

FLORIDA POWER CORPORATION
SUWANNEE FACILITY

TITLE V

AIR OPERATING

PERMIT APPLICATION

Submitted to:
Florida Department of
Environmental Protection

Prepared by:



KBN Engineering and Applied Sciences, Inc.
Gainesville, Florida



Letter of Transmittal

Date: 06/14/96

Project No.: 14421-1200

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

RECEIVED

JUN 14 1996

BUREAU OF AIR REGULATION

Re: FLORIDA POWER CORPORATION
Suwannee Facility

ID # 1210003

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

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

These are transmitted:

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

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

RECEIVED BY:

DATE: TIME:

14422Y/F1/NP/ALL-LOT-9 (06/14/96)

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

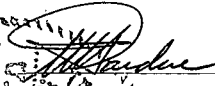
Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: Florida Power Corporation	
2. Site Name: Suwannee River	
3. Facility Identification Number: 1210003 [] Unknown	
4. Facility Location Information: Street Address or Other Locator: S of US Rte 90-NW of Live Oak City: Live Oak County: Suwannee Zip Code: 32462 <i>AT 8, Box 286</i> <i>30 miles</i>	
5. Relocatable Facility? [] Yes [x] No	6. Existing Permitted Facility? [] Yes [x] No

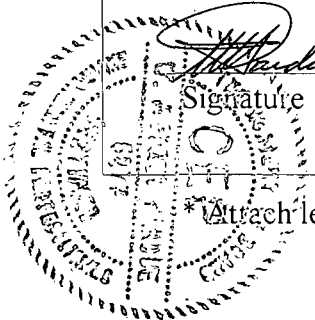
Application Processing Information (DEP Use)

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

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: W. Jeffrey Pardue, Director-Environmental Services Dep
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: (727) 826-4301 (813) 855-5151 Fax: (813) 866-4926
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the non-Title V source 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.</i>
 Signature _____ Date <u>6-13-96</u>

*Attach letter of authorization if not currently on file.



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.

Emissions Unit ID **Description of Emissions Unit** **Permit Type**

Unit #	Unit ID	
1R	001	No. 1 Unit, Fossil Fuel Steam Generator
2R	002	No. 2 Unit, Fossil Fuel Steam Generator
3R	003	No. 3 Unit, Fossil Fuel Steam Generator
4R	*	Peaking Gas Turbine Unit 1, 2, 3
5		Facility-wide Fugitive/Deminimis 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:

- 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: _____

- 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.

This 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: _____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units.

This 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 potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): _____

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

Application Processing Fee

Check one:

Attached - Amount: \$ _____

Not Applicable.

Construction/Modification Information

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

Professional Engineer Certification

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

4. Professional Engineer'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 [] 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.

Kenneth F. Kirby

Signature

6/9/96

Date



Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact: Scott Osbourn Sr., 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 SU-AI-AC

ATTACHMENT SU-AI-AC

ATTACHMENT SU-AI-AC

This TitleV application is for the Suwannee Facility. The application's structure is as follows:

Emissions Units

	EU1, EU2, EU3 - Boilers	EU4 - Gas Turbines	EU5 - Facility Wide
General	3	3 peaking units	General Activities
Emission Points	1 stack per boiler	1 stack per turbine	Fugitive Emissions
Segments ^a	No. 6 fuel oil Natural gas No. 2 fuel oil (pilot fuel for startup, shut down, malfunctions) On-spec used oil	No. 2 fuel oil On-spec used oil	Various
Pollutants	SO ₂ , PM	NO _x , SO ₂	NA
VE Emissions	VE limits applicable	VE limits applicable	NA
CEM	SO ₂ , NO _x , opacity	NO _x : water to fuel ratio	NA
PSD	Existing baseline sources	SO ₂ , PM/PM10	NA

^a 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 Coordinates: Zone: 17 East (km): 290.5 North (km): 3362.2			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 30 / 22 / 35 Longitude: (DD/MM/SS): 83 / 10 / 50			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s):
7. Facility Comment (limit to 500 characters): The Suwannee Facility consists of 3 fossil fuel steam generators and 3 gas turbine peaking units. The steam generators are fired with No. 6 fuel oil, on spec used oil and natural gas (distillate fuel oil is used as an ignitor). The peaking units are fired with No.2 fuel oil and on spec used oil and are limited in hours of operation.			

Facility Contact

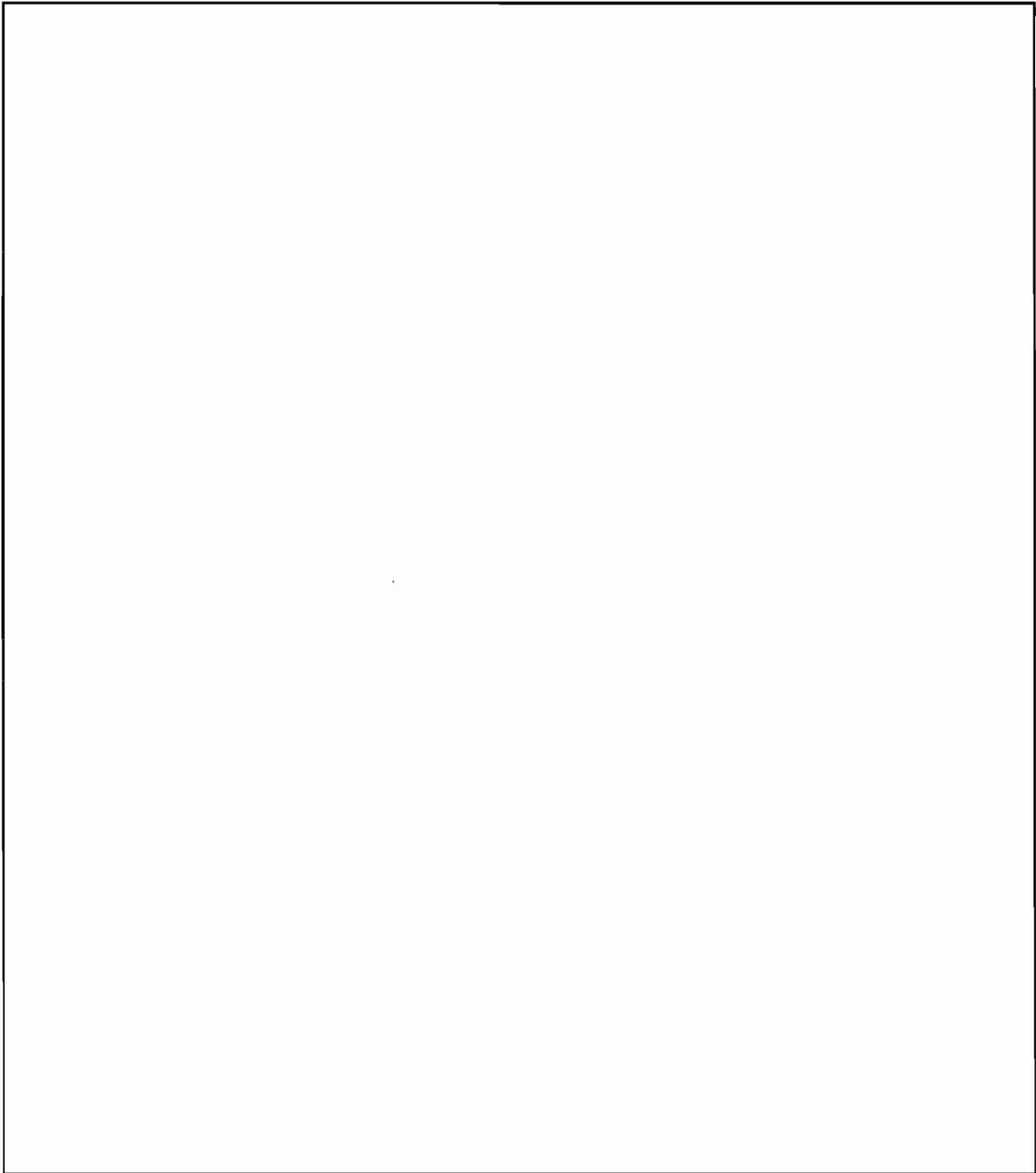
1. Name and Title of Facility Contact: M.V. Westbrook, Plant Manager
2. Facility Contact Mailing Address: Organization/Firm: Street Address: Route 8, Box 286 City: Suwannee <i>live Oak</i> State: FL Zip Code: 32060
3. Facility Contact Telephone Numbers: Telephone: (904) 364-5151 Fax: (813) 866-4967

Facility Regulatory Classifications

1. Small Business Stationary Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
2. Title V Source? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3. Synthetic Non-Title V Source? <input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
5. Synthetic Minor Source of Pollutants Other than HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6. Major Source of Hazardous Air Pollutants (HAPs)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7. Synthetic Minor Source of HAPs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
8. One or More Emissions Units Subject to NSPS? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
9. One or More Emissions Units Subject to NESHAP? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
10. Title V Source by EPA Designation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
11. Facility Regulatory Classifications Comment (limit to 200 characters): The gas turbines are subject to NSPS for stationary gas turbines (40 CFR Part 60, Subpart GG)

B. FACILITY REGULATIONS

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



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

See Attachment SU-FI-B

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
SO2 Sulfur Dioxide	A
PM Particulate Matter - Total	A
PM10 Particulate Matter - PM10	A
NOX Nitrogen Oxides	A
CO Carbon Monoxide	A
H107 Hydrogen fluoride [Hydrofluoric aci	A
H106 Hydrochloric acid	A
SAM Sulfuric Acid Mist	A
HAPS Total Hazardous Air Pollutants	A

D. FACILITY POLLUTANT DETAIL INFORMATION

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):		

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

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E1</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E2</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID(s): <u>SU-FI-E3</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E4</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E5</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. List of Equipment/Activities Regulated under Title VI: <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E8</u> <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
9. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

<p>11. Identification of Additional Applicable Requirements:</p> <p><input type="checkbox"/> Attached, Document ID: _____</p> <p><input checked="" type="checkbox"/> Not Applicable</p>
<p>12. Compliance Assurance Monitoring Plan:</p> <p><input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E12</u></p> <p><input type="checkbox"/> Not Applicable</p>
<p>13. Risk Management Plan Verification:</p> <p><input type="checkbox"/> Plan Submitted to Implementing Agency - Verification Attached Document ID: _____</p> <p><input checked="" type="checkbox"/> Plan to be Submitted to Implementing Agency by Required Date</p> <p><input type="checkbox"/> Not Applicable</p>
<p>14. Compliance Report and Plan</p> <p><input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E14</u></p> <p><input type="checkbox"/> Not Applicable</p>
<p>15. Compliance Statement (Hard-copy Required)</p> <p><input checked="" type="checkbox"/> Attached, Document ID: <u>SU-FI-E15</u></p> <p><input type="checkbox"/> Not Applicable</p>

ATTACHMENT SU-FI-B
FACILITY REGULATIONS COMMENT

ATTACHMENT SU-FI-B

APPLICABLE REQUIREMENTS LISTING - POWER PLANTS

FACILITY: FPC SUWANEE RIVER PLANT

FDEP Rules:

General Permits:

- 62-4.030
- 62-4.040(1)(a) - Exemptions from permitting
- 62-4.040(1)(b) - Exemptions from permitting
- 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
- 62-210.300(3)(a)11. - sanders, < 5 ft² or less surface area
- 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
- 62-210.300(3)(a)16. - brazing, soldering or welding
- 62-210.300(3)(a)17. - laundry dryers
- 62-210.300(3)(a)20. - emergency generators, limited to 32,000 gal/yr
- 62-210.300(3)(a)21. - general purpose engines, limited to 32,000 gal/yr
- 62-210.300(3)(a)22. - fire and safety equipment
- 62-210.300(3)(a)23. - surface coating > 5% VOC; 6 gal/day or less, averaged month.
- 62-210.300(3)(a)24. - surface coating < 5% or less VOC
- 62-210.300(3)(b) - Temporary Exemptions
- 62-210.370(3) - AORs
- 62-210.900(5) - AOR Form

Title V Permits:

- 62-213.205(1)(a) - Fees
- 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
62-213.420.(1)(b)2. - Permits-allows continued operation
62-213.420.(1)(b)3. - Permits-additional information
62-213.460 - Permit Shield
62-213.900(1) - Fee Form

Open Burning:

62-256.300 - Prohibitions
62-256.500 - Land Clearing
62-256.700 - Open burning Allowed

Asbestos Removal:

62-257.301 - Notification and Fee
62-257.400 - Fee Schedule
62-257.900 - Form

Stationary Sources-Emission Standards:

62-296.320(2) (State Only) - Odor
62-296.320(3)(b)(State Only) - Emergency Open Burning
62-296.320(4)(b) - General VE Standard
62-296.320(4)(c) - Unconfined Emissions of Particulate Matter

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:

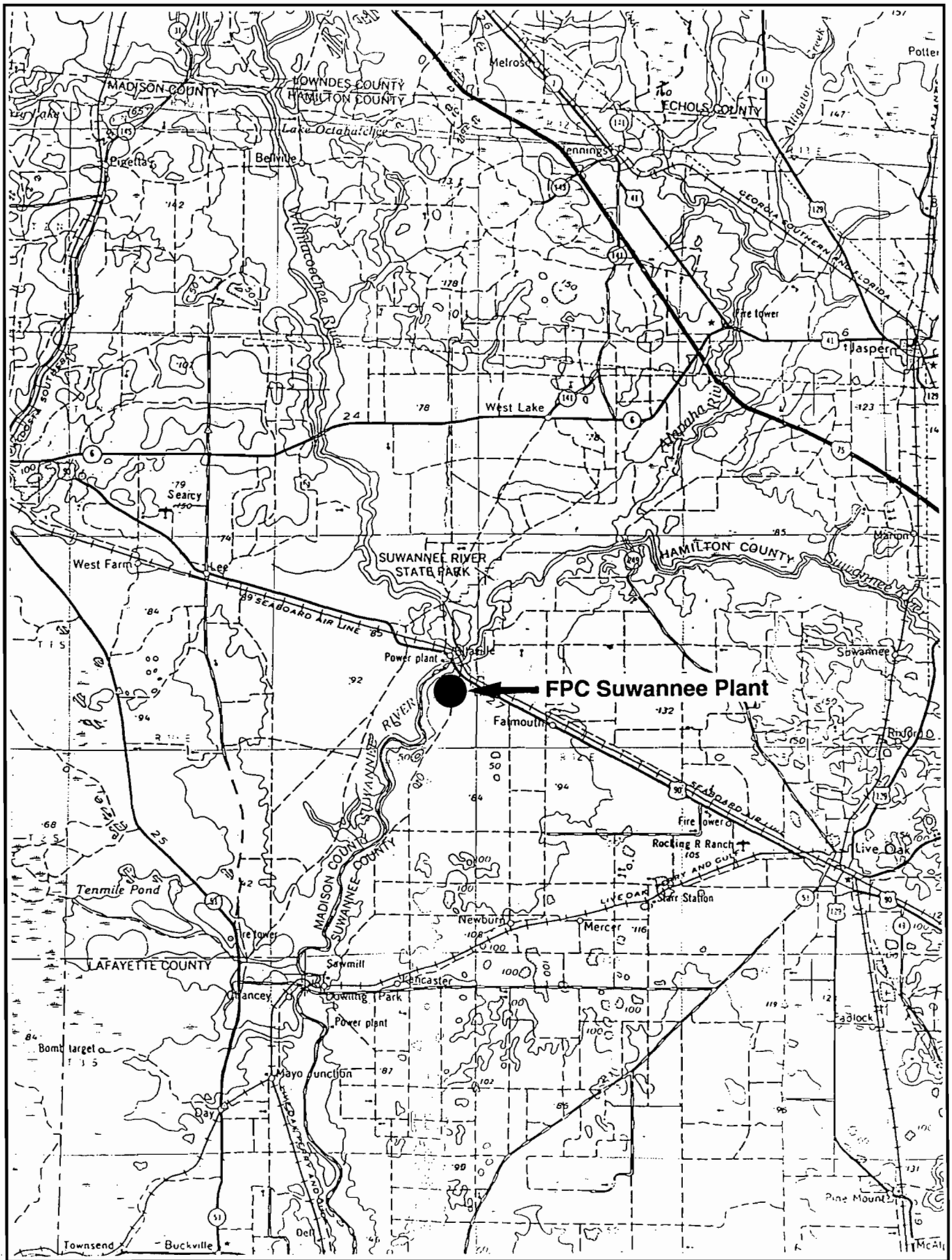
40 CFR 61.05 - Prohibited Activities
40 CFR 61.12(b) - Compliance with work practice standard
40 CFR 61.19 - Circumvention
40 CFR 61.145 - Demolition and Renovation
40 CFR 61.148 - Standard for Insulating Material

CFCs equal to or greater than 50 lb charge:

40 CFR 82.166(k) - Service Documentation/Certification
40 CFR 82.166(m) - Recordkeeping

ATTACHMENT SU-FI-E1

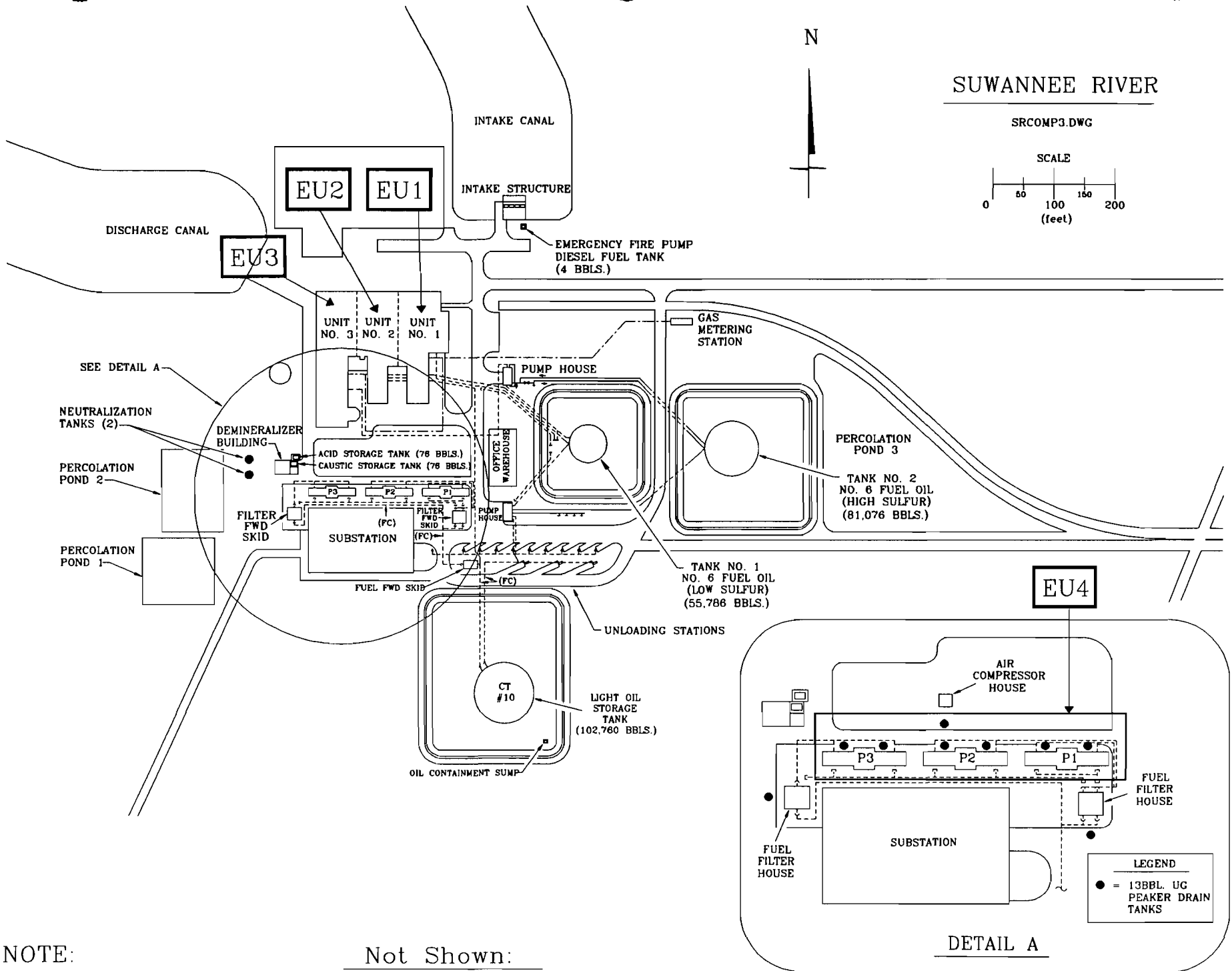
AREA MAP



**Attachment SU-FI-E1
Area Map**

ATTACHMENT SU-FI-E2

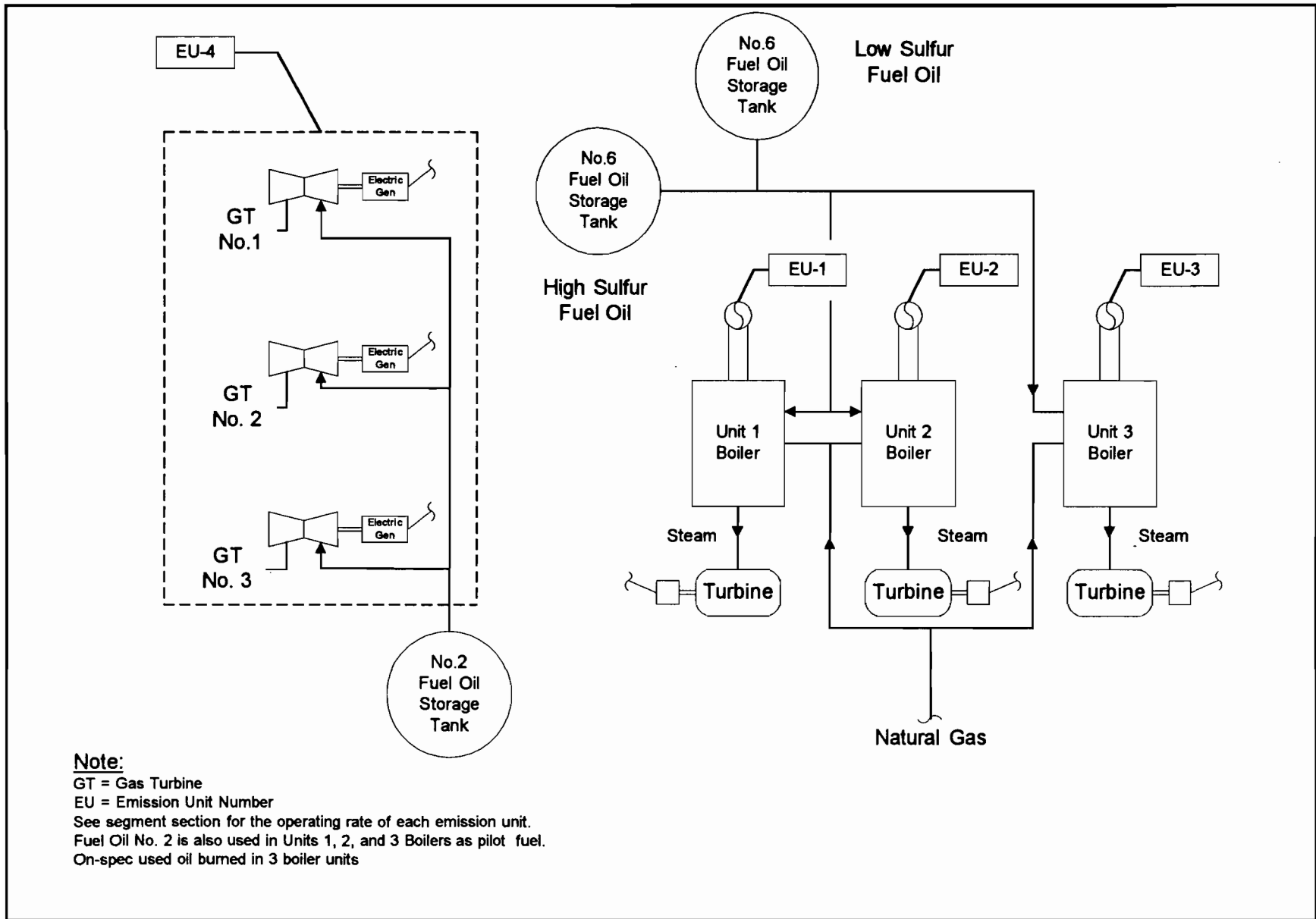
FACILITY PLOT PLAN



NOTE:
EU = Emission Unit


Not Shown:
EU5 - Facility-wide Fugitive Emissions

ATTACHMENT SU-FI-E3
PROCESS FLOW DIAGRAM



Note:

GT = Gas Turbine
 EU = Emission Unit Number
 See segment section for the operating rate of each emission unit.
 Fuel Oil No. 2 is also used in Units 1, 2, and 3 Boilers as pilot fuel.
 On-spec used oil burned in 3 boiler units

Florida Power Corporation		Emission Unit: Overall Plant	 KBN Engineering and Applied Sciences, Inc.
Emission Units		Process Area: Overall Plant	
Suwannee		Filename: FPCSU1.VSD	
		Latest Revision Date: 6/1/96 12:48 PM	

ATTACHMENT SU-FI-E4

**PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE
MATTER**

ATTACHMENT SU-FI-E4

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 SU-FI-E5
FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT SU-FI-E5

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. 5. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive/*de minimis* emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

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

Volatile Organic Compounds (VOCs)

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

Fugitive HAPs Emissions

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

- asbestos
- benzene
- chlorine
- hydrazine
- hydrochloric acid
- mercury compounds
- methyl ethyl ketone
- toluene
- xylene

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

Benzene - Present in unleaded gasoline. The facility maintains a storage tank for unleaded gasoline. These emissions have been calculated to be significantly less than 1 TPY.

