [Previous permits and Rule 17-296.405(1)(c)1.k., F.A.C.].
- 6. <u>Particulate emissions</u> from this boiler shall be limited as follows:
 - A. During <u>normal operations</u>, particulate emissions shall not exceed 0.10 pounds/MMBtu, 54.8 pounds per hour, nor 240 tons per year;
 - B. During <u>boiler cleaning</u> (sootblowing) and <u>load changes</u> particulate matter emissions shall not exceed 0.30 pounds/MMBtu, nor 164.4 pounds per hour, and provided that best operational practices are adhered to minimize the magnitude and duration of the excess emissions.

[Rules 17-296.702(2)(a) and 17-210.700(3), F.A.C., and previous permit].

PERMITTEE:
Florida Power Corp.
Higgins Plant

Higgins Plant Oldsmar, FL PERMIT/PROJECT:

Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

7. Visible emissions from this boiler shall be limited as follows:

A. During <u>normal operations</u>, visible emissions shall not exceed 40% opacity;

B. During boiler cleaning (sootblowing) and load changes visible emissions shall not exceed 60% opacity, provided that the duration of such excess emissions shall not exceed a total of 3 hours in any 24 hour period, and provided that best operational practices are adhered to minimize the magnitude and duration of the excess emissions.

[Rules 17-296.702(2)(b), 17-296.405(1)(a) and 17-210.700(3), F.A.C. and OGC Order File No. 86-1582, December 11, 1986].

8. Excess emissions resulting from startup or shutdown are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized. Excess emissions resulting from malfunctions are permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions is minimized, but in no case exceeds two hours in any 24-hour period unless specifically authorized by the Department for a longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operations, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction are prohibited. (See also Specific Condition No. 19). [Rules 17-210.700(1) and (2), F.A.C.].

Testing and Compliance Documentation Requirements

- 9. Test the emissions from the boiler for the following pollutants annually* within one month of the base date of May 7. A report of the test data shall be submitted to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management within 45 days of the testing. The test report shall include a statement of the boiler O₂ levels during the test, the fuel firing rate (in gallons/hour and MMBtu/hr) and the results of the fuel oil analysis (See Specific Condition No. 12).
 - (X) Particulate matter (PM) (steady state and sootblowing)
 - (X) Visible emissions (VE) (steady state and sootblowing)

(* Note: This source was authorized by Order of the Department Secretary dated December 11, 1986 (OGC File No. 86-1582) to test (continued)

PERMITTEE:
Florida Power Corp.
Higgins Plant
Oldsmar, FL

PERMIT/PROJECT:
Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

(continued)

particulate matter emissions and visible emissions annually with a 40% opacity limit. Failure of this source to meet either the particulate standard or the opacity standard in the future shall constitute grounds for revocation of this authorization and a return to more frequent testing.)

[Rules 17-297.340 and 17-297.570, F.A.C. and OGC Order File No. 86-1577].

10. The permittee shall notify the Air Quality Division of the Pinellas County Department of Environmental Management in writing 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.

[Rule 17-297.340(1)(i), F.A.C.].

11. Compliance with the emission limitations of Specific Condition Nos. 5, 6 and 7 shall be determined using the following methods contained in Rule 17-297, F.A.C. or in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297, F.A.C.:

Pollutant Test Method

Visible emissions DER Method 9

Particulate Matter EPA Method 5

OI

EPA Method 17 (only if stack temperature is less than 375 °F)

Sulfur dioxide (& %S) Fuel analysis (EPA Method 19)

The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60, Appendix A.

12. Compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be demonstrated during <u>all</u> particulate and VE compliance tests based on analysis of an as-fired oil sample taken during the testing. Results of this analysis, and calculation of the resulting pound/MMBtu sulfur dioxide emission rate, shall be submitted with the test report.

[Rule 17-4.070(3), F.A.C.].

PERMITTEE:
Florida Power Corp.
Higgins Plant
Oldsmar, FL

Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

Documentation of ongoing compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be demonstrated through fuel analysis on a monthly basis. The permittee shall take a daily as-fired fuel oil sample for each day of operation and, on a monthly basis, analyze the monthly composite fuel oil sample for sulfur content and heat content (See O&M Plan, Specific Condition No. 15.B.5.). Based on the results of this monthly analysis, the permittee shall calculate the monthly average pound/MMBtu sulfur dioxide emission rate. fuel analysis results and the monthly sulfur dioxide emission rate calculation shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a two year period. (See also Specific Condition No. 17 for quarterly reporting requirements.) [Rule 17-4.070(3), F.A.C.].

Approved compliance testing of emissions must be conducted while firing No. 6 fuel oil operating within 90-100% of the permitted rates as stated in the Process Parameters Section of Specific Condition No. 15. However, based on the rate at which the May 1992 stack test was conducted, the maximum permitted fuel oil sulfur content for this boiler is currently limited to 1.0 % S by weight. A compliance test submitted at an operating rate less than 90% of the permitted rates will automatically constitute an amended permit at the lesser rate until another test, showing compliance at a higher rate, is submitted. Any time the above permitted fuel oil sulfur content (monthly average) is exceeded by more than 10% for two consecutive months or 20% for any single month then particulate and visible emissions compliance tests, conducted while using the higher sulfur content fuel oil, shall be performed within 45 days of the end of the month that triggers this requirement. The test results shall be submitted to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management 45 days of such testing. Acceptance of the test by the Department will constitute an amended permit at the tested higher sulfur content, not to exceed a maximum sulfur content of 2.5 %S by weight. Failure to submit the fuel oil firing rate and sulfur content, or operating at conditions during the test which do not reflect normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.].

PERMITTEE:

Florida Power Corp. Higgins Plant Oldsmar, FL PERMIT/PROJECT:

Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

Operation and Maintenance Plan

15. The following is the specified Operation and Maintenance Plan for Particulate Control as required by Rule 17-296.700(6), F.A.C. (Particulate Matter RACT).

A. <u>Process Parameters</u> (Rule 17-296.700(6)(d), F.A.C.)

1. Heat Input Rate: 548 MMBtu/hour (maximum)

2. Fuel: No. 6 Fuel oil with a max. sulfur

content of 2.5%

3. Fuel Firing Rate: 3,654 gallons/hour (87 BBL/hour)

of No. 6 oil (maximum),

4. Ash content: as sampled

5. Steam Temperature: 950 °F

6. Steam Pressure: 1,315 psi

7. Steam Flow Rate: 450,000 pounds/hour

8. Stack Height 174 feet

9. Boiler Manufacturer: Combustion Engineering

10. Burner Arrangement: Tangentially 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.
- 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

PERMITTEE:
Florida Power Corp.
Higgins Plant

Higgins Plant Oldsmar, FL

PERMIT/PROJECT:

Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

- 4. Plant operators are to monitor, adjust and record the following operating parameters at least once per day to assure efficient plant operation:
 - a. temperatures (superheat, fuel)
 - b. flows (steam, feedwater, fuel)
 - c. unit load
 - 5. Fuel oil quality is to be checked prior to delivery and a sample taken each day that the facility is operated for a monthly composite sample analysis. Fuel oil analysis (by ASTM Methods) is to be analyzed for the following:
 - a. heat content (Btu/gallon)
 - b. sulfur content (%S by weight)
 - c. density
 - d. API gravity
- C. Recordkeeping (Rule 17-296.700(6)(e), F.A.C.)
 Records of inspection, maintenance, and performance
 parameters shall be retained for a minimum of two years and
 shall be made available to the Department or the Pinellas
 County Department of Environmental Management upon request.

[Rule 17-296.700(6), F.A.C.].

16. Based on the original permit application received by the Department and information submitted by the permittee with subsequent applications, the following are the maximum potential emission rates from this source based upon which this permit is issued:

Pollutant	pounds/hour	tons/year
Particulate (PM)	54.8	240.0
Sulfur dioxide (SO2)	1,507.0	6,600.7
Carbon Monoxide (CO)	18.3	80.0
Nitrogen Oxides (NOx)	153.5	672.2
Volatile Organics (VOC)	2.9	12.2

<u>PERMITTEE:</u> Florida Power Corp.