Chlorine - Used for water treatment at the facility.

Hydrazine - Hydrazine solution may be used for the treatment of boiler water.

Hydrochloric Acid - The facility may utilize hydrochloric acid in the chemistry laboratory for use in analytical procedures.

Mercury Compounds - The facility uses mercury-containing compounds in the chemistry laboratory for use in analytical procedures and flow-measuring equipment.

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:

- ammonia (aqueous, concentration 20 percent or greater)
- chlorine
- hydrazine
- hydrochloric acid
- nitric acid
- acetylene

Ammonia - Used for boiler water treatment.

Chlorine, Hydrazine, Hydrochloric Acid - Considered on the preceding page.

Nitric Acid - Nitric acid may be used in the chemistry laboratory for use in analytical procedures.

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

ATTACHMENT SU-FI-E8

LIST OF EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

ATTACHMENT SU-FI-E8

LIST OF EQUIPMENT / ACTIVITIES REGULATED — TITLE VI

The FPC Suwannee facility currently has over 20 refrigeration and air-conditioning units on the plant site. Of these, 1 air-conditioning unit currently meets the 50-pound threshold established by the Department:

<u>Model Name, Number</u>	<u>General Area</u>	<u>Amount</u>
Trane, Model CGWA030 Serial No. L80C12078	Steam Plant	75 pounds

ATTACHMENT SU-FI-E12
COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT SU-FI-E12

COMPLIANCE ASSURANCE MONITORING PLAN

Compliance Assurance Monitoring Plan to be submitted to implementing agency by required date.
See the Section for Pollutant Information, for method of compliance for specific pollutant.

ATTACHMENT SU-FI-E14
COMPLIANCE REPORT AND PLAN

COMPLIANCE REPORT AND PLAN

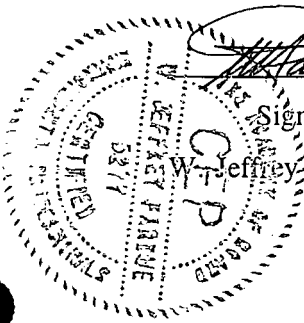
The facility and emissions units identified in this application are in compliance with the Applicable Requirements identified in Sections B and D of the application form and attachments referenced in Section E. 11. and L. 12. (if included). Compliance is certified as of the date this application and 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 SU-FI-E15
COMPLIANCE STATEMENT

ATTACHMENT SU-FI-E15

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.



Jeffrey Pardue

Signature, Responsible Official
Jeffrey Pardue, Director, Environmental Services Dept.

6-13-96
Date

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.

] 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).

] 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.

**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): No. 1 Unit, Fossil Fuel Steam Generator		
2. Emissions Unit Identification Number: <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown 001		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (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:

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

Emissions Unit Details

1. Initial Startup Date:	1 Nov 1953	
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer:	NA	Model Number: NA
4. Generator Nameplate Rating:	35 MW	
5. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	460	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):	<p>1. Maximum heat input based on permit limit firing natural gas (1000 Btu/cf-HHV) 2. Maximum heat input for firing No. 6 fuel oil 450 mmBtu/hr (18,300 Btu/lb-HHV; 8.2 lb/gal)</p>	

Emissions Unit Operating Schedule

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

**D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

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

Not Applicable

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

See Attachment SU-E01-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU1, See SU-FI-E2	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Boiler gases exhaust through a single stack	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	110 feet
7. Exit Diameter:	7 feet
8. Exit Temperature:	318 °F

9. Actual Volumetric Flow Rate:	143,667	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		
Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		

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

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): No. 6 Fuel Oil	
2. Source Classification Code (SCC): 10100404	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 26,280
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 2.5	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152	
10. Segment Comment (limit to 200 characters): 1. Unit is tangentially fired 2. Heat content-HHV	

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural gas	
2. Source Classification Code (SCC): 10100604	
3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 0.46	5. Maximum Annual Rate: 4,030
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): 1. Unit is tangentially fired 2. Heat content-HHV	

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): Distillate fuel oil	
2. Source Classification Code (SCC): 10100501	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3.261	5. Maximum Annual Rate: 28,565
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 characters): 1. Distillate fuel oil is used as a pilot fuel for startup shutdown, and malfunction 2. Heat content-HHV	

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): On-Specification Used Oil	
2. Source Classification Code (SCC): 1-01-013-02	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3.261	5. Maximum Annual Rate: 28,565
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 characters): Heat content - HHV. Limited to HIR for No. 6 fuel oil.	

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
PM			EL
PM10			NS
NOx			NS
CO			NS
H107			NS
H106			NS
HAPS			NS

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:	1,237.5 lb/hour	5,420.25 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
[<input type="checkbox"/>] 1 [<input type="checkbox"/>] 2 [<input type="checkbox"/>] 3 _____ to _____ tons/yr		
6. Emission Factor:		2.75 lb/MMBtu
Reference: FDEP Rule 62-296.405		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 [<input type="checkbox"/>] 1 [<input type="checkbox"/>] 2 [<input type="checkbox"/>] 3 [<input type="checkbox"/>] 4 [<input type="checkbox"/>] 5		
8. Calculation of Emissions (limit to 600 characters):		
See SU-E01-H8		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
Based on firing No. 6 fuel oil.		

Emissions Unit Information Section 1 of 5
Allowable Emissions (Pollutant identified on front page)

A.

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:	1,237.5 lb/hour	5,420.25 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): 1. Firing No. 6 fuel oil 2. Rule 62-296.405(1)		

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. of Related Operating Method/Mode) (limit to 200 characters):		

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:	135 lb/hour	246.4 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr		
6. Emission Factor:		0.3 lb/MMBtu
Reference: FDEP Rule 62-210.700		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters): See Attachment SU-E01-H8		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Potential lb/hr based on soot-blowing while oil firing. Potential TPY based on 0.125 lb/mmBtu over 24 hr (0.1 during normal operations, 21 hr; 0.3 during soot blowing, 3 hr).		

Emissions Unit Information Section 1 of 5
Allowable Emissions (Pollutant identified on front page)

A.

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:	45 lb/hour	197.1 tons/year
5. Method of Compliance (limit to 60 characters): Annual compliance test, EPA Method 5 or 17		
6. Pollutant Allowable Emissions Comment (Desc. 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:	135 lb/hour	73.9 tons/year
5. Method of Compliance (limit to 60 characters): Annual compliance test, EPA Method5 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		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 4

1.	Visible Emissions Subtype: VE20
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 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),F.A.C.

Visible Emissions Limitations: Visible Emissions Limitation 2 of 4

1.	Visible Emissions Subtype: VE60
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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 allowed during load changing and boiler cleaning for 3 hr in 24 hr. Unlimited opacity allowed for 4 six-minute periods during 3 hours. 2. Rule 62-210.700(3),F.A.C.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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 hrs for malfunction. 2. Rule 62-210.700(1),F.A.C.

Visible Emissions Limitations: Visible Emissions Limitation 4 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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. Startup or shutdown 2. Rule 62-710.700(2),F.A.C.

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 1 of 4

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 42 Serial Number: 42D-49861-284	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor 2 of 4

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 41 H Serial Number: 41H-50088-284	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 3 of 4

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement: <input checked="" type="checkbox"/> Rule [] Other	
4. Monitor Information: Monitor Manufacturer: Durag Model Number: CEMOP-281 Serial Number: 30634	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor 4 of 4

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input checked="" type="checkbox"/> Rule [] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 9408-16206-1-5	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6. Fuel oil flow monitor. Second monitor - Ser. No. 9408-16206-1-3	

**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	<input type="checkbox"/> C	<input type="checkbox"/> E	<input checked="" type="checkbox"/> Unknown
	SO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E	<input checked="" type="checkbox"/> Unknown
	NO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E	<input checked="" type="checkbox"/> Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO ₂	lb/hour		tons/year
	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	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L1</u>	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
2.	Fuel Analysis or Specification	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L2</u>	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
3.	Detailed Description of Control Equipment	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
4.	Description of Stack Sampling Facilities	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L4</u>	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
5.	Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Previously Submitted, Date: <u>21 Sep 1995</u>	<input type="checkbox"/> Not Applicable
6.	Procedures for Startup and Shutdown	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L6</u>	<input type="checkbox"/> Not Applicable	
7.	Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	
8.	Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	
9.	Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L10</u> <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L12</u> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L13</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required) <input checked="" type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>SU-E01-L14</u> <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

ATTACHMENT SU-E01-D
EMISSIONS UNIT REGULATIONS

ATTACHMENT SU-E01-D

APPLICABLE REQUIREMENTS LISTING - POWER PLANTS (5/13/96)

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:

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

Acid Rain:

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

Stationary Sources-Emission Standards:

- 62-296.405(1)(a) - FFSG; VE
- 62-296.405(1)(b) - FFSG; PM
- 62-296.405(1)(c)1.j. - FFSG; Oil-SO₂ (general limit; see rule for others)
- 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; SO₂ CEMS exempted for non-controlled units (oil/gas)

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

- 62-297.310(1) - Test Runs-Mass Emission
- 62-297.310(2)(b) - Operating Rate; other than CTs; no CT
- 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/H₂SO₄/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. - PM exemption if < 400 hrs/yr
- 62-297.310(7)(a)5. - FDEP Notification - 15 days
- 62-297.310(7)(a)9. - Waiver of Compliance Test (Fuel Sampling)
- 62-297.310(7)(c) - Test Reports
- 62-297.310(8)

Federal Rules:

Acid Rain-Permits: (Important: generally does not include Phase I requirements/or NOx)

- 40 CFR 72.9(a) - Permit Requirements
- 40 CFR 72.9(b) - Monitoring Requirements
- 40 CFR 72.9(c)(1) - SO2 Allowances-hold allowances
- 40 CFR 72.9(c)(2) - SO2 Allowances-violation
- 40 CFR 72.9(c)(3)(iii) - SO2 Allowances-Phase II Units (listed)
- 40 CFR 72.9(c)(4) - SO2 Allowances-allowances held in ATS
- 40 CFR 72.9(c)(5) - SO2 Allowances-no deduction for 72.9(c)(1)(i)
- 40 CFR 72.9(e) - Excess Emission Requirements
- 40 CFR 72.9(f) - Recordkeeping and Reporting
- 40 CFR 72.9(g) - Liability
- 40 CFR 72.20(a) - Designated Representative; required
- 40 CFR 72.20(b) - Designated Representative; legally binding
- 40 CFR 72.20(c) - Designated Representative; certification requirements
- 40 CFR 72.21 - Submissions
- 40 CFR 72.22 - Alternate Designated Representative
- 40 CFR 72.23 - Changing representatives; owners
- 40 CFR 72.30(a) - Requirements to Apply (operate)
- 40 CFR 72.30(c) - Requirements to Apply (reapply before expiration)
- 40 CFR 72.30(d) - Requirements to Apply (submittal requirements)
- 40 CFR 72.32 - Permit Shield
- 40 CFR 72.33(b) - Dispatch System ID;unit/system ID
- 40 CFR 72.33(c) - Dispatch System ID;ID requirements
- 40 CFR 72.33(d) - Dispatch System ID;ID change
- 40 CFR 72.40(a) - General; compliance plan
- 40 CFR 72.40(b) - General; multi-unit compliance options
- 40 CFR 72.40(c) - General; conditional approval
- 40 CFR 72.40(d) - General; termination of compliance options
- 40 CFR 72.51 - Permit Shield
- 40 CFR 72.90 - Annual Compliance Certification

Monitoring Part 75: (does not include common & by-pass stacks)

- 40 CFR 75.4 - Compliance Dates
- 40 CFR 75.5 - Prohibitions

- 40 CFR 75.10(a)(2) - Primary Measurement; NOx; except 75.12&.17; Subpart E
- 40 CFR 75.10(a)(3)(i) - Primary Measurement; CO2; 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; SO2
- 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 NOx 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; Addendix 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)(3) - General Missing Data Procedures; NOx
- 40 CFR 75.32 - Monitoring Data Availability for Missing Data
- 40 CFR 75.33 - Standard Missing Data Porcedures
- 40 CFR 75.53 - Monitoring Plan
- 40 CFR 75.54(a) - Recordkeeping-general
- 40 CFR 75.54(b) - Recordkeeping-operating parameter
- 40 CFR 75.54(c) - Recordkeeping-SO2
- 40 CFR 75.54(d) - Recordkeeping-NOx
- 40 CFR 75.54(e) - Recordkeeping-CO2
- 40 CFR 75.54(f) - Recordkeeping-Opacity
- 40 CFR 75.55(c) - Recordkeeping - Specific Situations (Appendix D)
- 40 CFR 75.55(e) - Recordkeeping - Specific Situations (gaseous fuel)
- 40 CFR 75.56 - Certification; QA/QC Provisions
- 40 CFR 75.60 - Reporting Requirements-General
- 40 CFR 75.61 - Reporting Requirements-Notification cert/recertification
- 40 CFR 75.63 - Reporting Requirements-Certification/Recertification
- 40 CFR 75.64(a) - Reporting Requirements-Quarterly reports; submission
- 40 CFR 75.64(b) - Reporting Requirements-Quarterly reports; DR statement
- 40 CFR 75.64(c) - Rep. Req.; Quarterly reports; Compliance Certification
- 40 CFR 75.64(d) - Rep. Req.; Quarterly reports; Electronic format
- 40 CFR 75.65 - Opacity Reports
- Appendix A-3. - Performance Specifications
- Appendix A-4. - Data Handling and Acquisition Systems
- Appendix A-5. - Calibration Gases
- Appendix A-6. - Certification Tests and Procedures
- Appendix B - QA/QC Procedures
- Appendix C-1. - Missing Data; SO2/NOx for controlled sources

Appendix C-2.
Appendix F
Appendix G-2.
Appendix H

- Missing Data; Load-Based Procedure; NOx & flow
- Conversion Procedures
- Determination of CO2; from combustion sources
- Traceability Protocol

ATTACHMENT SU-E01-H8
CALCULATION OF EMISSIONS

Table 1. Maximum Estimated Emissions for Emissions Limited Pollutants, FPC Suwannee Plant, Fossil Fuel Steam Generators Units No. 1, 2, and 3

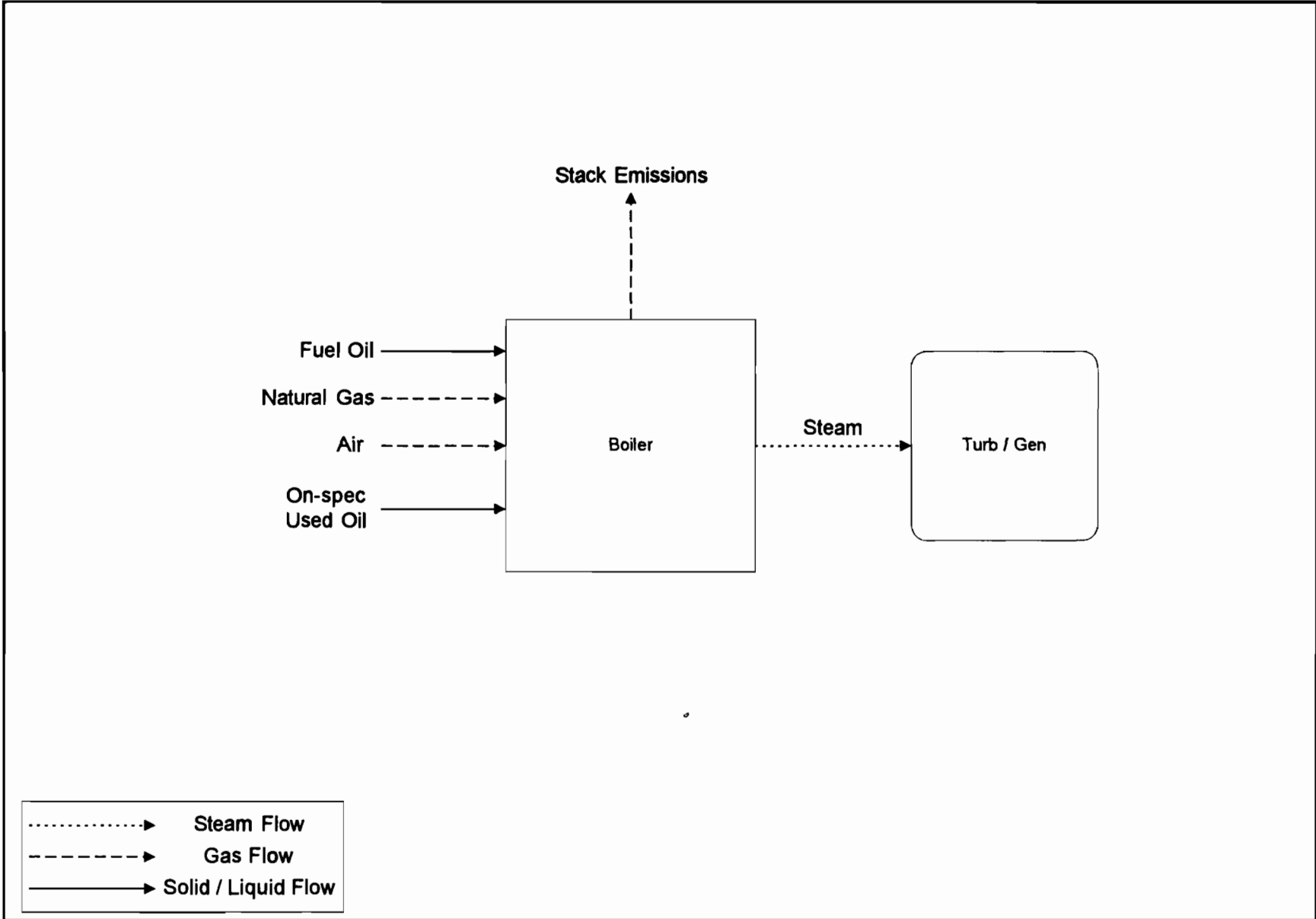
Pollutant	Unit 1	Unit 2	Unit 3
	Oil-Firing	Oil-Firing	Oil-Firing
Hours of Operation	8,760	8,760	8,760
Sulfur Dioxide (lb/hr) (Oil)= EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)			
Basis (1)	DEP Rules	DEP Rules	DEP Rules
EF (lb/MMBtu)	2.75	2.75	2.75
HIR (MMBtu/hr)	450	444	881
Emission rate (lb/hr)	1237.5	1,221	2422.75 (1)
(TPY)	5420.25	5,348	10,612 (1)
Particulate Matter (lb/hr) (Oil)= EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)			
Basis (2)	DEP Rules	DEP Rules	DEP Rules
EF (lb/MMBtu; sootblowing)	0.3	0.3	0.3
EF (lb/MMBtu; normal operation) or (lb/MMcf)	0.1	0.1	0.1
EF (lb/MMBtu) (Oil; normal/sootblowing; annual)	0.125	0.125	0.125
HIR (MMBtu/hr)	450	444	881
Emission rate (lb/hr)- normal operation	45.0	44.4	88.1
(TPY)	197.1	194.5	385.9
(lb/hr)- sootblowing	135.0	133.2	264.3
(TPY)	73.9	72.9	144.7
(TPY)- normal + sootblowing	246.4	243.1	482.3
Particulate Matter (PM-10)(lb/hr) (Oil)= EF (lb/MMBtu) x Heat Input Rate (MMBtu/hr)			
Basis (2)	DEP Rules	DEP Rules	DEP Rules
EF (lb/MMBtu; sootblowing)	0.3	0.3	0.3
EF (lb/MMBtu; normal operation) or (lb/MMcf)	0.1	0.1	0.1
EF (lb/MMBtu) (Oil; normal/sootblowing; annual)	0.125	0.125	0.125
HIR (MMBtu/hr)	450	444	881
Emission rate (lb/hr)- normal operation	45.0	44.4	88.1
(TPY)	197.1	194.5	385.9
(lb/hr)- sootblowing	135.0	133.2	264.3
(TPY)	73.9	72.9	144.7
(TPY)- normal + sootblowing	246.4	243.1	482.3


(1) Based on Specific Condition 4 of air operating permit; maximum emissions at 2.5% sulfur oil at maximum heat input rate of 881 MMBtu/hr.

(2) FDEP Rule 62-296.405(1) and 62-210.700 (3); 0.1 and 0.3 lb/MMBtu for normal operations and excess emissions, respectively.

ATTACHMENT SU-E01-L1

PROCESS FLOW DIAGRAM



Florida Power Corporation		Emission Unit: Boilers No. 1, 2, 3		 KBN Engineering and Applied Sciences, Inc.
		Process Area: Overall Plant		
Emission Units	Suwannee	Filename: FPCSU2.VSD		
		Latest Revision Date: 6/6/96 06:31 PM		

ATTACHMENT SU-E01-L2
FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT SU-E01-L2

**FUEL ANALYSIS
NATURAL GAS ANALYSIS**

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
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 SU-E01-L2

FUEL ANALYSIS
NO. 6 FUEL OIL

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
API gravity @ 60 F	8 ¹	-
Relative density	8.2 lb/gal ²	
Heat content	18,300 Btu / lb (LHV)	
% sulfur	0.04 ²	2.5 ³
% nitrogen	0.25 - 0.50	
% 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.

ATTACHMENT SU-E01-L2

FUEL ANALYSIS
NO. 2 FUEL OIL

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
API gravity @ 60 F	30 ¹	-
Relative density	7.1 lb/gal ²	-
Heat content	19,500 Btu / lb (HHV)	-
% sulfur	0.04 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.

ATTACHMENT SU-E01-L2

**FUEL ANALYSIS
ON-SPEC USED OIL**

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
API gravity @ 60 F	28 ¹	-
Relative density	7.4 lb/gal ²	-
Heat content	18,700 Btu / lb (HHV)	-
% sulfur	0.3 - 0.5 ²	2.5 ³
% nitrogen	0.30	-
% 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 SU-E01-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT SU-E01-L4

Description of Stack Sampling Facilities

The Suwannee Plant Steam Generator Unit No. 1 is required by Permit AO61-189582 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to Rule 62-297.310, F.A.C., the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by Rule 62-297.310(6) , the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports are 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.

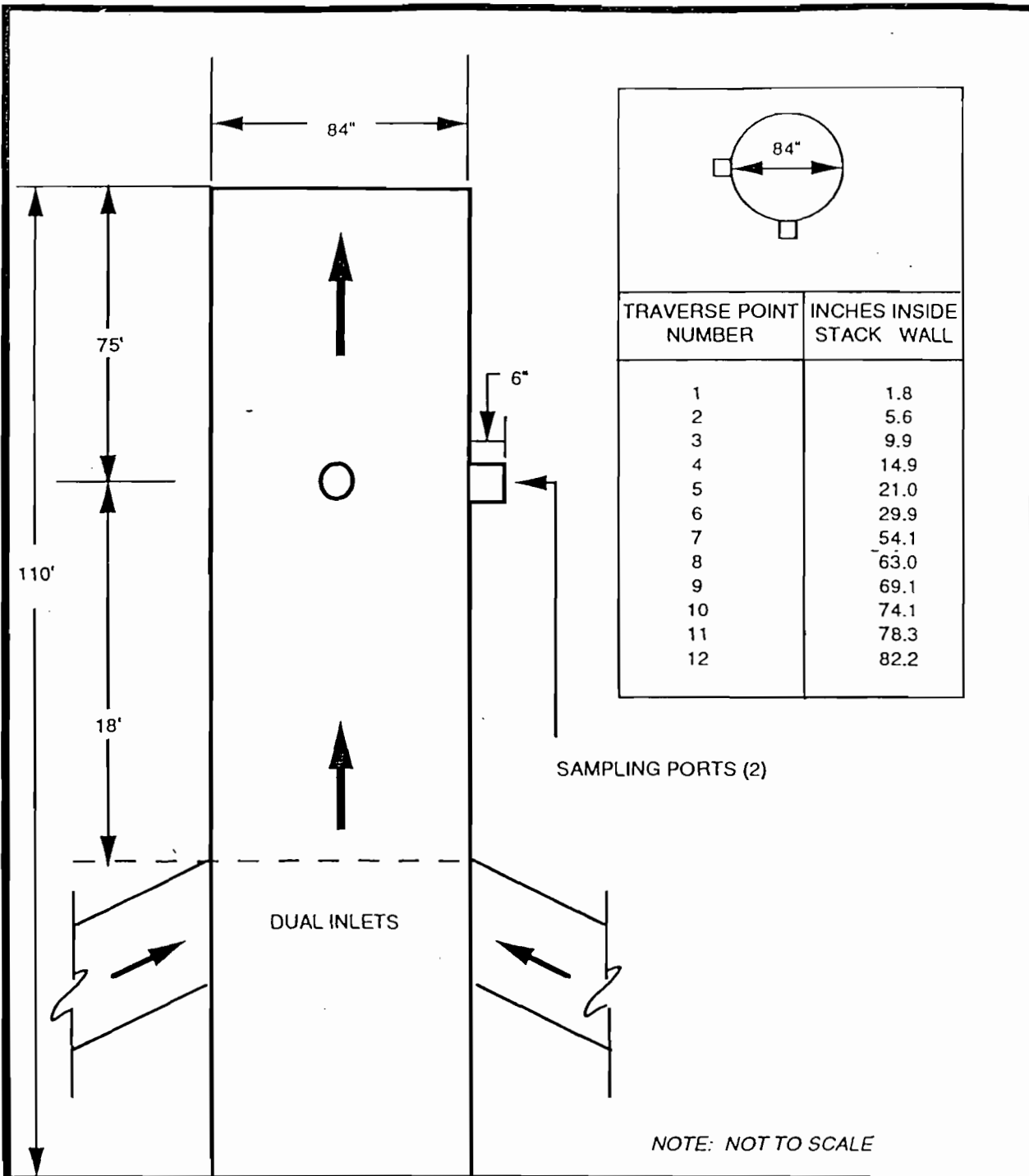
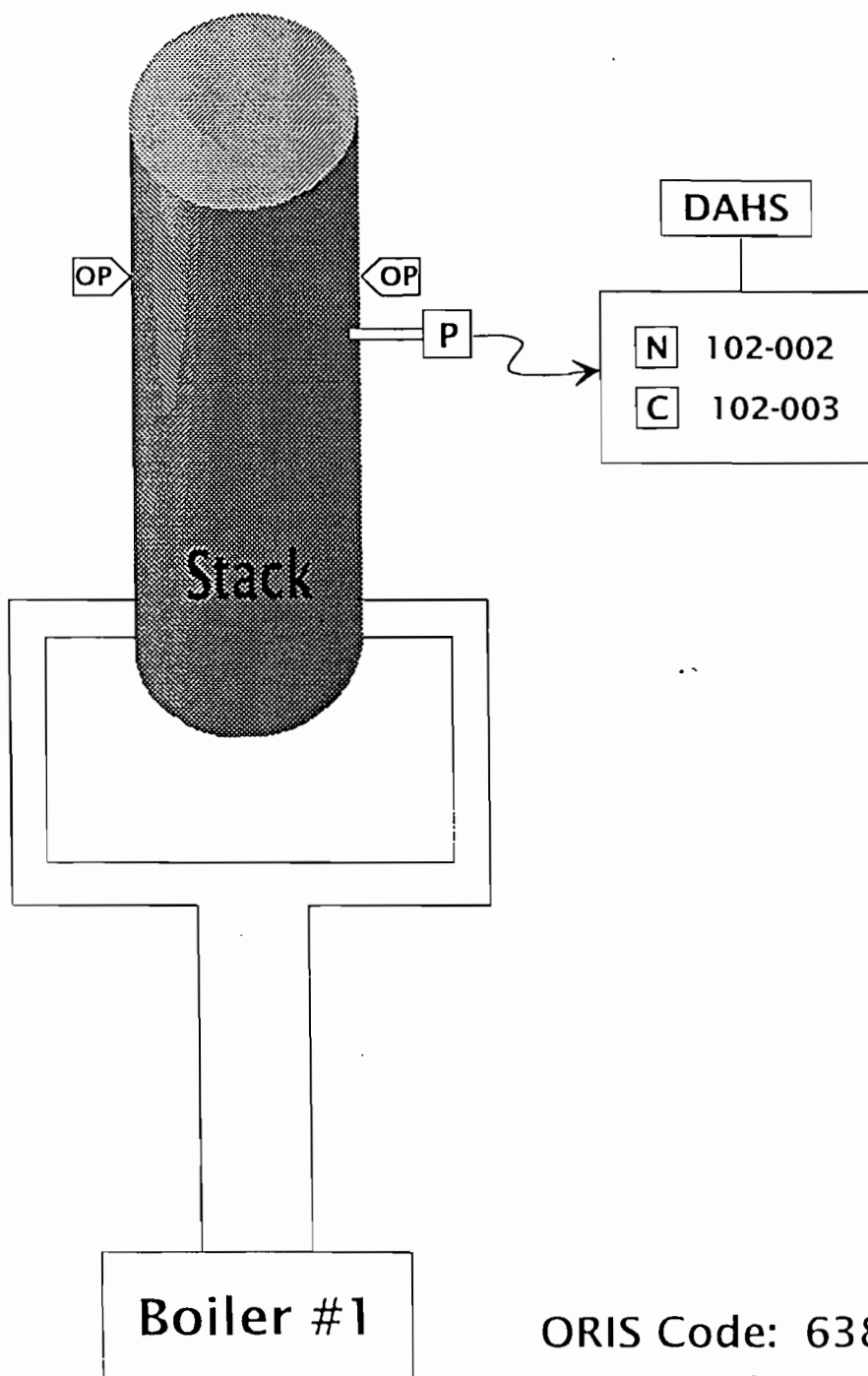


FIGURE 1.
 EXHAUST SCHEMATIC
 UNITS 1 AND 2
 FLORIDA POWER CORPORATION - SUWANNEE PLANT
 WEST OF LIVE OAK, FLORIDA

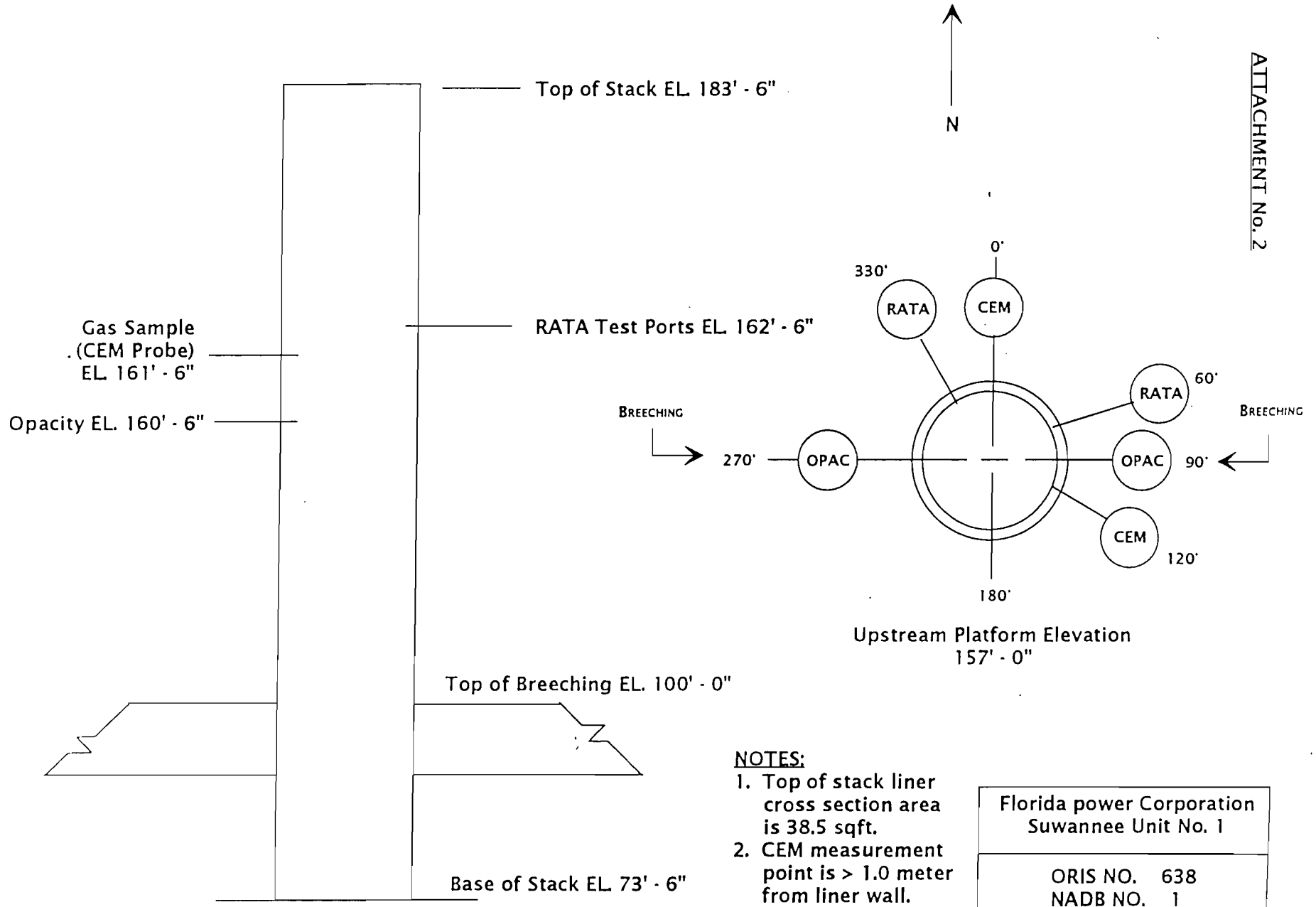
ACE
 AIR CONSULTING
 AND ENGINEERING, INC.

Suwannee Unit #1

Florida Power Corporation, Live Oak, FL
EPA Monitoring Plan Location Information (Part 2)



ORIS Code: 638
NADB Boiler ID: 1



- NOTES:**
- 1. Top of stack liner cross section area is 38.5 sqft.
 - 2. CEM measurement point is > 1.0 meter from liner wall.

Florida power Corporation Suwannee Unit No. 1
ORIS NO. 638 NADB NO. 1

ATTACHMENT SU-E01-L6
PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT SU1-E01-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.

ATTACHMENT SU-E01-L10
ALTERNATIVE METHODS OF OPERATION

ATTACHMENT SU1-E01-L10

ALTERNATIVE METHODS OF OPERATION

FOSSIL FUEL STEAM GENERATOR

The fossil fuel steam generator can operate on natural gas, No. 6 fuel oil, No. 2 fuel and on-spec used oil. The No. 2 fuel oil is used as pilot fuel during startup, shutdown, and malfunctions. This unit can operate for the entire year (i.e., 8,760 hours) and can fire either fuel oil or natural gas with no restrictions on hours of operation. On spec used oil limited to heat input for No. 6 fuel oil.

ATTACHMENT SU-E01-L12

IDENTIFICATION OF 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).

Best Available Copy



Department of Environmental Protection

RECEIVED

MAY 02 1996

Environmental Services Department

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

April 15, 1996

Dr. P.Y. Baynard
Director-Environmental & License Affairs
Florida Power Corporation
Environmental Services Department
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee Co. - AP
Florida Power Corporation
Suwannee Plant

Unit No.	/	ID No.	/	Permit No.
1	/	1210003001 (was 31JAX61000301)	/	AO61-189582
2	/	1210003002 (was 31JAX61000302)	/	AO61-189582
3	/	1210003003 (was 31JAX61000303)	/	AO61-189581

The referenced permits are revised below based on the request received 01-12-96 that on-specification used oil to be allow as a fuel.

Specific Condition #1 is revised by adding on-specification used oil as a fuel as follows:

RATE	FUEL
— ⁵	on-specification used oil ^{6,7,8}

⁵The rate shall not exceed the permit heat input rate stated for No. 6 fuel oil for each unit and the amount fired shall be recorded.

⁶The on-spec used oil burned shall comply with the limits listed below and the provisions of 40 CFR 279 and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Specific Condition #1 - continued:

⁷On-specification used oil maximum concentration of PCBs shall be less than 50 ppm. Used oil shall not be blended to meet this requirement. Used oil with PCBs concentration of 2 to 49 ppm shall be fired only during normal operation temperature and used oil with PCBs concentration of less than 2 ppm may be fired during startups and shutdowns.

Specific Condition #5 is revised by adding on-specification used oil test requirements as follows:

POLLUTANT	Interval ⁵	TEST METHOD(S) ⁵
ARSENIC		
CADMIUM		
CHROMIUM		
LEAD		
TOTAL HALOGENS		
FLASH POINT (IGNITABILITY)		
PCBs		

⁵Approved EPA, DEP or ASTM test methods shall be used or a certified on-specification used oil analysis of each delivery shall be retained for inspection or submittal on request by the Department.

A copy of any applicable marketer's notice or EPA notification shall be submitted.

This letter and the request shall become a part of the permit.

Any party to this Order (permit) has the right to seek judicial review of the permit 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 this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION

Christopher L. Kirts
 Christopher L. Kirts, P.E.
 District Air Program Administrator

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Wesley B. Bradford 4/17/96
 Clerk Date

CLK:RJI:JLC
 Scott H. Osbourn



Department of Environmental Protection

MAY 02 1996
Department

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

April 15, 1996

Dr. P.Y. Baynard
Director-Environmental & License Affairs
Florida Power Corporation
Environmental Services Department
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee Co. - AP
Florida Power Corporation
Suwannee Plant
No. 1, 2 & 3 Peaking Units
ID# 1210003004,005,006 (were 31JAX61000304,05,06)
AO61-189579
Permit Revisions

The referenced permits are revised below based on the request received 01-12-96 that on-specification used oil to be allow as a fuel.

Specific Condition #1 is revised by adding on-specification used oil as a fuel as follows:

RATE	FUEL
— ⁵	on-specification used oil ^{6,7,8}

⁵The rate shall not exceed the heat input rate 739 MMBTU/hr per unit for No. 2 fuel oil and the amount fired shall be recorded.

⁶The on-spec used oil burned shall comply with the limits listed below and the provisions of 40 CFR 279 and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

Specific Condition #1 - continued:

⁷On-specification used oil maximum concentration of PCBs shall be less than 50 ppm. Used oil shall not be blended to meet this requirement. Used oil with PCBs concentration of 2 to 49 ppm shall be fired only during normal operation temperature and used oil with PCBs concentration of less than 2 ppm may be fired during startups and shutdowns.

Specific Condition #5 is revised by adding on-specification used oil test requirements as follows:

POLLUTANT	Interval ⁵	TEST METHOD(S) ⁵
ARSENIC		
CADMIUM		
CHROMIUM		
LEAD		
TOTAL HALOGENS		
FLASH POINT (IGNITABILITY)		
PCBs		

⁵Approved EPA, DEP or ASTM test methods shall be used or a certified on-specification used oil analysis of each delivery shall be retained for inspection or submittal on request by the Department.

A copy of any applicable marketer's notice or EPA notification shall be submitted.

This letter and the request shall become a part of the permit.

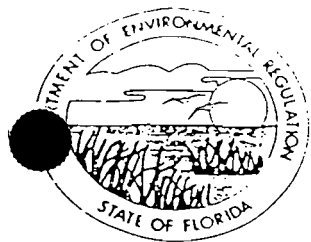
Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 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 this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

FILING AND ACKNOWLEDGEMENT
 FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
[Signature]
 Clerk Date 4/17/96

STATE OF FLORIDA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION
[Signature]
 Christopher L. Kirts, P.E.
 District Air Program Administrator

CLK:RJL:JLC
 Scott H. Osbourn



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

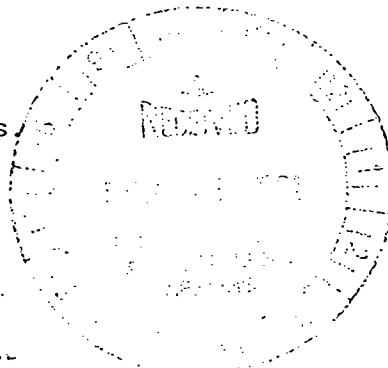
Lawton Chiles, Governor

Carol M. Browner, Secretary

NOTICE OF PERMIT ISSUANCE

CERTIFIED - RETURN RECEIPT

Dr. P.Y. Baynard, Director - Environ. & Licen. Affrs.
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733



Dear Dr. Baynard:

Suwannee County - AP
Florida Power Corporation
No. 1 Unit

Enclosed is Permit Number A061-189582 to operate the subject air pollution source, pursuant to Section 403.087, Florida Statutes (FS).

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 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;

(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 require reversal or modification of the Department's action or proposed action; and

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Florida Power Corporation
Page two
A061-189582

(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 allowed 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 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 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 Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

EEF:dhk

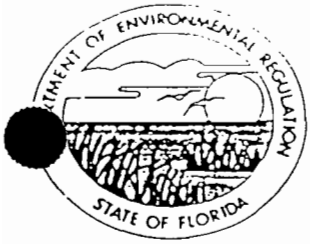
Copies furnished to: Richard O. Frazee, P.E.

FILED AND RECORDED
FILED BY
SEARCHED
INDEXED
RECEIVED

Lilly Loria 2-14-91

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 2-14-91 to the listed persons.



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000301
Permit/Cert Number: A061-189582
Date of Issue: 02-14-91 /
Expiration Date: February 18, 1996
County: Suwannee
Latitude/Longitude: 30°22'35"N; 83°10'50"W
Project: No. 1 Unit
UTM: E-(17)290.5; N-3362.2

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 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 No. 1 Unit, Fossil Fuel Steam Generator.

Located south of U.S. 90, on east bank of Suwannee River, Northwest of Live Oak, Suwannee County, Florida.

In accordance with:

Application dated 11-07-80
Additional information received 02-19-81
Renewal application dated 12-02-85
Additional information received 12-26-85, 01-15 and 01-20-86
Renewal application received 11-26-90

PERMITTEE:
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Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000301
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants, or representatives.
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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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 at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000301
Permit/Cert: A061-189582
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Expiration Date: February 18, 1996

GENERAL CONDITIONS

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact 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 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
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 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000301
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS

13. This permit also constitutes:

- () 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 Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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 date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the department, the permittee shall, within a reasonable period of 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 submitted or corrected promptly.