Higgins Plant Oldsmar, FL

•

PERMIT/PROJECT:

Permit No.: A052-216384

County: Pinellas

Project: Higgins Unit 3

Reporting Requirements

SPECIFIC CONDITIONS:

17. Compliance with the fuel oil sulfur content and sulfur dioxide emissions limitations of Specific Condition No. 5 shall be documented by the permittee through submittal of quarterly reports of the Higgins Plant monthly average fuel oil sulfur content, heat content, and the resulting sulfur dioxide emission rate in pounds/MMBtu of heat input. These quarterly reports shall be submitted within 30 days of the end of each calendar quarter to the Air Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management. [Rule 17-4.070(3), F.A.C.].

- 18. Submit to the Southwest District Office of the Department and to the Pinellas County Department of Environmental Management each calendar year on or before March 1, an emission report for this source for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), F.S.:
 - A. Annual amount of materials and/or fuels utilized;
 - B. Annual emissions of PM, SO₂, NOx and VOC based on fuel use, operating hours and fuel analysis. Until further notice by the Department the permittee shall calculate PM emissions by multiplying the PM stack test results by the hours of operation. Other annual emissions shall be determined by multiplying the annual fuel use times the following emission factors:

Pollutant	No. 6 Oil Ef (lb/1000 gal)
SO2	157(S)
co	. 5
NOx	105
voc	0.76

(Provide calculation sheets to document calculation method)

C. Any changes in the information contained in the permit application.

PERMITTEE:
Florida Power Corp.
Higgins Plant
Oldsmar, FL

PERMIT/PROJECT:
Permit No.: A052-216384
County: Pinellas

Project: Higgins Unit 3

SPECIFIC CONDITIONS:

19. Excess emission notification. In the event that the permittee is unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Air Quality Division of the Pinellas County Department of Environmental Management.

Notification shall be conducted in accordance with General Condition No. 8 of this permit. (See attached General Conditions.) In the case of excess emissions resulting from malfunctions, a full written report on the malfunction shall be submitted in a quarterly report if so requested by the Department.

[Rule 17-210.700(6), F.A.C.].

Permit Renewal

21. Three applications to renew this operating permit shall be submitted to the Southwest District Office of the Department, with an additional copy sent to the Air Quality Division of the Pinellas County Department of Environmental Management, no later than July 17, 1997 (60 days prior to the expiration date of this permit). [Rule 17-4.090(1), F.A.C. and Pinellas County Ordinance 89-70, as amended, Subpart 2.210].

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Richard D. Garrity, Ph.D.

Director of District Management

Southwest District

ATTACHMENT - GENERAL CONDITIONS:

- The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

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- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit;
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

- In accepting this permit, the permittee understands and agrees that all cords, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

This	permit	also	constitutes:
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- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standard

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - the analytical techniques or methods used;
 - 6. the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of:

Petition for Reduction in)
Semiannual Particulate)
Emissions Compliance Testing,)
Higgins Unit No. 3;
Florida Power Corporation)

Petitioner.

OGC File No. 86-1582

ORDER

On February 18, 1986, the Petitioner, Florida Power Corporation, filed a Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1. for the following fossil fuel steam generating unit:

Higgins Unit No.3

Pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1., and by Order dated November 7, 1982, Petitioner has conducted semiannual particulate emission compliance tests. Florida Administrative Code Rule 17-2.600(5)(b)1. provides that the Department may reduce the frequency of particulate testing upon a demonstration that the particulate standard of 0.1 pound per million Btu heat input has been regularly met. The petition and supporting documentation submitted by Petitioner indicate that, since May 5, 1982, Petitioner has regularly met the particulate standard. It is therefore,

ORDERED that the Petition for Reduction in the Frequency of Particulate Emissions Compliance Testing in GRANTED. Petitioner may immediately commence testing on an annual basis. Test results from the first regularly scheduled compliance test conducted in FY 87 (October 1, 1986 - September 30, 1987), provided the results of that test meet the particulate standard and the 40% opacity standard, shall be accepted as results from the first annual test. Failure of Higgins Unit No.3 to meet

either the particulate standard or the 40% opacity standard in the future shall constitute grounds for revocation of this authorization.