PERMITEE:
 Florida Power Corporation
 Post Office Box 14042 (H2G)
 St. Petersburg, Florida 33733

I.D. Number: 31JAX61000301
 Permit/Cert: AO61-189582
 Date of Issuc: February 14, 1991
 Expiration Date: February 18, 1996
 REVISED: July 12, 1994

1. The maximum input/rate (operating rate) is SEE BELOW and shall not be exceeded without prior Department approval:

<u>RATE</u>	<u>FUEL</u>
• 450 MMBTU/hr ¹	No. 6 fuel oil ²
• 460 MMBTU/hr	Natural Gas
• <u>3</u>	No. 2 fuel oil ⁴

- ¹ From 72 barrels/hr — *Nbc.*
- ² Fuel oil sulfur content shall not exceed 2.5% by wt.
- ³ Include the actual quantity fired in the Annual Operating Report (AOR)
- ⁴ Used as pilot fuel during startup, shutdown, malfunctions

2. Testing of emissions must be performed at an operating rate of at least 90% of the rate in Specific Condition No. 1, or Specific Condition No. 3 will become effective.
3. The operating rate shall not exceed 110% of the most recently accepted test, except for additional testing purposes, and shall not exceed the rate in Specific Condition No. 1. After testing at a higher rate, the operating rate shall continue to not exceed the aforementioned rate until the test report at the higher rate is reviewed and accepted by the Department.
4. The permitted maximum allowable emission rate for each pollutant is as follows:

<u>POLLUTANT</u>	<u>FAC RULE</u>	<u>lbs/hr</u>	<u>TPY</u>
PM ₁ ¹	17-2.600(5)(a)2	45.0 ²	197.10 ³
PM ₂ ⁴	17-2.250(3)	135.0 ⁵	_____
SO ₂ ⁶	17-2.600(5)(a)3.a.(xi)	1237.5 ⁷	5420.25 ³
• VE ₁ ⁸	17-2.600(5)(a)1	• 20% opacity, except	
• VE ₂ ⁹	17-2.250(3)	• 40% for 2 min/hr	
• VE ₃ ¹⁰	17-2.250(3)	• 60% opacity up to 3 hrs in 24 hrs	
		• 60% opacity up to 3 hrs in 24 hrs	

- ¹ PM - Particulate Matter
- ² Basis: 450 MMBTU/hr; 0.1 lb/MMBTU
- ³ Basis: Hours of operation shall be limited to 8760 H/Y (24 H/D; 7 D/W; 52 W/Y)
- ⁴ PM₂ - particulate matter while soot blowing
- ⁵ Basis: 450MMBTU/hr; 0.3 lb/MMBTU
- ⁶ SO₂ - sulfur dioxide
- ⁷ Basis: 450 MMBTU/hr; 2.75 lbs/MMBTU
- ⁸ VE₁ - visible emissions as Steady State
- ⁹ VE₂ - visible emissions while soot blowing
- ¹⁰ VE₃ - visible emissions while load changing

PERMITTEE:
 Florida Power Corporation
 Post Office Box 14042 (H2G)
 St. Petersburg, Florida 33733

I.D. Number: 31JAX61000301
 Permit/Cert: A061-189582
 Date of Issue:
 Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

5. Test the emission for the following pollutant(s) at the interval(s) indicated, notify the Department 14 days prior to testing, and submit the test report documentation to the Department within 45 days after completion of the testing:

<u>Pollutant</u>	<u>Interval</u>	<u>Test Method</u> ¹
PM ₁	12 months from 09-01-90 ²	EPA 5 or 17
PM ₂	12 months from 09-01-90 ²	EPA 5 or 17
SO ₂	12 months from 03-01-90 ²	----- ³
VE ₁ ⁴	12 months from 09-01-90 ²	DER 9
VE ₂ ⁴	12 months from 09-01-90 ²	DER 9

¹From 17-2.700(1), FAC in Table 700-1

²Per FAC Rule 17-2.700(2)(a)3.b., testing is not required if liquid fuel is used no more than 400 hrs/yr.

³See FAC Rule 17-2.700(6)(c)1.b.

⁴VE test shall be conducted during one of the test runs.

Tests and test reports shall comply with the requirements of Florida Administrative Code Rule 17-2.700(6) and (7), respectively.

6. If steady state emissions testing is required as noted above and if it is necessary to conduct soot blowing operations during the period that the unit is on oil, then a soot blowing emissions test shall be conducted in addition to the steady state emissions test. In order to produce stack emissions representative of soot blowing conditions, oil must be burned in the unit for a period of time immediately prior to conducting the soot blowing emissions test such that, in the unit operator's judgment, conditions for maintaining optimum boiler operations requires that soot blowing be conducted. The specific conditions under which the soot blowing emission test will be conducted shall be discussed and agreed upon between the Department and the permittee.

7. If any unit exceeds the maximum allowable emissions as indicated by the results of the testing, then the unit shall be retested on oil within one month of the date of the failed test. If it is not possible to retest within one month, a written request for a delay and an explanation of the cause of the failure and of the delay will be required within one month of the date of the failed test.

8. In conjunction with operation of this unit on oil, the permittee shall obtain and maintain (for Department review when requested) documentation that includes, but is not limited to, the following information: hourly rate of oil consumption, heat content of the oil consumed, and sulfur content of the oil consumed.

9. In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

A.31
 (8) 1/12-2/15/90
 and 1/2-2/7/90
 (9) 2, 4, 15
 A.32
 new written
 somewhat
 A.22
 A.37

BEST AVAILABLE COPY

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

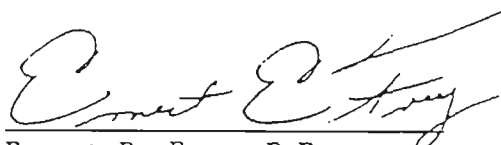
I.D. Number: 31JAX61000301
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

- 10. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1.
- 11. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.
- 12. The ID No. for this source is to be used on all correspondence.
- 13. Forms for the renewal will be sent 5 months prior to 02-18-96 and the completed forms with test results are due 90 days prior to 02-18-96.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

FILED AND ACKNOWLEDGMENT

FILED IN THE OFFICE OF THE DEPUTY ASSISTANT SECRETARY
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Peter Durin 2-14-91

BEST AVAILABLE COPY

CERTIFICATION

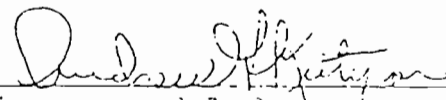
PROJECT NAME: Florida Power Corporation
No. 1 Unit

Application No. A061-189582

I HEREBY CERTIFY that the engineering features described in application No. A061-189582 provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, and geological features).

Andrew G. Kutyna, P.E.

Name, P.E.


Signature and Seal

2-12-0
Date

ATTACHMENT SU-E01-L13
COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT SU-E01-L13

Compliance Assurance Monitoring Plan to be submitted to implementing agency by required date.
See Section E, Pollutant Information, for method of compliance for specific pollutant.

ATTACHMENT SU-E01-L14
ACID RAIN PERMIT APPLICATION

Phase II Permit Application

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

This submission is: New Revised

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

Suwannee River Plant, FL, 638

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

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

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

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

Best Available Copy

Plant Name (from Step 1)
Suwannee River Plant

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

Standard Requirements

Permit Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from Step 1)
Suwannee River Plant

Recordkeeping and Reporting Requirements (cont.)

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

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

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

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

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

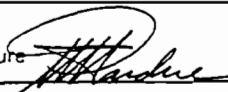
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

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

Name *W. Jeffrey Pardue, C.E.P., Director, Environmental Services Dept.*

Signature



Date *12/14/95*

Best Available Copy

Phase II Permit-Page 4

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

AIRS
FINDS



Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24

This submission is: New Revised

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

Plant Name	Suwannee	State	FL	ORIS Code	638
------------	----------	-------	----	-----------	-----

STEP 2
Enter requested information for the designated representative

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

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

Name					
Address					
Phone Number			Fax Number		

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

I certify that I was selected as the designated representative or alternate 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 affected 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 and operator shall be fully bound by my actions, 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 permitting 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-unit, 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 held or distributed in accordance with the contract.

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

Plant Name (from Step 1)

Suwannee

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

Signature (designated representative) <i>[Signature]</i>	Date 11/2/94
Signature (alternate)	Date

STEP 5
 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 owner.

Name Florida Power Corporation						<input checked="" type="checkbox"/> Owner	<input checked="" type="checkbox"/> Operator
ID# 1	ID# 2	ID# 3	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities Florida Public Service Commission							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities							

Name						<input type="checkbox"/> Owner	<input type="checkbox"/> Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities							

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.

] 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).

] 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.

**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): No. 2 Unit, Fossil Fuel Steam Generator		
2. Emissions Unit Identification Number: <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown 002		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (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:

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

Emissions Unit Details

1. Initial Startup Date:	1 Nov 1954	
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer:	NA	Model Number: NA
4. Generator Nameplate Rating:	38 MW	
5. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	450	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):	<p>1. Maximum heat input based on permit limit firing natural gas (1000 Btu/cf-HHV) 2. Maximum heat input for firing No. 6 fuel oil 450 mmBtu/hr (18,300 Btu/lb-HHV; 8.2 lb/gal)</p>	

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)**

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

Not Applicable

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

See Attachment SU-E02-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU2, See SU-FI-E2	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Boiler gases exhaust through a single stack	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	110 feet
7. Exit Diameter:	7 feet
8. Exit Temperature:	340 °F

9. Actual Volumetric Flow Rate:	197,000 acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates:	
Zone:	East (km): North (km):
14. Emission Point Comment (limit to 200 characters):	

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

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): No. 6 Fuel Oil	
2. Source Classification Code (SCC): 10100501	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 2.921	5. Maximum Annual Rate: 25,590
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 2.5	8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit: 152	
10. Segment Comment (limit to 200 characters): 1. Heat content-HHV. 2. Max sulfur - 1 grain/100 cf.	

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural gas	
2. Source Classification Code (SCC): 10100601	
3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 0.45	5. Maximum Annual Rate: 3,942
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): 1 Heat content-HHV. 2. Maximum Sulfur - 1 grain/100 cf	

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): Distillate fuel oil	
2. Source Classification Code (SCC): 10100501	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3.217	5. Maximum Annual Rate: 28,184
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 characters): 1. Distillate fuel oil is used as a pilot fuel for startup shutdown, and malfunction 2. Heat content-HHV	

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): On-Specification used oil	
2. Source Classification Code (SCC): 10101302	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3.217	5. Maximum Annual Rate: 28,184
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 characters): Heat content - HHV. Limited to HIR for No. 6 fuel oil.	

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
PM			EL
PM10			NS
NOX			NS
CO			NS
H107			NS
H106			NS
HAPS			NS

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:	1,221 lb/hour	5,348 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr		
6. Emission Factor:		2.75 lb/MMBtu
Reference: FDEP Rule 62-296.405		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
See SU-E01-H8		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
1. Based on firing No. 6 fuel oil		

Emissions Unit Information Section 2 of 5
Allowable Emissions (Pollutant identified on front page)

A.

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:	1,221 lb/hour	5,348 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): 1. Firing No. 6 fuel oil 2. Rule 62-296.405(1)		

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. of Related Operating Method/Mode) (limit to 200 characters):		

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:	133.2 lb/hour 243.1 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr	
6. Emission Factor: 0.3 lb/MMBtu Reference: FDEP Rule 62-210.700	
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters): See Attachment SU-E01-H8	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Potential lb/hr based on soot-blowing while oil firing. Potential TPY based on 0.125 lb/mmBtu over 24 hr (0.1 during normal operations, 21 hr; 0.3 during soot blowing, 3 hr).	

Emissions Unit Information Section 2 of 5
Allowable Emissions (Pollutant identified on front page)

A.

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:	44.4 lb/hour	194.5 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:	133.2 lb/hour	72.9 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		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 4

1.	Visible Emissions Subtype: VE20
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 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)

Visible Emissions Limitations: Visible Emissions Limitation 2 of 4

1.	Visible Emissions Subtype: VE60
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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 allowed 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),F.A.C.

**I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)**

Visible Emissions Limitations: Visible Emissions Limitation 3 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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),F.A.C.

Visible Emissions Limitations: Visible Emissions Limitation 4 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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. Startup or shutdown 2. Rule 62-710.700(2),F.A.C.

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 1 of 4

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 42 Serial Number: 4LD-49860-284	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor 2 of 4

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 41 H Serial Number: 41H-50090-284	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 3 of 4

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement: [<input checked="" type="checkbox"/>] Rule [] Other	
4. Monitor Information: Monitor Manufacturer: Durag Model Number: CEMOP-281 Serial Number: 30444	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor 4 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement: [<input checked="" type="checkbox"/>] Rule [] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 9408-16206-1-4	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6. Fuel oil monitor Ser. No. 9408-16206-1-2	

**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	<input type="checkbox"/>] C	<input type="checkbox"/>] E	<input checked="" type="checkbox"/>] Unknown
	SO ₂	<input type="checkbox"/>] C	<input type="checkbox"/>] E	<input checked="" type="checkbox"/>] Unknown
	NO ₂	<input type="checkbox"/>] C	<input type="checkbox"/>] E	<input checked="" type="checkbox"/>] Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO ₂	lb/hour		tons/year
	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	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L1</u>	<input type="checkbox"/> Waiver Requested
		<input type="checkbox"/> Not Applicable	
2.	Fuel Analysis or Specification	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L2</u>	<input type="checkbox"/> Waiver Requested
		<input type="checkbox"/> Not Applicable	
3.	Detailed Description of Control Equipment	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
		<input checked="" type="checkbox"/> Not Applicable	
4.	Description of Stack Sampling Facilities	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E02-L4</u>	<input type="checkbox"/> Waiver Requested
		<input type="checkbox"/> Not Applicable	
5.	Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Not Applicable
		<input checked="" type="checkbox"/> Previously Submitted, Date: <u>21 Sep 1995</u>	
6.	Procedures for Startup and Shutdown	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L6</u>	<input type="checkbox"/> Not Applicable
		<input type="checkbox"/> Not Applicable	
7.	Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
		<input type="checkbox"/> Not Applicable	
8.	Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
		<input type="checkbox"/> Not Applicable	
9.	Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
		<input type="checkbox"/> Not Applicable	

Additional Supplemental Requirements for Category 1 Applications Only

10. Alternative Methods of Operation
<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L10</u> <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading)
<input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements
<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E02-L12</u> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan
<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L13</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required)
<input checked="" type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>SU-E01-L14</u>
<input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____
<input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____
<input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____
<input type="checkbox"/> Not Applicable

ATTACHMENT SU-E02-D
EMISSIONS UNIT REGULATIONS

ATTACHMENT SU-E02-D

APPLICABLE REQUIREMENTS LISTING - POWER PLANTS

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:

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

Acid Rain:

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

Stationary Sources-Emission Standards:

- 62-296.405(1)(a) - FFSG; VE
- 62-296.405(1)(b) - FFSG; PM
- 62-296.405(1)(c)1.j. - FFSG; Oil-SO₂ (general limit; see rule for others)
- 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; SO₂ CEMS exempted for non-controlled units (oil/gas)

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

- 62-297.310(1) - Test Runs-Mass Emission
- 62-297.310(2)(b) - Operating Rate; other than CTs; no CT
- 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/H₂SO₄/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. - PM exemption if < 400 hrs/yr
- 62-297.310(7)(a)5. - FDEP Notification - 15 days
- 62-297.310(7)(a)9. - Waiver of Compliance Test (Fuel Sampling)
- 62-297.310(7)(c) - Test Reports
- 62-297.310(8)

Federal Rules:

Acid Rain-Permits: (Important: generally does not include Phase I requirements/or NOx)

- 40 CFR 72.9(a) - Permit Requirements
- 40 CFR 72.9(b) - Monitoring Requirements
- 40 CFR 72.9(c)(1) - SO2 Allowances-hold allowances
- 40 CFR 72.9(c)(2) - SO2 Allowances-violation
- 40 CFR 72.9(c)(3)(iii) - SO2 Allowances-Phase II Units (listed)
- 40 CFR 72.9(c)(4) - SO2 Allowances-allowances held in ATS
- 40 CFR 72.9(c)(5) - SO2 Allowances-no deduction for 72.9(c)(1)(i)
- 40 CFR 72.9(e) - Excess Emission Requirements
- 40 CFR 72.9(f) - Recordkeeping and Reporting
- 40 CFR 72.9(g) - Liability
- 40 CFR 72.20(a) - Designated Representative; required
- 40 CFR 72.20(b) - Designated Representative; legally binding
- 40 CFR 72.20(c) - Designated Representative; certification requirements
- 40 CFR 72.21 - Submissions
- 40 CFR 72.22 - Alternate Designated Representative
- 40 CFR 72.23 - Changing representatives; owners
- 40 CFR 72.30(a) - Requirements to Apply (operate)
- 40 CFR 72.30(c) - Requirements to Apply (reapply before expiration)
- 40 CFR 72.30(d) - Requirements to Apply (submittal requirements)
- 40 CFR 72.32 - Permit Shield
- 40 CFR 72.33(b) - Dispatch System ID;unit/system ID
- 40 CFR 72.33(c) - Dispatch System ID;ID requirements
- 40 CFR 72.33(d) - Dispatch System ID;ID change
- 40 CFR 72.40(a) - General; compliance plan
- 40 CFR 72.40(b) - General; multi-unit compliance options
- 40 CFR 72.40(c) - General; conditional approval
- 40 CFR 72.40(d) - General; termination of compliance options
- 40 CFR 72.51 - Permit Shield
- 40 CFR 72.90 - Annual Compliance Certification

Monitoring Part 75: (does not include common & by-pass stacks)

- 40 CFR 75.4 - Compliance Dates
- 40 CFR 75.5 - Prohibitions

- 40 CFR 75.10(a)(2) - Primary Measurement; NOx; except 75.12&.17; Subpart E
- 40 CFR 75.10(a)(3)(i) - Primary Measurement; CO2; 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; SO2
- 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 NOx 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; Addendix 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)(3) - General Missing Data Procedures; NOx
- 40 CFR 75.32 - Monitoring Data Availability for Missing Data
- 40 CFR 75.33 - Standard Missing Data Porcedures
- 40 CFR 75.53 - Monitoring Plan
- 40 CFR 75.54(a) - Recordkeeping-general
- 40 CFR 75.54(b) - Recordkeeping-operating parameter
- 40 CFR 75.54(c) - Recordkeeping-SO2
- 40 CFR 75.54(d) - Recordkeeping-NOx
- 40 CFR 75.54(e) - Recordkeeping-CO2
- 40 CFR 75.54(f) - Recordkeeping-Opacity
- 40 CFR 75.55(c) - Recordkeeping - Specific Situations (Appendix D)
- 40 CFR 75.55(e) - Recordkeeping - Specific Situations (gaseous fuel)
- 40 CFR 75.56 - Certification; QA/QC Provisions
- 40 CFR 75.60 - Reporting Requirements-General
- 40 CFR 75.61 - Reporting Requirements-Notification cert/recertification
- 40 CFR 75.63 - Reporting Requirements-Certification/Recertification
- 40 CFR 75.64(a) - Reporting Requirements-Quarterly reports; submission
- 40 CFR 75.64(b) - Reporting Requirements-Quarterly reports; DR statement
- 40 CFR 75.64(c) - Rep. Req.; Quarterly reports; Compliance Certification
- 40 CFR 75.64(d) - Rep. Req.; Quarterly reports; Electronic format
- 40 CFR 75.65 - Opacity Reports
- Appendix A-3. - Performance Specifications
- Appendix A-4. - Data Handling and Acquisition Systems
- Appendix A-5. - Calibration Gases
- Appendix A-6. - Certification Tests and Procedures
- Appendix B - QA/QC Procedures
- Appendix C-1. - Missing Data; SO2/NOx for controlled sources

Appendix C-2.
Appendix F
Appendix G-2.
Appendix H

- Missing Data; Load-Based Procedure; NOx & flow
- Conversion Procedures
- Determination of CO₂; from combustion sources
- Traceability Protocol

ATTACHMENT SU-E02-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT SU-E02-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

The Suwannee Plant Steam Generator Unit No. 2 is required by Permit AO61-189582 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to Rule 62-297.310, F.A.C., the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by Rule 62-297.310(6) , the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports are 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.

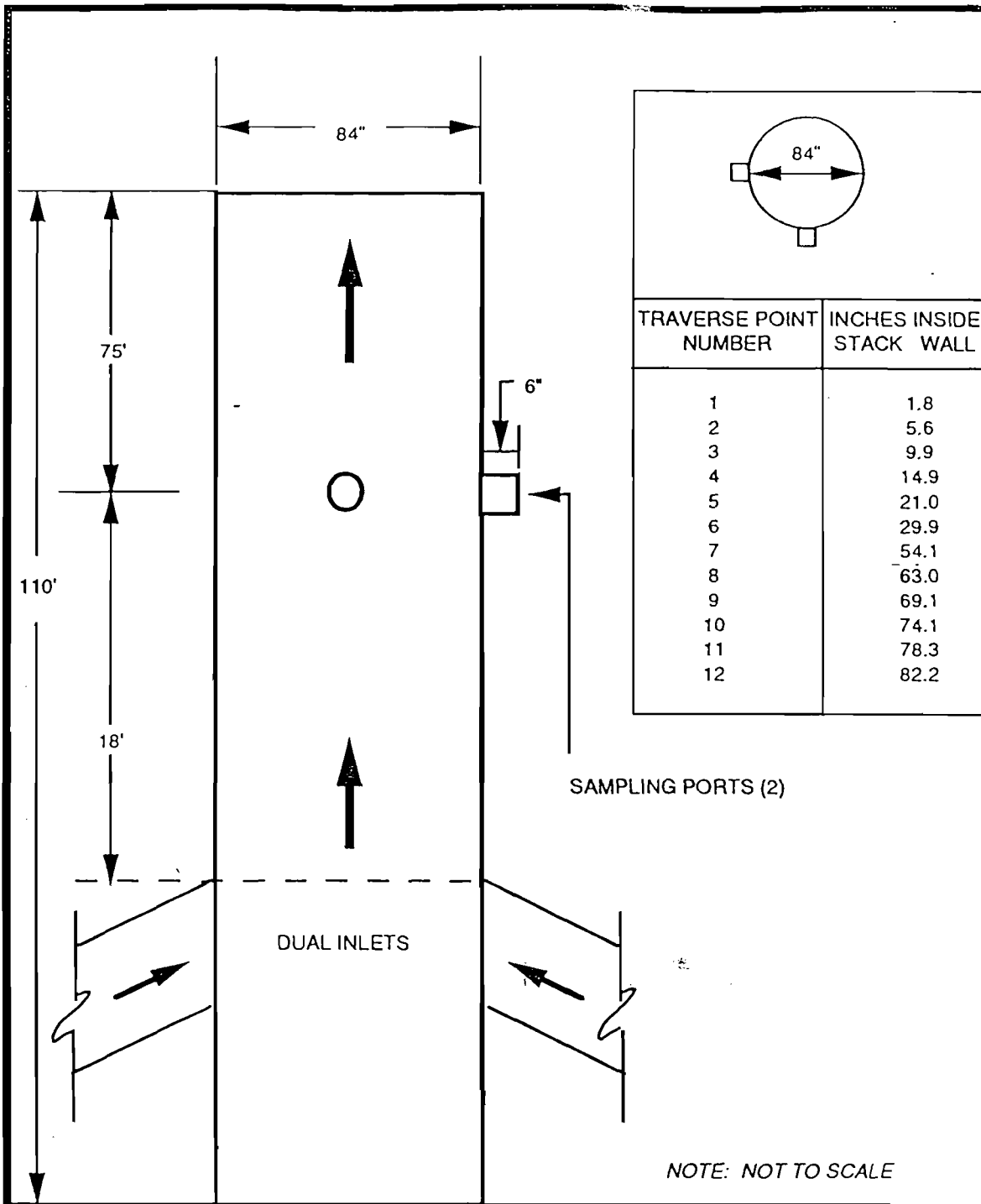
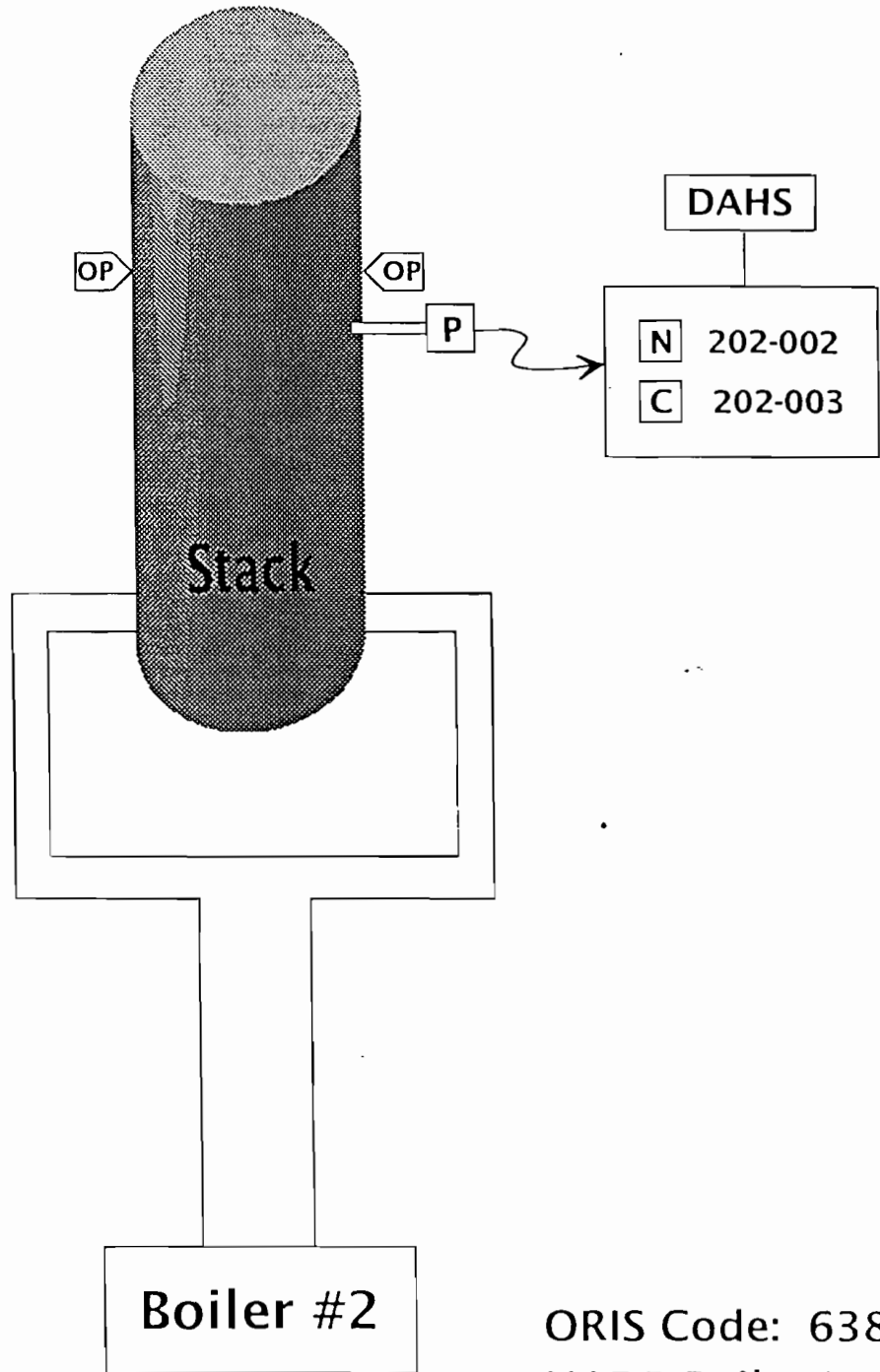


FIGURE 1.
 EXHAUST SCHEMATIC
 UNITS 1 AND 2
 FLORIDA POWER CORPORATION -SUWANNEE PLANT
 WEST OF LIVE OAK, FLORIDA

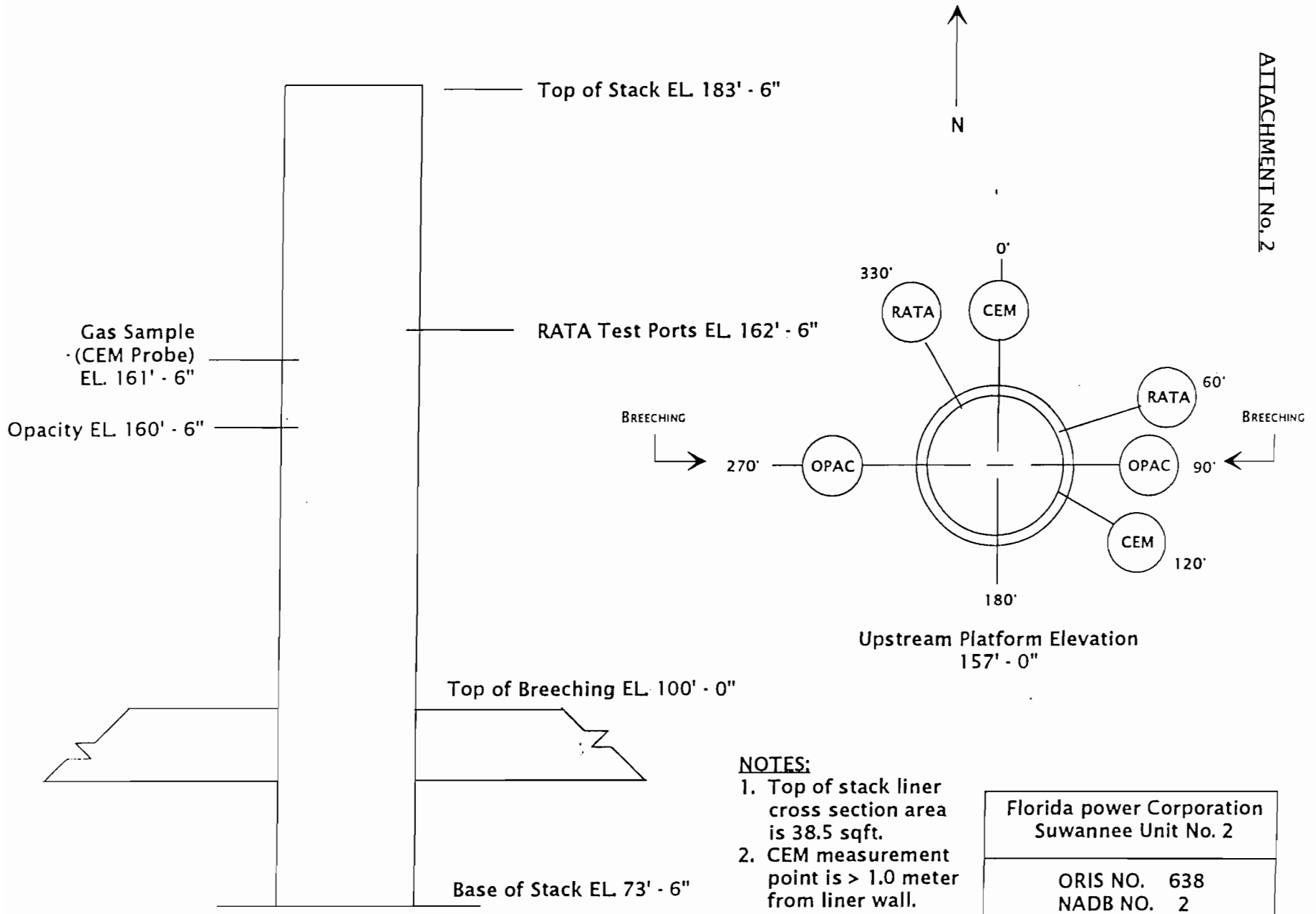
ACE
 AIR CONSULTING
 AND ENGINEERING, INC.

Suwannee Unit #2

Florida Power Corporation, Live Oak, FL
EPA Monitoring Plan Location Information (Part 2)



ORIS Code: 638
NADB Boiler ID: 2



- NOTES:**
- 1. Top of stack liner cross section area is 38.5 sqft.
 - 2. CEM measurement point is > 1.0 meter from liner wall.

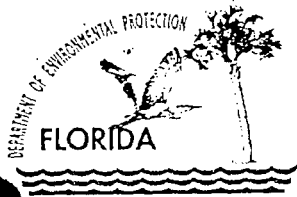
Florida power Corporation Suwannee Unit No. 2	
ORIS NO.	638
NADB NO.	2

ATTACHMENT SU-E02-L12

IDENTIFICATION OF 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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Department of Environmental Protection

RECEIVED
MAY 02 1996
Florida Department of Environmental Protection

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

April 15, 1996

Dr. P.Y. Baynard
Director-Environmental & License Affairs
Florida Power Corporation
Environmental Services Department
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee Co. - AP
Florida Power Corporation
Suwannee Plant

<u>Unit No.</u>	<u>/</u>	<u>ID No.</u>	<u>/</u>	<u>Permit No.</u>
1	/	1210003001 (was 31JAX61000301)	/	AO61-189582
2	/	1210003002 (was 31JAX61000302)	/	AO61-189582
3	/	1210003003 (was 31JAX61000303)	/	AO61-189581

The referenced permits are revised below based on the request received 01-12-96 that on-specification used oil to be allow as a fuel.

Specific Condition #1 is revised by adding on-specification used oil as a fuel as follows:

RATE	FUEL
--- ⁵	on-specification used oil ^{6,7,8}

⁵The rate shall not exceed the permit heat input rate stated for No. 6 fuel oil for each unit and the amount fired shall be recorded.

⁶The on-spec used oil burned shall comply with the limits listed below and the provisions of 40 CFR 279 and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Specific Condition #1 - continued:

⁷On-specification used oil maximum concentration of PCBs shall be less than 50 ppm. Used oil shall not be blended to meet this requirement. Used oil with PCBs concentration of 2 to 49 ppm shall be fired only during normal operation temperature and used oil with PCBs concentration of less than 2 ppm may be fired during startups and shutdowns.

Specific Condition #5 is revised by adding on-specification used oil test requirements as follows:

POLLUTANT	Interval ⁵	TEST METHOD(S) ⁵
ARSENIC		
CADMIUM		
CHROMIUM		
LEAD		
TOTAL HALOGENS		
FLASH POINT (IGNITABILITY)		
PCBs		

⁵Approved EPA, DEP or ASTM test methods shall be used or a certified on-specification used oil analysis of each delivery shall be retained for inspection or submittal on request by the Department.

A copy of any applicable marketer's notice or EPA notification shall be submitted.

This letter and the request shall become a part of the permit.

Any party to this Order (permit) has the right to seek judicial review of the permit 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 this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk receipt of which is hereby acknowledged.

Wincey Rinefield 4/17/96
 Clerk Date

STATE OF FLORIDA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION

Christopher L. Kirts
 Christopher L. Kirts, P.E.
 District Air Program Administrator

CLK:RJL:JLC
 cc Scott H. Osbourn

Department of Environmental Protection

MAY 02 1996



Lawton Chiles Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell Secretary

April 15, 1996

Dr. P.Y. Baynard
Director-Environmental & License Affairs
Florida Power Corporation
Environmental Services Department
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee Co. - AP
Florida Power Corporation
Suwannee Plant
No. 1,2 & 3 Peaking Units
ID# 1210003004,005,006 (were 31JAX61000304,05,06)
AO61-189579
Permit Revisions

The referenced permits are revised below based on the request received 01-12-96 that on-specification used oil to be allow as a fuel.

Specific Condition #1 is revised by adding on-specification used oil as a fuel as follows:

Table with 2 columns: RATE and FUEL. RATE contains a superscript 5. FUEL contains 'on-specification used oil' with superscripts 6,7,8.

5The rate shall not exceed the heat input rate 739 MMBTU/hr per unit for No. 2 fuel oil and the amount fired shall be recorded.

6The on-spec used oil burned shall comply with the limits listed below and the provisions of 40 CFR 279 and shall be recorded:

Table titled 'ON-SPEC USED OIL SPECIFICATIONS' with columns 'Constituent/Property' and 'Allowable Level'. Rows include Arsenic, Cadmium, Chromium, Lead, Total Halogens, and Flash Point with their respective limits.

Specific Condition #1 - continued:

⁷On-specification used oil maximum concentration of PCBs shall be less than 50 ppm. Used oil shall not be blended to meet this requirement. Used oil with PCBs concentration of 2 to 49 ppm shall be fired only during normal operation temperature and used oil with PCBs concentration of less than 2 ppm may be fired during startups and shutdowns.

Specific Condition #5 is revised by adding on-specification used oil test requirements as follows:

POLLUTANT	Interval ⁵	TEST METHOD(S) ⁵
ARSENIC		
CADMIUM		
CHROMIUM		
LEAD		
TOTAL HALOGENS		
FLASH POINT (IGNITABILITY)		
PCBs		

⁵Approved EPA, DEP or ASTM test methods shall be used or a certified on-specification used oil analysis of each delivery shall be retained for inspection or submittal on request by the Department.


A copy of any applicable marketer's notice or EPA notification shall be submitted.

This letter and the request shall become a part of the permit.

Any party to this Order (permit) has the right to seek judicial review of the permit 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 this Notice is filed with the Clerk of the Department.

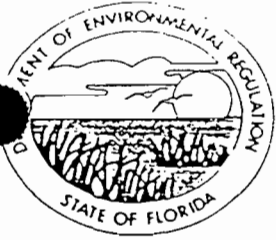
Executed in Jacksonville, Florida.

FILING AND ACKNOWLEDGEMENT
 FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Debra Bonfield Clerk 4/17/96 Date

STATE OF FLORIDA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION

 Christopher L. Kirts, P.E.
 District Air Program Administrator

CLK:RJL:JLC
 Scott H. Osbourn

Best Available Copy



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

NOTICE OF PERMIT ISSUANCE

CERTIFIED - RETURN RECEIPT

Dr. P.Y. Baynard, Director - Environ. & Licen. Affrs.
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee County - AP
Florida Power Corporation
No. 2 Unit



Enclosed is Permit Number A061-189582 to operate the subject air pollution source, pursuant to Section 403.087, Florida Statutes (FS).

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 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;

(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 require reversal or modification of the Department's action or proposed action; and

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Florida Power Corporation

Page two

A061-189582

(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 allowed 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 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 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 Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Ernest E. Frey, P.E.
Deputy Assistant Secretary

EEF:dhk

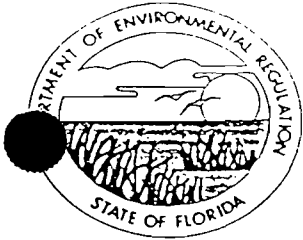
Copies furnished to: Richard O. Frazee, P.E.

FILED AND
SEARCHED
INDEXED
SERIALIZED
FEB 14 1991
FBI - JACKSONVILLE

2-14-91

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 2/14/91 to the listed persons.



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000302
Permit/Cert Number: A061-189582
Date of Issue: 2-14-91
Expiration Date: February 18, 1996
County: Suwannee
Latitude/Longitude: 30°22'35"N; 83°10'50"W
Project: No. 2 Unit
UTM: E-(17)290.5; N-3362.2

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 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 No. 2 Unit, Fossil Fuel Steam Generator.

Located south of U.S. 90, on east bank of Suwannee River, Northwest of Live Oak, Suwannee County, Florida.

In accordance with:

Application dated 11-07-80
Additional information received 02-19-81
Renewal application dated 12-02-85
Additional information received 12-26-85, 01-15 and 01-20-86
Renewal application received 11-26-90

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000302
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants, or representatives.
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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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 at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000302
Permit/Cert: AO61-189582
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact 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 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
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 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000302
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS

13. This permit also constitutes:

- () 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 Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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 date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the department, the permittee shall, within a reasonable period of 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 submitted or corrected promptly.

BEST AVAILABLE COPY

PERMITEE:
 Florida Power Corporation
 Post Office Box 14042 (H2G)
 St. Petersburg, Florida 33733

I.D. Number: 31JAX61000302
 Permit/Cert: AO61-189582
 Date of Issue: February 14, 1991
 Expiration Date: February 18, 1996
 REVISED: July 12, 1994

1. The maximum input/rate (operating rate) is SEE BELOW and shall not be exceeded without prior Department approval:

<u>RATE</u>	<u>FUEL</u>
● 444 MMBTU/hr ¹	No. 6 fuel oil ²
● 450 MMBTU/hr	Natural Gas
<u> 3</u>	No. 2 fuel oil ⁴

- ¹ From 72 barrels/hr - *N&C*
- ² Fuel oil sulfur content shall not exceed 2.5% by wt.
- ³ Include the actual quantity fired in the Annual Operating Report (AOR)
- ⁴ Used as pilot fuel during startup, shutdown, malfunctions

2. Testing of emissions must be performed at an operating rate of at least 90% of the rate in Specific Condition No. 1, or Specific Condition No. 3 will become effective.

3. The operating rate shall not exceed 110% of the most recently accepted test, except for additional testing purposes, and shall not exceed the rate in Specific Condition No. 1. After testing at a higher rate, the operating rate shall continue to not exceed the aforementioned rate until the test report at the higher rate is reviewed and accepted by the Department.

4. The permitted maximum allowable emission rate for each pollutant is as follows:

<u>POLLUTANT</u>	<u>FAC RULE</u>	<u>lbs/hr</u>	<u>TPY</u>
PM ₁ ¹	17-2.600(5)(a)2	44.4 ²	194.47 ³
PM ₂ ⁴	17-2.250(3)	133.2 ⁵	_____
SO ₂ ⁶	17-2.600(5)(a)3.a.(xi)	1221.0 ⁷	5347.98 ³
● VE ₁ ⁸	17-2.600(5)(a)1	● 20% opacity, except	
		● 40% for 2 min/hr	
● VE ₂ ⁹	17-2.250(3)	● 60% opacity up to	
		3 hrs in 24 hrs	
● VE ₃ ¹⁰	17-2.250(3)	● 60% opacity up to	
		3 hrs in 24 hrs	

- ¹ PM - Particulate Matter
- ² Basis: 444 MMBTU/hr, 0.1 lb/MMBTU
- ³ Basis: Hours of operation shall be limited to 8760 H/Y (24 H/D; 7 D/W; 52 W/Y)
- ⁴ PM₂ - particulate matter while soot blowing
- ⁵ Basis: 444 MMBTU/hr, 0.3 lb/MMBTU
- ⁶ SO₂ - sulfur dioxide
- ⁷ Basis: 444 MMBTU/hr, 2.75 lbs/MMBTU
- ⁸ VE₁ - visible emissions as Steady State
- ⁹ VE₂ - visible emissions while soot blowing
- ¹⁰ VE₃ - visible emissions while load changing

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PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000302
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

- 5. Test the emission for the following pollutant(s) at the interval(s) indicated, notify the Department 14 days prior to testing, and submit the test report documentation to the Department within 45 days after completion of the testing:

Table 2-1

<u>Pollutant</u>	<u>Interval</u>	<u>Test Method</u> ¹
PM ₁	12 months from 09-01-90 ²	EPA 5 or 17
PM ₂	12 months from 09-01-90 ²	EPA 5 or 17
SO ₂	12 months from 03-01-90 ²	---- ³
VE ₁ ⁴	12 months from 09-01-90 ²	DER 9
VE ₂ ⁴	12 months from 09-01-90 ²	DER 9

¹From 17-2.700(1), FAC in Table 700-1

²Per FAC Rule 17-2.700(2)(a)3.b., testing is not required if liquid fuel is used no more than 400 hrs/yr.

³See FAC Rule 17-2.700(6)(c)1.b.

⁴VE test shall be conducted during one of the test runs.

Tests and test reports shall comply with the requirements of Florida Administrative Code Rule 17-2.700(6) and (7), respectively.

- 6. If steady state emissions testing is required as noted above and if it is necessary to conduct soot blowing operations during the period that the unit is on oil, then a soot blowing emissions test shall be conducted in addition to the steady state emissions test. In order to produce stack emissions representative of soot blowing conditions, oil must be burned in the unit for a period of time immediately prior to conducting the soot blowing emissions test such that, in the unit operator's judgment, conditions for maintaining optimum boiler operations requires that soot blowing be conducted. The specific conditions under which the soot blowing emission test will be conducted shall be discussed and agreed upon between the Department and the permittee.
- 7. If any unit exceeds the maximum allowable emissions as indicated by the results of the testing, then the unit shall be retested on oil within one month of the date of the failed test. If it is not possible to retest within one month, a written request for a delay and an explanation of the cause of the failure and of the delay will be required within one month of the date of the failed test.
- 8. In conjunction with operation of this unit on oil, the permittee shall obtain and maintain (for Department review when requested) documentation that includes; but is not limited to, the following information: hourly rate of oil consumption, heat content of the oil consumed, and sulfur content of the oil consumed.
- 9. In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

BEST AVAILABLE COPY

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

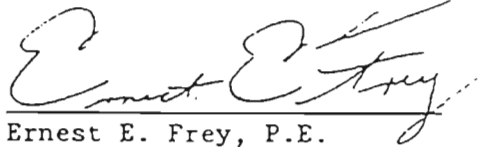
I.D. Number: 31JAX61000302
Permit/Cert: A061-189582
Date of Issue:
Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

- 10. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1.
- 11. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.
- 12. The ID No. for this source is to be used on all correspondence.
- 13. Forms for the renewal will be sent 5 months prior to 02-18-96 and the completed forms with test results are due 90 days prior to 02-18-96.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

FILING AND ACKNOWLEDGMENT
 FILED on _____ for \$120.52
 State of Florida, Department of Environmental Regulation
 received by _____ acknowledged _____
 _____ Date 2-14-91

CERTIFICATION

PROJECT NAME: Florida Power Corporation
No. 2 Unit

Application No. A061-189582

I HEREBY CERTIFY that the engineering features described in application No. A061-189582 provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, and geological features).