Persons whose substantial interests are affected by the above proposed agency action have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on the proposed action. The Petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the proposed agency action. Persons whose substantial interests will be affected by any decision of the Department have the right to intervene in the proceeding. A petition for the intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the Hearing Officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no Hearing Officer has been assigned, the petition is to filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitues a

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waiver of any right such person determination (hearing) under DONE AND ORDERED this Tallahassee, Florida.	Section 120.57, Florida Statutes.
FIEMIC AND ACKNOWLEDGEMENT FICTO, on this date, pursuant to \$120.52 France Statutes, with the designated Department Clerk, receipt of which is nereby acknowledged. C. Hutchison 12-12-86 Clerk Date	STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION VICTORIA J. TSCHINKEL Secretary Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing ORDER has been furnished by United States Mail to J.A. Hancock, Vice President, Fossil Operations, Florida Power Corporation, Post Office Box 14042, St. Petersburg, Florida 33733; on this 12 day of pecanoca, 1986, in Tallahassee, Florida.

Gary Early

Assistant General Counsel

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Telephone (904)488-9730

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L 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. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

,
Type of Emissions Unit Addressed in This Section
1. 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.
2. Single Process, Group of Processes, or Fugitive Only? 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.

17

DEP Form No. 62.210.900(1) - Form Effective: 03-21-96

Emissions Unit Information Section8	3(of	8	FactWide Fugitive Emissions
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B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

Description of Emission Facility-Wide Fugitive Er	s Unit Addressed in This Section nissions	(limit to 60 characters):
2. Emissions Unit Identific	ation Number: [] No Corre	esponding ID [X] Unknown
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [] Yes [_X] No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Commen See Attachment HG-EU8		\$\frac{1}{2}

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

В.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment _ 1 of _ 2

1. Segment Description (Process/Fuel Tyle) (limit to 500 characters):	pe and Associated Operating Method/Mode)
Petroleum Product Storage - Fugitive Er	nissions(Storage)
0.00.	
2. Source Classification Code (SCC):	-03-888-01
3. SCC Units:	
Thousands gallons stored	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	,
•	6,759
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
•	
10. Segment Comment (limit to 200 chara	actors).
· ·	,
	capacity of various petroleum product storage tanks mit appl. submittal. See Attachment HG-EU8-B6 for
list.	init appli submittali ece Attaoliment 110 200 20 101

Emissions Unit Information Section	8 of 8	FactWide Fugitive Emissions
Segment Description and Rate: Segmen	nt 2 of 2	
Segment Description (Process/Fuel Ty (limit to 500 characters): Petroleum Product Storage - Fugitive En	•	. ,
2. Source Classification Code (SCC):		4-03-999-99
3. SCC Units: Thousand gallo	ons throughput	
4. Maximum Hourly Rate:	5. Maximum	Annual Rate:
6. Estimated Annual Activity Factor:	235,856	3
7. Maximum Percent Sulfur:	8. Maximum	Percent Ash:
9. Million Btu per SCC Unit:		
10. Segment Comment (limit to 200 char Segment refers to combined through contained in emissions unit at time p for list.	put of various petr	

26

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

Emissions	Unit	Information	Section	8	of ⁸	

Fact.-Wide Fugitive Emissions

G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	Secondary Control Device Code	4. Pollutant Regulatory Code
			J.
			·

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

- [] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
- [x] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

- The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
- [] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.
- [] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.
- [x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code: PM1 C] E] Unknown SO₂] C 1 Unknown] E NO₂ 1 C]E 1 Unknown 4. Baseline Emissions: PM lb/hour tons/year tons/year SO₂ lb/hour NO₂ tons/year 5. PSD Comment (limit to 200 characters):

33

ATTACHMENT HG-EU8-B6 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 activities listed in DARM's guidance.

NOTIFICATION OF TEMPORARY EXEMPTIONS

Pursuant to Rule 62-210.300(3)(b)1., notice is herein provide that the emissions units listed below 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-EU8-B6 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, 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
Jnit 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	Lube Oil Vent with demister	. UR
(GT 2, 3, 4)	Lube oil storage tank (underground)- 2600 gal.	UR
	Waste oil storage tank- 546 gal.	UR

Attachment HG-EU8-B6 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Higgins, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	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-EU8-B6 General Emissions Unit Information

Table 2. FPC, Higgins Plant, Petroleum Product Storage and Throughput Operations

FPC 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)	5 4 6	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