Andrew G. Kutyna, P.E.

Name, P.E.

Andrew G. Kutyna
Signature and Seal.

7-12-91
Date

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.

] 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).

] 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.

**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): No. 3 Unit, Fossil Fuel Steam Generator		
2. Emissions Unit Identification Number: <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown 003		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (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:

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

Emissions Unit Details

1. Initial Startup Date:	1 Oct 1956	
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer: NA	Model Number: NA	
4. Generator Nameplate Rating:	83 MW	
5. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	881	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 natural gas (1000 Btu/cf-HHV) 2. Maximum heat input for firing No. 6 fuel oil 880 mmBtu/hr (18,300 Btu/lb-HHV; 8.2 lb/gal)	

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)**

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

Not Applicable

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

See Attachment SU-E03-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU3, See SU-FI-E2	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Boiler gases exhaust through a single stack	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	135 feet
7. Exit Diameter:	7.7 feet
8. Exit Temperature:	300 °F

9. Actual Volumetric Flow Rate:	305,067	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		
Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		
See Attachment SU-E01-H8		

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

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): No. 6 Fuel Oil	
2. Source Classification Code (SCC): 10100401	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 5.796	5. Maximum Annual Rate: 50,773
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 2.5	8. Maximum Percent Ash: 0.1
9. Million Btu per SCC Unit: 152	
10. Segment Comment (limit to 200 characters): Heat content-HHV.	

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural gas	
2. Source Classification Code (SCC): 10100601	
3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 0.88	5. Maximum Annual Rate: 7,709
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): 1. Heat content - HHV	

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): Distillate fuel oil	
2. Source Classification Code (SCC): 10100501	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 6.304	5. Maximum Annual Rate: 55,924
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 characters): 1. Distillate fuel oil is used as a pilot fuel for startup, shutdown, and malfunction 2. Heat content-HHV	

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): On-specification used oil	
2. Source Classification Code (SCC): 10101302	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 6.384	5. Maximum Annual Rate: 55,924
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 characters): Heat content - HHV. Limited to HIR for No. 6 fuel oil.	

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
PM			EL
PM10			EL
NOX			NS
CO			NS
H107			NS
H106			NS
HAPS			NS

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:	2,422.75 lb/hour	10,612 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr		
6. Emission Factor:		2.75 lb/MMBtu
Reference: FDEP Rule 62-296.405		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<p>See SU-E01-H8</p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<p>Based on firing No. 6 fuel oil.</p>		

Emissions Unit Information Section 3 of 5
Allowable Emissions (Pollutant identified on front page)

A.

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:	2,422.75 lb/hour	10,612 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): Rule 62-296.405(1).		

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. of Related Operating Method/Mode) (limit to 200 characters):		

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:	264.3 lb/hour 482.3 tons/year
4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr	
6. Emission Factor: 0.3 lb/MMBtu Reference: FDEP Rule 62-210.700	
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
8. Calculation of Emissions (limit to 600 characters): See Attachment SU-E01-H8	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Potential lb/hr based on soot-blowing while oil firing. Potential TPY based on 0.125 lb/mmBtu over 24 hr (0.1 during normal operations, 21 hr; 0.3 during soot blowing, 3 hr).	

Emissions Unit Information Section 3 of 5
Allowable Emissions (Pollutant identified on front page)

A.

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:	88.1 lb/hour	385.9 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 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:	264.3 lb/hour	144.7 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		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 4

1.	Visible Emissions Subtype: VE20
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3.	Requested Allowable Opacity Normal Conditions: 20 % Exceptional Conditions: 40 % Maximum Period of Excess Opacity Allowed: 2 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),F.A.C.

Visible Emissions Limitations: Visible Emissions Limitation 2 of 4

1.	Visible Emissions Subtype: VE60
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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 allowed during load changing and boiler cleaning for up to 3 hr in 24 hr. Unlimited opacity allowed for 4 six-minute periods during 3 hr. 2. Rule 62-210.700(3),F.A.C.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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),F.A.C.

Visible Emissions Limitations: Visible Emissions Limitation 4 of 4

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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. Startup or shutdown 2. Rule 62-710.700(2),F.A.C.

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 1 of 4

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 42 Serial Number: 42D-49871-284	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

Continuous Monitoring System Continuous Monitor 2 of 4

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information: Monitor Manufacturer: TECO Model Number: 41 H Serial Number: 41H-50087-284	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6	

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 3 of 4

1. Parameter Code: VE	2. Pollutant(s):
3. CMS Requirement: [<input checked="" type="checkbox"/>] Rule [] Other	
4. Monitor Information: Monitor Manufacturer: Durag Model Number: CEMOP-281 Serial Number: 30443	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6. Fuel oil flow monitor Ser. No. 9408-16206-1-6	

Continuous Monitoring System Continuous Monitor 4 of 4

1. Parameter Code: FLOW	2. Pollutant(s):
3. CMS Requirement: [<input checked="" type="checkbox"/>] Rule [] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 9408-16206-1-1	
5. Installation Date: 30 Dec 1995	
6. Performance Specification Test Date: 30 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): 40 CFR 72.6. Fuel oil flow monitor. Serial No. 9408-16206-1-6.	

**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	<input type="checkbox"/> C	<input type="checkbox"/> E	<input checked="" type="checkbox"/> Unknown
SO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E	<input checked="" type="checkbox"/> Unknown
NO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E	<input checked="" type="checkbox"/> Unknown
4.	Baseline Emissions:		
PM	lb/hour		tons/year
SO ₂	lb/hour		tons/year
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	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L1</u>	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
2.	Fuel Analysis or Specification	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L2</u>	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
3.	Detailed Description of Control Equipment	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
4.	Description of Stack Sampling Facilities	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E03-L4</u>	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Waiver Requested
5.	Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Previously Submitted, Date: <u>21 Sep 1995</u>	<input type="checkbox"/> Not Applicable
6.	Procedures for Startup and Shutdown	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L6</u>	<input type="checkbox"/> Not Applicable	
7.	Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	
8.	Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	
9.	Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable	

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E03-L10</u> <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E03-L12</u> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L13</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required) <input checked="" type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>SU-E01-L14</u> <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

ATTACHMENT SU-E03-D
EMISSIONS UNIT REGULATIONS

ATTACHMENT SU-E03-D

APPLICABLE REQUIREMENTS LISTING - POWER PLANTS (5/13/96)

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:

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

Acid Rain:

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

Stationary Sources-Emission Standards:

- 62-296.405(1)(a) - FFSG; VE
- 62-296.405(1)(b) - FFSG; PM
- 62-296.405(1)(c)1.j. - FFSG; Oil-SO₂ (general limit; see rule for others)
- 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; SO₂ CEMS exempted for non-controlled units (oil/gas)

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

- 62-297.310(1) - Test Runs-Mass Emission
- 62-297.310(2)(b) - Operating Rate; other than CTs; no CT
- 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/H₂SO₄/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. - PM exemption if < 400 hrs/yr
- 62-297.310(7)(a)5. - FDEP Notification - 15 days
- 62-297.310(7)(a)9. - Waiver of Compliance Test (Fuel Sampling)
- 62-297.310(7)(c) - Test Reports
- 62-297.310(8)

Federal Rules:

Acid Rain-Permits: (Important: generally does not include Phase I requirements/or NOx)

- 40 CFR 72.9(a) - Permit Requirements
- 40 CFR 72.9(b) - Monitoring Requirements
- 40 CFR 72.9(c)(1) - SO2 Allowances-hold allowances
- 40 CFR 72.9(c)(2) - SO2 Allowances-violation
- 40 CFR 72.9(c)(3)(iii) - SO2 Allowances-Phase II Units (listed)
- 40 CFR 72.9(c)(4) - SO2 Allowances-allowances held in ATS
- 40 CFR 72.9(c)(5) - SO2 Allowances-no deduction for 72.9(c)(1)(i)
- 40 CFR 72.9(e) - Excess Emission Requirements
- 40 CFR 72.9(f) - Recordkeeping and Reporting
- 40 CFR 72.9(g) - Liability
- 40 CFR 72.20(a) - Designated Representative; required
- 40 CFR 72.20(b) - Designated Representative; legally binding
- 40 CFR 72.20(c) - Designated Representative; certification requirements
- 40 CFR 72.21 - Submissions
- 40 CFR 72.22 - Alternate Designated Representative
- 40 CFR 72.23 - Changing representatives; owners
- 40 CFR 72.30(a) - Requirements to Apply (operate)
- 40 CFR 72.30(c) - Requirements to Apply (reapply before expiration)
- 40 CFR 72.30(d) - Requirements to Apply (submittal requirements)
- 40 CFR 72.32 - Permit Shield
- 40 CFR 72.33(b) - Dispatch System ID;unit/system ID
- 40 CFR 72.33(c) - Dispatch System ID;ID requirements
- 40 CFR 72.33(d) - Dispatch System ID;ID change
- 40 CFR 72.40(a) - General; compliance plan
- 40 CFR 72.40(b) - General; multi-unit compliance options
- 40 CFR 72.40(c) - General; conditional approval
- 40 CFR 72.40(d) - General; termination of compliance options
- 40 CFR 72.51 - Permit Shield
- 40 CFR 72.90 - Annual Compliance Certification

Monitoring Part 75: (does not include common & by-pass stacks)

- 40 CFR 75.4 - Compliance Dates
- 40 CFR 75.5 - Prohibitions

- 40 CFR 75.10(a)(2) - Primary Measurement; NOx; except 75.12&.17; Subpart E
- 40 CFR 75.10(a)(3)(i) - Primary Measurement; CO2; 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; SO2
- 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 NOx 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; Addendix 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)(3) - General Missing Data Procedures; NOx
- 40 CFR 75.32 - Monitoring Data Availability for Missing Data
- 40 CFR 75.33 - Standard Missing Data Porcedures
- 40 CFR 75.53 - Monitoring Plan
- 40 CFR 75.54(a) - Recordkeeping-general
- 40 CFR 75.54(b) - Recordkeeping-operating parameter
- 40 CFR 75.54(c) - Recordkeeping-SO2
- 40 CFR 75.54(d) - Recordkeeping-NOx
- 40 CFR 75.54(e) - Recordkeeping-CO2
- 40 CFR 75.54(f) - Recordkeeping-Opacity
- 40 CFR 75.55(c) - Recordkeeping - Specific Situations (Appendix D)
- 40 CFR 75.55(e) - Recordkeeping - Specific Situations (gaseous fuel)
- 40 CFR 75.56 - Certification; QA/QC Provisions
- 40 CFR 75.60 - Reporting Requirements-General
- 40 CFR 75.61 - Reporting Requirements-Notification cert/recertification
- 40 CFR 75.63 - Reporting Requirements-Certification/Recertification
- 40 CFR 75.64(a) - Reporting Requirements-Quarterly reports; submission
- 40 CFR 75.64(b) - Reporting Requirements-Quarterly reports; DR statement
- 40 CFR 75.64(c) - Rep. Req.; Quarterly reports; Compliance Certification
- 40 CFR 75.64(d) - Rep. Req.; Quarterly reports; Electronic format
- 40 CFR 75.65 - Opacity Reports
- Appendix A-3. - Performance Specifications
- Appendix A-4. - Data Handling and Acquisition Systems
- Appendix A-5. - Calibration Gases
- Appendix A-6. - Certification Tests and Procedures
- Appendix B - QA/QC Procedures
- Appendix C-1. - Missing Data; SO2/NOx for controlled sources

Appendix C-2.
Appendix F
Appendix G-2.
Appendix H

- Missing Data; Load-Based Procedure; NOx & flow
- Conversion Procedures
- Determination of CO₂; from combustion sources
- Traceability Protocol

ATTACHMENT SU-E03-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT SU-E03-L4

Description of Stack Sampling Facilities

The Suwannee Plant Steam Generator Unit No. 3 is required by Permit AO61-189581 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to Rule 62-297.310, F.A.C., the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by Rule 62-297.310(6), the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports are 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.

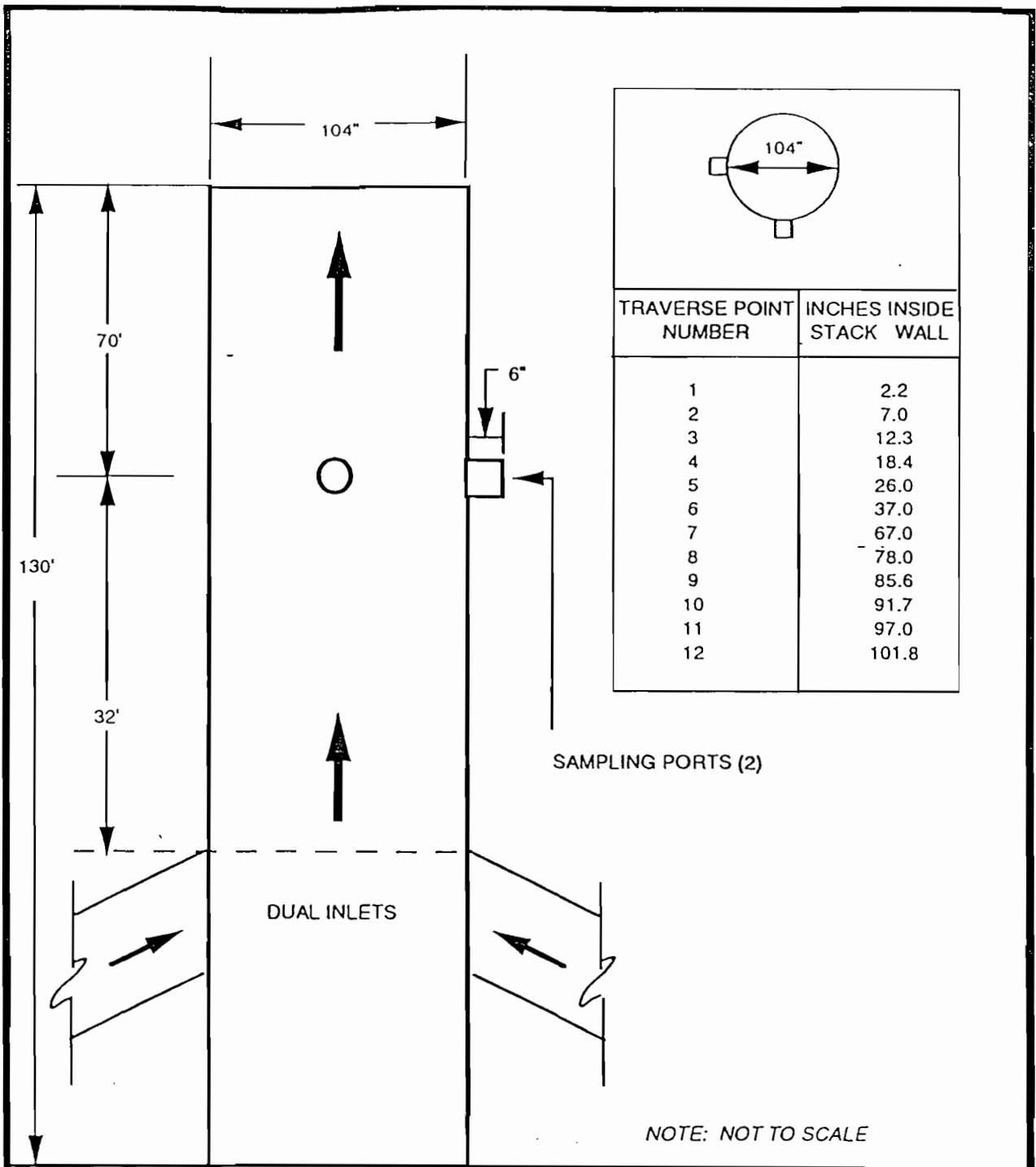
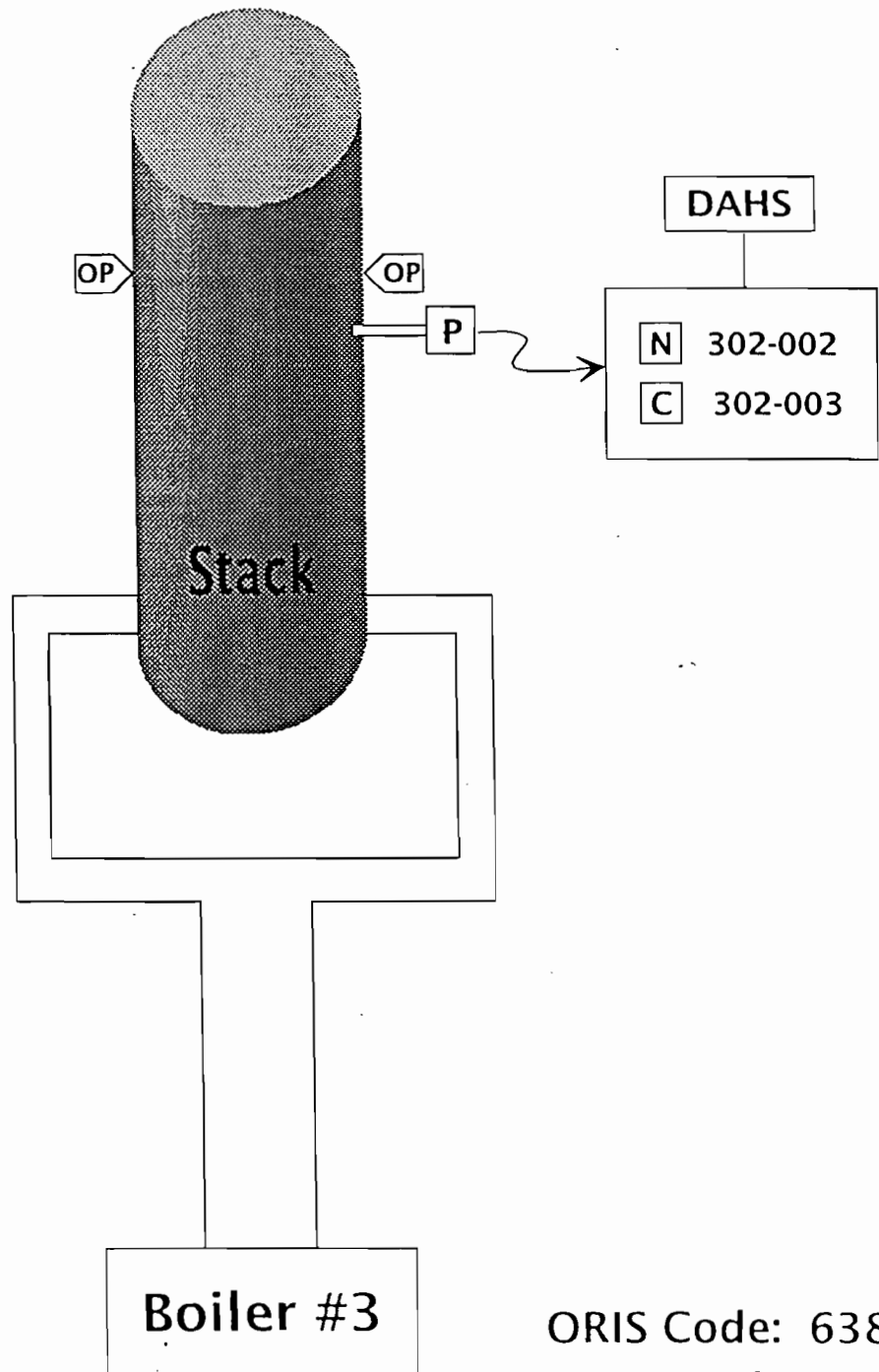


FIGURE 2
 EXHAUST SCHEMATIC
 UNIT 3
 FLORIDA POWER CORPORATION - SUWANNEE PLANT
 WEST OF LIVE OAK, FLORIDA

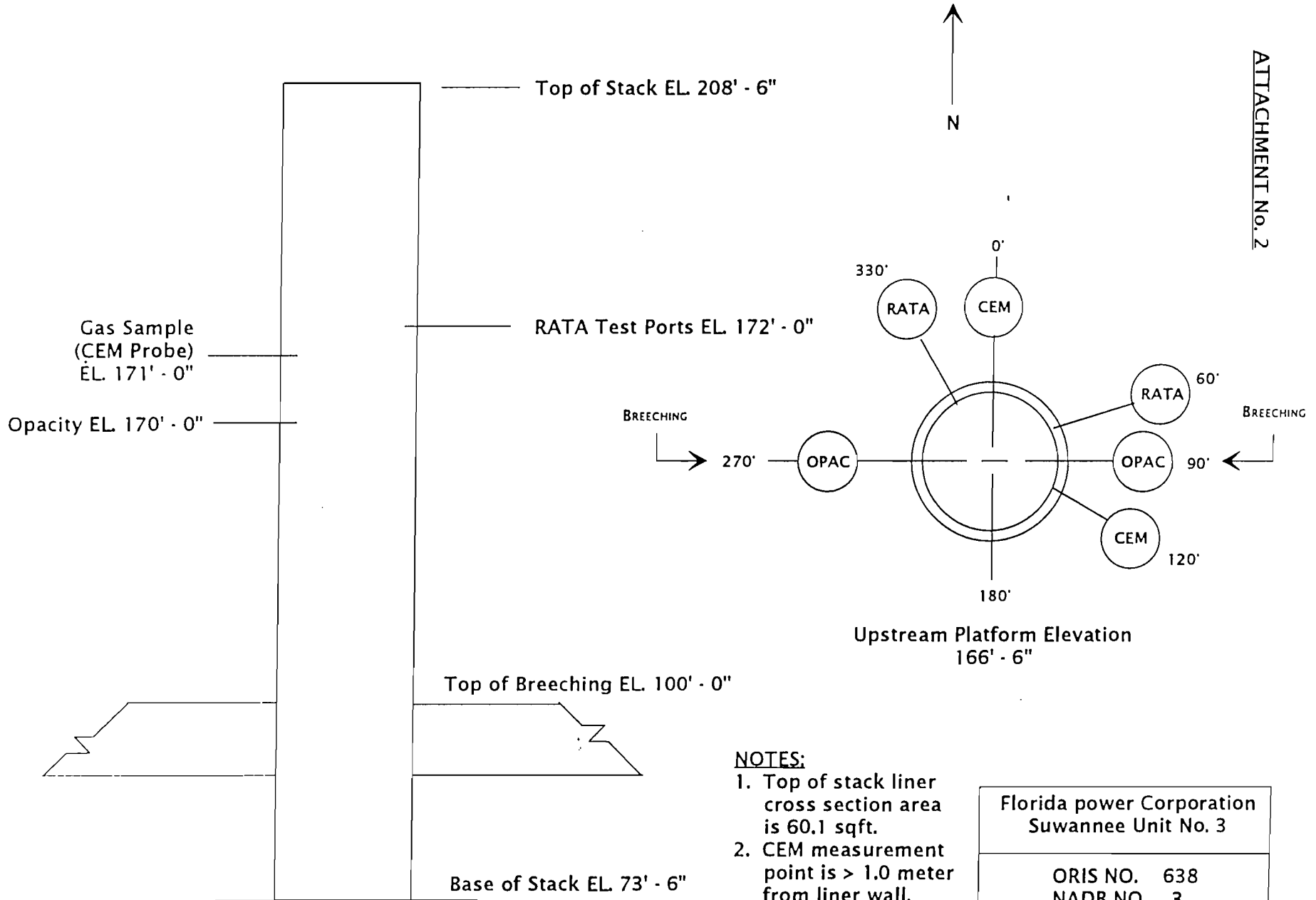
ACE
 AIR CONSULTING
 AND ENGINEERING, INC.

Suwannee Unit #3

Florida Power Corporation, Live Oak, FL
EPA Monitoring Plan Location Information (Part 2)



ORIS Code: 638
NADB Boiler ID: 3



NOTES:

- 1. Top of stack liner cross section area is 60.1 sqft.
- 2. CEM measurement point is > 1.0 meter from liner wall.

Florida power Corporation Suwannee Unit No. 3
ORIS NO. 638 NADB NO. 3

ATTACHMENT SU-E03-L10
ALTERNATIVE METHODS OF OPERATION

ATTACHMENT SU-E03-L10

**ALTERNATIVE METHODS OF OPERATION
FOSSIL FUEL STEAM GENERATOR**

The fossil fuel steam generator can operate on both natural gas, No. 6 fuel oil, and No. 2 fuel. The No. 2 fuel oil is used as pilot fuel during startup, shutdown, and malfunctions. The maximum sulfur content in the fuel oil shall not exceed 2.5 percent during oil firing with the maximum heat input rate of 881 million British thermal units per hour (MMBtu/hr). During natural gas firing alone, the maximum heat input rate shall not exceed 880 MMBtu/hr. This unit can operate for the entire year (i.e., 8,760 hours) and can fire either fuel oil or natural gas fire with no restrictions on hours of operation.

ATTACHMENT SU-E03-L12

IDENTIFICATION OF 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 Protection



Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Virginia B. Wetherell
Secretary

CERTIFIED - RETURN RECEIPT

October 12, 1993

Dr. P.Y. Baynard
Director - Environmental & License Affairs
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee County - AP
Florida Power Corporation
No. 3 Unit
ID#31JAX61000303
AO61-189581
Permit Revision

The Department has revised Specific Condition No. 1 of the above referenced permit to reflect the use of No. 2 fuel oil as an igniter.

This letter and attached revised page 5 of 7 shall become a part of the referenced permit.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing 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 this Notice is filed with the Clerk of the Department.

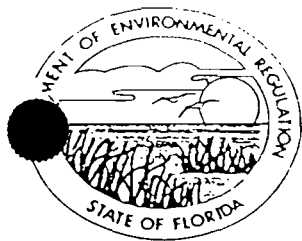
If you have any questions concerning this matter, please contact Rita Felton at (904) 448-4310, Extension 370.

Sincerely,

Ernest E. Frey, P.E.
Director of District Management

EEF:RF:bt

Attachment



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

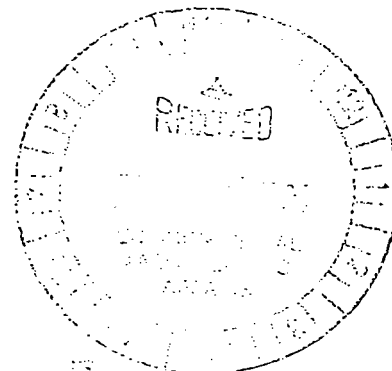
NOTICE OF PERMIT ISSUANCE

CERTIFIED - RETURN RECEIPT

Dr. P.Y. Baynard, Director - Environ. & Licen. Affrs.
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee County - AP
Florida Power Corporation
No. 3 Unit



Enclosed is Permit Number A061-189581 to operate the subject air pollution source, pursuant to Section 403.087, Florida Statutes (FS).

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 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;

(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 require reversal or modification of the Department's action or proposed action; and

Florida Power Corporation
Page two
A061-189581

(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.

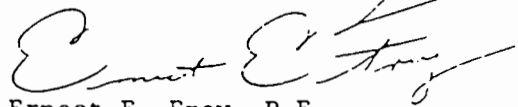
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard 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 allowed 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 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 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 Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

EEF:dhk

Copies furnished to: Richard O. Frazee, P.E.

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

Betty Aron 2-14-91
Clerk Date

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 2/14/91 to the listed persons.

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000303
Permit/Cert: AO61-189581
Date of Issue: February 14, 1991
Expiration Date: February 18, 1996
REVISED:

SPECIFIC CONDITIONS:

1. The maximum input/rate (operating rate) is SEE BELOW and shall not be exceeded without prior approval.

<u>Rate</u>	<u>Fuel</u>
881 MMBTU/hr ¹	No. 6 fuel oil ²
880 MMBTU/hr	Natural gas
493 MMBTU/hr ³	No. 6 fuel oil ⁴
388 MMBTU/hr ⁵	Natural gas
--- ⁶	No. 2 fuel oil ⁷

¹From 141 barrels/hr

²Fuel oil sulfur content shall not exceed 1.0% by wt.

³Basis: 56% of 881 MMBTU/hr

⁴Fuel oil sulfur content shall not exceed 2.5% by wt.

⁵Basis: 44% of 881 MMBTU/hr

⁶Include the actual quantity fired in the Annual Operating Report (AOR)

⁷Used as a pilot fuel during startups, shutdowns, malfunctions

2. Testing of emissions must be performed at an operating rate of at least 90% of the rate in Specific Condition (SC) No. 1, or SC No. 3 will become effective.
3. The operating rate shall not exceed 110% of the operating rate during the most recent test except for testing purposes, but shall not exceed the rate in SC No. 1. After testing at an operating rate greater than 110% of the last test operating rate, the operating rate shall not exceed 110% of the last (submitted) test operating rate until the test report at the higher rate has been reviewed and accepted by the Department.
4. The maximum allowable emission rate for each pollutant is as follows:

<u>Pollutant</u>	<u>FAC Rule</u>	<u>lbs/hr</u>	<u>TPY</u>
PM ₁ ¹	17-2.600(5)(a)2.	88.1 ²	385.88 ³
PM ₂ ⁴	17-2.250(3)	264.3 ⁵	----
SO ₂ ⁶	17-2.600(5)(a)3.a.(xi)	2422.75 ⁷	10611.64 ³
VE ₁ ⁸	17-2.600(5)(a)1.	20% opacity, except 40% for 2 mins/hr	
VE ₂ ⁹	17-2.250(3)	60% opacity up to 3 hrs in 24 hrs	
VE ₃ ¹⁰	17-2.250(3)	60% opacity up to 3 hrs in 24 hrs	

¹PM - particulate matter

²Basis: 881 MMBTU/hr; 0.1 lb/MMBTU

³Basis: Hours of operation shall be limited to 8760 H/Y (24 H/D; 7 D/W; 52 W/Y) and shall be recorded.

⁴PM₂ - particulate matter while sootblowing

⁵Basis: 881 MMBTU/hr; 0.3 lb/MMBTU

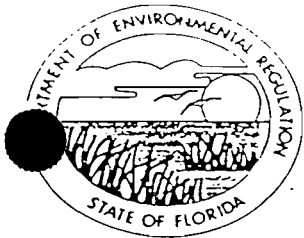
⁶SO₂ - sulfur dioxide

⁷Basis: 881 MMBTU/hr; 2.75 lbs/MMBTU

⁸VE₁ - visible emissions at Steady State

⁹VE₂ - visible emissions while sootblowing

¹⁰VE₃ - visible emissions while load changing



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000303
Permit/Cert Number: A061-189581
Date of Issue: 02-14-96
Expiration Date: February 18, 1996
County: Suwannee
Latitude/Longitude: 30°22'35"N; 83°10'50"W
Project: No. 3 Unit
UTM: E-(17)290.5; N-3362.2

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 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 No. 3 Unit, Fossil Fuel Steam Generator.

Located south of U.S. 90, on east bank of Suwannee River, Northwest of Live Oak, Suwannee County, Florida.

In accordance with:

Application dated 11-07-80
Additional information received 02-19-81
Renewal application dated 12-02-85
Additional information received 12-26-85, 01-15 and 01-20-86
Renewal application received 11-25-90

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000303
Permit/Cert: A061-189581
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants, or representatives.
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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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 at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000303
Permit/Cert: A061-189581
Date of Issue:
Expiration Date: February 18, 1996

GENERAL CONDITIONS

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact 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 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
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 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

PERMITTEE:
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GENERAL CONDITIONS

13. This permit also constitutes:

- () 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 Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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 date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the department, the permittee shall, within a reasonable period of 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 submitted or corrected promptly.

BEST AVAILABLE COPY

PERMITTEE:
 Florida Power Corporation
 Post Office Box 14042 (H2G)
 St. Petersburg, Florida 33733

I.D. Number: 31JAX61000303
 Permit/Cert: A061-189581
 Date of Issue:
 Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

1. The maximum input/rate (operating rate) is SEE BELOW and shall not be exceeded without prior approval.

<u>Rate</u>	<u>Fuel</u>
• 881 MMBTU/hr ¹	No. 6 fuel oil ²
• 880 MMBTU/hr	Natural gas
• 493 MMBTU/hr ³	No. 6 fuel oil ⁴
• 388 MMBTU/hr ⁵	Natural gas

- ¹From 141 barrels/hr - *Ntc.*
- ²Fuel oil sulfur content shall not exceed 1.0% by wt.
- ³Basis: 56% of 881 MMBTU/hr
- ⁴Fuel oil sulfur content shall not exceed 2.5% by wt.
- ⁵Basis: 44% of 881 MMBTU/hr

2. Testing of emissions must be performed at an operating rate of at least 90% of the rate in Specific Condition (SC) No. 1, or SC No. 3 will become effective.
3. The operating rate shall not exceed 110% of the operating rate during the most recent test except for testing purposes, but shall not exceed the rate in SC No. 1. After testing at an operating rate greater than 110% of the last test operating rate, the operating rate shall not exceed 110% of the last (submitted) test operating rate until the test report at the higher rate has been reviewed and accepted by the Department.
4. The maximum allowable emission rate for each pollutant is as follows:

<u>Pollutant</u>	<u>FAC Rule</u>	<u>lbs/hr</u> ^{eg.e.}	<u>TPY</u> ^{eg.e.}
PM ₁ ¹	17-2.600(5)(a)2.	88.1 ²	385.88 ³
PM ₂ ⁴	17-2.250(3)	264.3 ⁵	----
SO ₂ ⁶	17-2.600(5)(a)3.a.(xi)	2422.75 ⁵	10611.64 ³
• VE ₁ ⁸	17-2.600(5)(a)1.	<ul style="list-style-type: none"> • 20% opacity, except • 40% for 2 mins/hr • 60% opacity up to 3 hrs in 24 hrs • 60% opacity up to 3 hrs in 24 hrs 	
• VE ₂ ⁹	17-2.250(3)		
• VE ₃ ¹⁰	17-2.250(3)		

- ¹PM - particulate matter
- ²Basis: 881 MMBTU/hr; 0.1 lb/MMBTU
- ³Basis: Hours of operation shall be limited to 8760 H/Y (24 H/D; 7 D/W; 52 W/Y) and shall be recorded.
- ⁴PM₂ - particulate matter while sootblowing
- ⁵Basis: 881 MMBTU/hr; 0.3 lb/MMBTU
- ⁶SO₂ - sulfur dioxide
- ⁷Basis: 881 MMBTU/hr; 2.75 lbs/MMBTU
- ⁸VE₁ - visible emissions at Steady State
- ⁹VE₂ - visible emissions while sootblowing
- ¹⁰VE₃ - visible emissions while load changing

PERMITTEE:
 Florida Power Corporation
 Post Office Box 14042 (H2G)
 St. Petersburg, Florida 33733

I.D. Number: 31JAX61000303
 Permit/Cert: A061-189581
 Date of Issue:
 Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

5. Test the emission for the following pollutant(s) at the interval(s) indicated, notify the Department 14 days prior to testing, and submit the test report documentation to the Department within 45 days after completion of the testing:

<u>Pollutant</u>	<u>Interval</u>	<u>Test Method</u> ¹
PM ₁	12 months from 09-01-90 ²	EPA 5 or 17
PM ₂	12 months from 09-01-90 ²	EPA 5 or 17
SO ₂	12 months from 03-01-90 ²	---- ³
VE ₁ ⁴	12 months from 09-01-90 ²	DER 9
VE ₂ ⁴	12 months from 09-01-90 ²	DER 9

¹From 17-2.700(1), FAC in Table 700-1

²Per FAC Rule 17-2.700(2)(a)3.b., testing is not required if liquid fuel is used no more than 400 hrs/yr.

³See FAC Rule 17-2.700(6)(c)1.b.

⁴VE test shall be conducted during one of the test runs.

Tests and test reports shall comply with the requirements of Florida Administrative Code Rule 17-2.700(6) and (7), respectively.

6. If steady state emissions testing is required as noted above and if it is necessary to conduct soot blowing operations during the period that the unit is on oil, then a soot blowing emissions test shall be conducted in addition to the steady state emissions test. In order to produce stack emissions representative of soot blowing conditions, oil must be burned in the unit for a period of time immediately prior to conducting the soot blowing emissions test such that, in the unit operator's judgment, conditions for maintaining optimum boiler operations requires that soot blowing be conducted. The specific conditions under which the soot blowing emission test will be conducted shall be discussed and agreed upon between the Department and the permittee.
7. If any unit exceeds the maximum allowable emissions as indicated by the results of the testing, then the unit shall be retested on oil within one month of the date of the failed test. If it is not possible to retest within one month, a written request for a delay and an explanation of the cause of the failure and of the delay will be required within one month of the date of the failed test.
8. In conjunction with operation of this unit on oil, the permittee shall obtain and maintain (for Department review when requested) documentation that includes, but is not limited to, the following information: hourly rate of oil consumption, heat content of the oil consumed, and sulfur content of the oil consumed.
9. In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

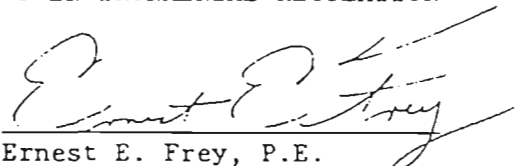
I.D. Number: 31JAX61000303
Permit/Cert: A061-189581
Date of Issue:
Expiration Date: February 18, 1996

SPECIFIC CONDITIONS:

10. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1.
11. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.
12. The ID No. for this source is to be used on all correspondence.
13. Forms for the renewal will be sent 5 months prior to 02-18-96 and the completed forms with test results are due 90 days prior to 02-18-96.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

FILING AND ACKNOWLEDGEMENT
FILED on this date pursuant to S120.52, Florida
Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.

Ernest Frey Clerk 2-14-91 Date

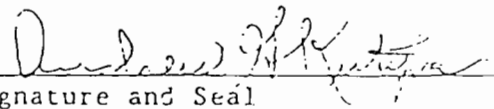
CERTIFICATION

PROJECT NAME: Florida Power Corporation
No. 3 Unit

Application No. A061-189581

I HEREBY CERTIFY that the engineering features described in application No. A061-189581 provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, and geological features).

Andrew G. Kutyna, P.E.
Name, P.E.


Signature and Seal

2-13-0
Date

**Florida
Power**
CORPORATION

July 5, 1978

Mr. Frank Watkins, Jr., P.E.
Florida Department of Environmental Regulation
3426 Bills Road
Jacksonville, Florida 32207

Subject: Suwannee County - AP No. A061-10282
Florida Power Corporation
Power Unit No. 3

Dear Mr. Watkins:

The following corrections are requested in the subject permit:

1. On the permit, change the wording Maximum Heat Input Rate of "750 MMBTU/Hr." to 880 MMBTU/Hr.
2. Operating Permit Condition #9.B., delete the words "Four guns on" and "five guns on".

Concerning the maximum heat input rate please be advised that the maximum unit load is 83 MW with a fuel input of 141 barrels of oil per hour. During 1977 the average heat content per barrel was 6,236,675 BTU. Multiplying the barrels per hour by the heat content gives 879.37 MMBTU/Hr. *compare to the 898 used in the PSD for CTS*

Concerning permit condition #9.B. the request to delete the number of guns is made because at reduced loads the normal practice is to reduce the number of guns used to inject fuel. The percentage of fuel oil and gas would remain constant but the number of guns used will vary. The changes in heat input is noted to correspond to the corrected maximum heat input rate.

Also, please be advised that Florida Power Corporation accepts the low sulfur fuel oil and oil/gas combination fuel requirements of this permit as an expedient method of meeting the opacity standard of CH 17-2.04(6)(e)2.(b).

Page 2
July 5, 1978
Mr. Frank Watkins, Jr., P.E.

Florida Power Corporation reserves the right to use a higher sulfur fuel oil if modifications are made which will cause Unit #3 to meet the opacity standard and other emission standards are also met.

The Department of Environmental Regulation will be informed of any effort to meet the opacity standard by modifications to Unit #3.

Should there be any questions concerning these requests please contact me by telephone at 813/866-4544.

Very truly yours,



R. E. Parnelle, P.E.
Manager
Environmental Operations

REP/bz

Attachments

bc: Mr. W. P. Stewart
Mr. W. S. O'Brien
Mr. J. Alberdi
Mr. D. A. Shantz
Ms. P. Y. Baynard
Mr. Ed. Haywood
Mr. J. B. Clardy

Memorandum

Florida Department of Environmental Protection

TO: Howard Rhodes

THRU: Clair Fancy *CHF by Ann*

FROM: Al Linero *Al Linero 5/5*

DATE: May 5, 1997

SUBJECT: FPC Suwannee Natural Gas Use for Peaking Units P1, P2, and P3

Attached is a modification to the EPA-issued PSD construction permit for the three oil-fired peaking units at Suwannee which are slated for addition of natural gas capability.

The revision deletes from the permit one authorized unit which was never constructed, while allowing firing of natural gas which is available to FPC on an interruptible basis.

The key issue is that these units have not operated close to their permitted hours of operation in recent years, yet they are slated for greatly increased service this year whether or not gas capability is added. This additional demand is not related to addition of natural gas capability. Since it is likely that the units will operate near their operating limits at some point, it is reasonable to use past allowable emissions to compare with future potential emissions. This results in no significant emissions increases and therefore the project is not subject to PSD or BACT.

Some discussion of peaking units was included in the WEPCO decision which alluded to the unreasonableness of doing a past actual to future potential emissions comparison when replacing a peaking unit. We consulted with EPA who agreed that our action was proper and they pointed us to a memo sent to GE in the early 1980's for adding natural gas capability to an oil-fired turbine.

FPC agreed to accept a lower NOx limit of 56 ppm while firing gas versus the present limit of 98 ppm. Because control of NOx to 56 ppm can cause a PSD-significant increase in CO, we have agreed to a NOx limit of 68 ppm. This is still a significant reduction in NOx emissions compared to fuel oil use.

We have updated the PSD permit to state that the only fuels which can be fired are natural gas and distillate fuel oil. We also took the opportunity to consolidate conditions (e.g. 0.5% sulfur in fuel oil) from the original Florida AC's which had not been included in the EPA-issued PSD permit. FPC is aware of these conditions and had included them in the application. We received no comments as a result of the public notice. I recommend your approval and signature.

AAL/aal/l

Attachments

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT MODIFICATION

In the Matter of an
Application for Permit Modification

Mr. W. Jeffrey Pardue, C.E.P.
Director, Environmental Services Dept.
Florida Power Corp.
3201 34th Street South
St. Petersburg, FL 33711

DEP File No. 1210003
PSD-FL-014(A)

Enclosed is Permit Modification Number PSD-FL-014(A) to add natural gas firing capability to three existing oil-fired peaking units at the Suwannee Power Plant. This permit modification is issued pursuant to Section 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

C.H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT MODIFICATION (including the FINAL permit Modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5-6-97 to the person(s) listed:

Mr. W. Jeffrey Pardue, FPC *
Mr. Ken Kosky, P.E., Golder Associates
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Chris Kirts, NED

Clerk Stamp

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

Kern Fisher 5-6-97
(Clerk) (Date)

FINAL DETERMINATION

Florida Power Corporation

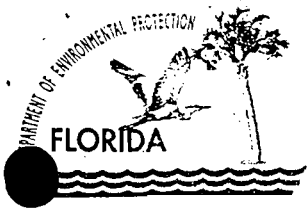
Permit No. PSD-FL-014(A), File No. 1210003-002-AC
Suwannee Facility, Peaking Units P1, P2, P3

An Intent to Issue a permit modification for Florida Power Corporation (FPC), Suwannee Facility, Peaking Units P1, P2, and P3 was distributed on February 14, 1997. The facility is located South of U.S. Route 90, Northwest of Live Oak, Suwannee County. The Public Notice of Intent to Issue was published in the Suwannee Democrat on February 28, 1997. No comments were received in response to the public notice.

Comments were received from Department staff pointing out that the application forms describe the units as presently fired with No. 2 fuel oil and on-spec used oil. No construction (or PSD) permit modifications have been made in the past to incorporate used oil firing. During discussions with FPC it was clarified that the present permit action allows only the addition of natural gas firing capability.

A reconciliation was performed of conditions in the original construction permits issued by the Department in 1978 with the PSD permit issued by EPA in 1979. This primarily affects the sulfur dioxide emissions limit in the PSD permit and is consistent with FPC's application.

The final action of the Department will be to issue the permit as proposed but with the changes indicated above.



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

May 5, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, C.E.P.
Director, Environmental Services Dept.
Florida Power Corp.
3201 34th Street South
St. Petersburg, FL 33711

Re: Suwannee Power Plant, Peaking Units P1, P2, and P3
Modification of Final Determination - PSD-FL-014(A)
Addition of Natural Gas Capability

Dear Mr. Pardue:

The Department hereby amends the Conditions of Approval related to emissions and fuel use in the subject Final Determination (dated July 9, 1979 as amended on May 22, 1980 by EPA) pursuant to 40CFR52.21 - Prevention of Significant Deterioration (PSD Permit). The PSD permit is amended as follows:

Introduction

References to the number of turbines are reduced to three from four.

Condition 1. Standards for Nitrogen Oxides

Add the following section addressing natural gas combustion:

- (3) From any gas turbine, while firing natural gas, any exhaust gases which contain nitrogen oxides in excess of 0.0068 percent by volume at 15 percent oxygen and on a dry basis.

Condition 2. Standard for Sulfur Dioxide

Incorporate construction permit provisions from AC61-11862, 63, and 64 (issued November 28, 1978 as amended on February 5, 1979 by the Department) as follows:

FROM:

- (a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not cause to be discharged into the atmosphere from any stationary gas

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

turbine any gases which contain sulfur dioxide in excess of a 0.015 percent by volume at 15 percent oxygen and on a dry basis.

- (b) The sulfur content of the fuel fired by the gas turbine may be used to determine compliance with paragraph (a) of this section. Under such circumstances, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.

TO:

- (a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.0095 percent by volume at 15 percent oxygen and on a dry basis. The maximum allowed emission rate shall not to exceed 379 pounds per hour.
- (b) The sulfur content of the fuel fired by the gas turbine may be used to determine compliance with paragraph (a) of this section. Under such circumstances, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.5 percent by weight.

Condition 7 (new)

These stationary gas turbines shall burn natural gas and distillate (No. 2) fuel oil only. Burning of other fuels requires review, public notice, and approval through the preconstruction review process (Rules 62-210 and 62-212, F.A.C).

A copy of this modification letter and the General Permit Conditions pursuant to Rule 62-4.160, F.A.C. shall be attached to and shall become a part of Permit PSD-FL-014.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/aal/l

Enclosures

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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 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.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment 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.
- G.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.
- G.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.
- G.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:
- (a) Have access to and copy and 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.
- G.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.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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.

- G.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, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.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.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, 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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit modification also constitutes:
- (a) Determination of Best Available Control Technology ()
 - (b) Determination of Prevention of Significant Deterioration (); and
 - (c) Compliance with New Source Performance Standards (X).
- G.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 or 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; and
 - 6. The results of such analyses.
- G.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 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.

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.

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).

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.

**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): Peaking Gas Turbine Unit 1, 2, 3		
2. Emissions Unit Identification Number: <input type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown *		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters): Packaging Unit: Water injected twin pac; ARMS ID No. - Unit 1, 004; Unit 2, 005; Unit 3, 006.		

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters): Water injection
2. Control Device or Method Code: 28

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:

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

Emissions Unit Details

1. Initial Startup Date:	29 Oct 1980	
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer:	Turbo Power and Marine Systems	Model Number: FT4C-3 LF
4. Generator Nameplate Rating:	63 MW	
5. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	739	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 per unit based on permit limit firing No. 2 fuel oil at ambient temperature of 59 °F	

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/yr	1,500 hours/yr

**D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

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

Not Applicable

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

See Attachment SU-E04-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: EU4, See SU-FI-E2	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Gas turbine gases exhaust through a single stack per turbine unit	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	22 feet
7. Exit Diameter:	11.3 feet
8. Exit Temperature:	726 °F

9. Actual Volumetric Flow Rate:	1,255,500 acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates:	
Zone:	East (km): North (km):
14. Emission Point Comment (limit to 200 characters):	
1. Information for temperature and flow rate obtained from air operating permit.	

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): No. 2 fuel oil	
2. Source Classification Code (SCC): 20100101	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 5.355	5. Maximum Annual Rate: 8,033
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 characters): 1. Maximum annual rate is based on 1,500 hr/yr (permit limit) 2. Heat content-LHV	

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): On-specification used oil	
2. Source Classification Code (SCC): 10101302	
3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 5.355	5. Maximum Annual Rate: 8,033
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 0.5	8. Maximum Percent Ash: 0.9
9. Million Btu per SCC Unit: 138	
10. Segment Comment (limit to 200 characters): 1. Max annual rate based on 1,500 hr/yr (permit limit). 2. Heat content - HHV.	

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2			EL
NOX	028		EL
PM			EL
PM10			NS
CO			NS
HAPS			NS

**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:	379 lb/hour	284.3 tons/year
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr		
6. Emission Factor:		0.5 %sulfur
Reference: AC61-11862, 63, & 64		
7. Emissions Method Code: <input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters): See Attachment SU-E04-H8		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Emission limit is BACT; each unit limited to 1500 hr/yr operation. Potential emissions in permit based on heat content of 132,600 Btu/gal (current heat content assumed 139,000 Btu/gal).		

Emissions Unit Information Section 4 of 5
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: OTHER		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 0.5 % sulfur fuel		
4. Equivalent Allowable Emissions:	379 lb/hour	284.3 tons/year
5. Method of Compliance (limit to 60 characters): Fuel analysis		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Emission limit established as BACT (see AC61-11862, -11863, -11864); 1500 hr/yr operation limit per unit.		

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. of Related Operating Method/Mode) (limit to 200 characters):		

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

Pollutant Detail Information:

1. Pollutant Emitted: NOX		
2. Total Percent Efficiency of Control:		%
3. Potential Emissions:	210.22 lb/hour	157.66 tons/year
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr		
6. Emission Factor:		75 ppmvd
Reference: AC61-11862, 63, & 64		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
See Attachment SU-E04-H8		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
Emission limit established is BACT; each gas turbine limited to 1,500 hr/yr operation.		

Emissions Unit Information Section 4 of 5
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: OTHER		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: See comment		
4. Equivalent Allowable Emissions:	210.22 lb/hour	157.66 tons/year
5. Method of Compliance (limit to 60 characters): Water to fuel ratio		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Emission limit established as BACT (see AC61-11862, -11863, -11864); 1500 hr/yr operation limit per unit. Requested Allowable Emissions: 75 ppmvd at 15% O2 and 0.015% or less fuel bound nitrogen.		

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. of Related Operating Method/Mode) (limit to 200 characters):		

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:		%
3. Potential Emissions:	38 lb/hour	28.5 tons/year
4. Synthetically Limited? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
5. Range of Estimated Fugitive/Other Emissions:		
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/yr		
6. Emission Factor:		38 lb/hr
Reference: AC61-11862, 63, & 64		
7. Emissions Method Code:		
<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
8. Calculation of Emissions (limit to 600 characters):		
<p>See SU-E04-H8</p>		
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):		
<p>Emission limit established in air construction permit; each gas turbine limited to 1500 hr/yr operation</p>		

Emissions Unit Information Section 4 of 5
Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: OTHER		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 38 lb/hr		
4. Equivalent Allowable Emissions:	38 lb/hour	28.5 tons/year
5. Method of Compliance (limit to 60 characters):		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): 1. Based on air construction permit, AC61-11862, -11863, 11964.		

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. of Related Operating Method/Mode) (limit to 200 characters):		

**I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)**

Visible Emissions Limitations: Visible Emissions Limitation 1 of 2

1.	Visible Emissions Subtype: VE20
2.	Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> 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): Based on permit condition as BACT

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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. Rule 62-210.700(1); excess emissions from startup, shutdown and malfunction, not to exceed 2 hr in 24 hr

**J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)**

Continuous Monitoring System Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> 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): H2O/fuel ratio monitored cont. If during any 1-hr period H2O/fuel ratio is <0.526, Unit 1; 0.486, Unit 2; 0.505, Unit 3, it must be indicated on the quarterly excess emissions report-40CFR60.334(c)(1)	

Continuous Monitoring System Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> 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.
- 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	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E <input type="checkbox"/> Unknown
	SO ₂	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E <input type="checkbox"/> Unknown
	NO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E <input checked="" type="checkbox"/> Unknown
4.	Baseline Emissions:		
	PM	lb/hour	tons/year
	SO ₂	lb/hour	tons/year
	NO ₂		tons/year
5.	PSD Comment (limit to 200 characters):		
	Baseline NO2 emissions not known.		

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

Supplemental Requirements for All Applications

1. Process Flow Diagram	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E04-L1</u>	<input type="checkbox"/> Waiver Requested
	<input type="checkbox"/> Not Applicable	
2. Fuel Analysis or Specification	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E04-L2</u>	<input type="checkbox"/> Waiver Requested
	<input type="checkbox"/> Not Applicable	
3. Detailed Description of Control Equipment	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E04-L3</u>	<input type="checkbox"/> Waiver Requested
	<input type="checkbox"/> Not Applicable	
4. Description of Stack Sampling Facilities	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Waiver Requested
	<input checked="" type="checkbox"/> Not Applicable	
5. Compliance Test Report	<input type="checkbox"/> Attached, Document ID: _____	<input type="checkbox"/> Not Applicable
	<input checked="" type="checkbox"/> Previously Submitted, Date: <u>1 Dec 1994</u>	
6. Procedures for Startup and Shutdown	<input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E04-L6</u>	<input type="checkbox"/> Not Applicable
	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
7. Operation and Maintenance Plan	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
8. Supplemental Information for Construction Permit Application	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E04-L12</u> <input type="checkbox"/> Not Applicable
13. Compliance Assurance Monitoring Plan <input checked="" type="checkbox"/> Attached, Document ID: <u>SU-E01-L13</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Permit Application (Hard Copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

ATTACHMENT SU-E04-D
EMISSIONS UNIT REGULATIONS

ATTACHMENT SU-E04-D

APPLICABLE REQUIREMENTS LISTING - POWER PLANTS

FDEP Rules:

Air Pollution Control-General Provisions:

62-204.800(7)(b)37. (State Only) - NSPS Subpart GG

Stationary Sources-General:

- 62-210.650 - Circumvention; EUs with control device
- 62-210.700(1) - Malfunction only for FFGS
- 62-210.700(4) - maintenance
- 62-210.700(6)

Stationary Sources-Emission Standards:

62-296.320(4)(b) - CTs Units

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

- 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

Federal Rules:

NSPS SubPart GG:

- 40 CFR 60.332(a)(1) - NOx for Electric Utility CTs
- 40 CFR 60.333 - SO2 limits
- 40 CFR 60.334 - Monitoring of Operations
- 40 CFR 60.335 - Test Methods

[Note: Emission Unit exempt from EPA's Acid Rain Program by 40 CFR 72.6(b)(1)]

ATTACHMENT SU-E04-H8
CALCULATION OF EMISSIONS

Table 1. Maximum Estimated Emissions for Emissions Limited Pollutants, FPC Suwannee Plant, Gas Turbine Peaking Units 1, 2, and 3 (Fuel Oil)

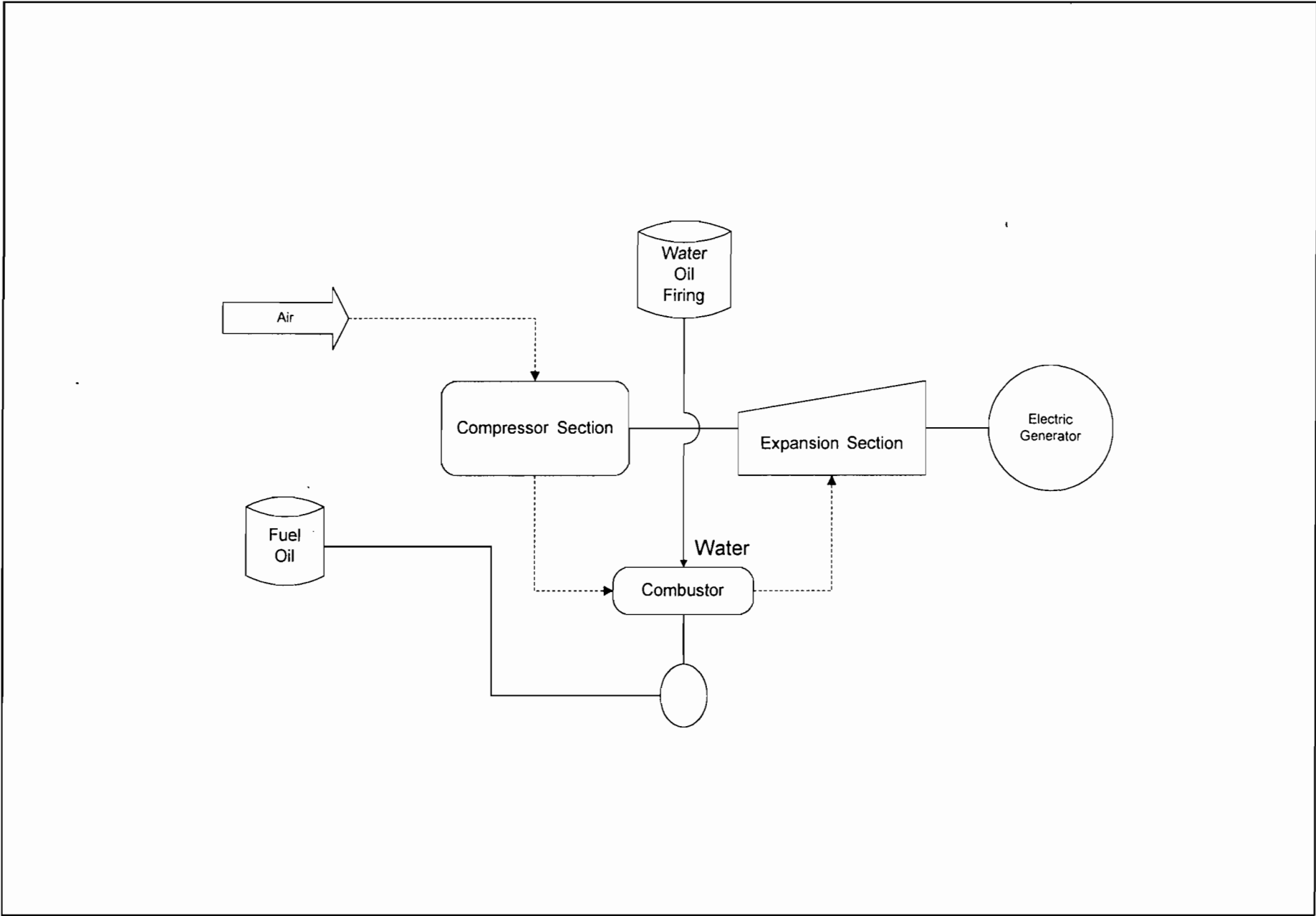
Pollutant/Units	P-1	P-2	P-3
Hours of Operation	1,500	1,500	1,500
Annual Capacity Factor (%)	100	100	100
Sulfur Dioxide (lb/hr) = Fuel oil (lb/hr) x sulfur content(fraction) x (lb SO ₂ /lb S)			
Basis (1)	AC Permit	AC Permit	AC Permit
Fuel Usage (lb/hr)	37,907	37,907	37,907
Sulfur content (%)	0.50	0.50	0.50
lb SO ₂ /lb S (64/32)	2.0	2.0	2.0
lb/hr	379	379	379
TPY	284	284	284
Particulate (lb/hr) = Emission rate (lb/hr) from manufacturer			
Basis (1)	AC Permit	AC Permit	AC Permit
Emission Rate (lb/hr)	38.0	38.0	38.0
TPY	28.5	28.5	28.5
Nitrogen Oxides (lb/hr) = NO _x (ppm) x {[20.9 x (1 - Moisture(%)/100)] - Oxygen(%)} x 2116.8 x Volume flow (acfm) x 46 (mole. wgt NO _x) x 60 min/hr ÷ [1545 x (CT temp. (°F) + 460°F) x 5.9 x 1,000,000 (ppm)]			
Basis (1)	AC Permit	AC Permit	AC Permit
Basis, ppmvd @15% O ₂ , ISO	75.0	75.0	75.0
Moisture (%)	6.07	6.07	6.07
Oxygen (%)	15.5	15.5	15.5
Volume Flow (acfm)	1,254,993	1,254,993	1,254,993
Temperature (°F)	726	726	726
lb/hr	210.2	210.2	210.2
TPY	157.6	157.6	157.6


Sources: (1) Emission limit established as BACT; Permit AC53-190437;

Note: Universal gas constant = 1,545 ft-lb(force)/°R;
 Atmospheric pressure = 2,116.8 lb(force)/ft²
 ppmvd= parts per million, volume dry.
 O₂= oxygen

ATTACHMENT SU-E04-L1

PROCESS FLOW DIAGRAM



Florida Power Corporation		Emission Unit: Peaking Gas Turbine No. 1, 2, 3		 KBN Engineering and Applied Sciences, Inc.
		Process Area: Overall Plant		
		Filename: FPCSU.VSD		
		Latest Revision Date: 6/5/95 10:26 AM		
Emission Unit	Suwannee			

ATTACHMENT SU-E04-L2
FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT SU-E04-L2

FUEL ANALYSIS
NO. 2 FUEL OIL

Page 1 of 2

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
API gravity @ 60 F	30 ¹	-
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.

ATTACHMENT SU-E04-L2

FUEL ANALYSIS
ON-SPEC USED OIL

Page 2 of 2

<u>Parameter</u>	<u>Typical Value</u>	<u>Max Value</u>
API gravity @ 60 F	28 ¹	-
Relative density	7.4 lb/gal ²	
Heat content	18,700 Btu / lb (HHV)	
% sulfur	0.3 - 0.5 ²	0.5 ³
% nitrogen	0.30	
% 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 SU-E04-L3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT SU-E04-L3

The NO_x control for each combustion turbine is monitored on a continuous basis using the water-to-fuel ratio established for each unit. If during any 1-hour period the water-to-fuel ratio is less than 0.526 for Unit 1, 0.486 for Unit 2, or 0.505 for Unit 3, it must be reported as an excess emission and indicated on the quarterly excess emissions report [40 CFR 60.334(c)(1)].

ATTACHMENT SU-E04-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT SU-E04-L6

PROCEDURES FOR STARTUP/SHUTDOWN

Startup for the gas turbine begins with an electric system using a switch to turn the unit on. The unit can be "on line" and sending electrical power to the grid within 5 minutes startup.

The gas turbine utilizes water injection for NO_x minimization during startup and shutdown. Water is injected approximately 3 minutes after startup when exhaust gases reach a temperature of about 900°F. Water-to-fuel ratio is continuously monitored. If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective actions 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 from the system electrical grid), shutting off the fuel and coasting down to stop.

ATTACHMENT SU-E04-L12

IDENTIFICATION OF 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).



REUBIN O'D ASKEW
GOVERNOR

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER SUBDISTRICT
3426 BILLS ROAD
JACKSONVILLE, FLORIDA 32207

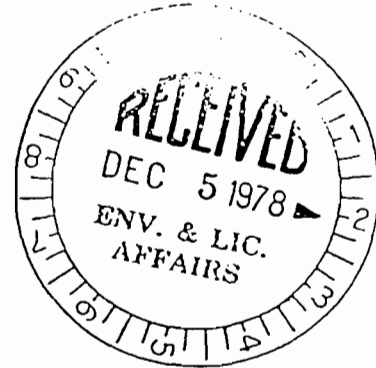
JOSEPH W. LANDERS, JR.
SECRETARY

November 28, 1978

Mr. N. B. Spake, Assistant Vice President
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

Dear Mr. Spake:

Suwannee County - AP
Florida Power Corp.
Peaking Unit #1



Pursuant to your recent application, enclosed is Permit No. AC61-11862 dated November 28, 1978 to construct the subject pollution source.

This permit will expire on May 1, 1981 and will be subject to the conditions, requirements and restrictions checked or indicated otherwise on the attached sheet entitled "Permit Conditions."

This permit is issued under the authority of Florida Statutes 403.061(16). The time limits imposed herein are a condition to this permit and are enforceable under Florida Statute 403.161. You are hereby placed on Notice that the Department will review this permit before the scheduled date of expiry and will seek court action for any violation of the conditions and requirements of this permit.

You have fourteen days from the date of receipt hereof within which to seek a review of the conditions and requirements contained in this permit.

In future communication please refer to your permit number and source I.D. Your continued cooperation is appreciated.

Sincerely,

Frank Watkins, Jr., P.E.
Subdistrict Engineer

FW:jck

cc: Records Center, Tallahassee
Gainesville Branch Office
Mr. John E. Dawson, P.E.

file in #

State of Florida

DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee	
To: _____	Loctn.: _____
To: _____	Loctn.: _____
To: _____	Loctn.: _____
From: _____	Date: _____

ST. JOHNS RIVER

RECEIVED

AUG 28 1978

JAN 29 1997

BUREAU OF
AIR REGULATION

SUB DISTRICT - JAX

TO : Joseph W. Landers, Jr.

FROM: J. P. Subramani *J. Subramani*

DATE: August 11, 1978

SUBJ: BACT Application for Four Florida Power Corporation
Gas Turbines, Suwannee River Plant Site,
Suwannee County

Facility: Four 63,000 KW gas turbine electric generating units to be located at Florida Power Corporation's Suwannee River Plant. The units, scheduled for commercial operation in October 1980, will be known as Suwannee River Peaking Units 1 through 4.

At a peak power level of 63,000 KW, each unit will burn approximately 37,910 pounds of distillate fuel per minute which constitutes a heat input rate of 739 million BTU/hr.

BACT Determination Requested by the Applicant

Nitrogen Dioxide: 75 ppm by volume

Sulfur Dioxide: 95 ppm by volume

Opacity: Less than 20%

Date Receipt of a Complete BACT Application:

May 12, 1978

Date of Publication in the Florida Administrative Weekly:

June 23, 1978

Date of Publication in a Newspaper of General Circulation:

June 30, 1978 - Florida Times Union

Mr. Joseph W. Landers, Jr.
 August 11, 1978
 Page Two

Study Group Members:

Steve Smallwood, Bureau of Air Quality Management, DER
 Albert Townsend, South Florida District, DER
 Robert Kapplemann, City of Jacksonville,
 Department of Health
 Frank Darabi, St. John River Subdistrict, DER
 Victoria Martinez, BACT Coordinator, DER

Study Group Recommendations:

	*Albert Townsend	Robert Kapplemann	Steve Smallwood	Frank Darabi
Ash Content of Fuel		.01%		Low
Particulates				.08 lb/STU
NO ₂	Wet Method	50 ppmv-water or steam to fuel ratio of about 1.4	±75 ppmv with EPA's upward corrections for efficiency and fuel bound nitrogen	75 ppmv
SO ₂	Low Sulfur Oil	±.3% S Oil	±100 ppmv	.3% S Fuel
Opacity		10% except for start-up	±20%	20%
HC				
CO				
Noise				Minimized at property line.

*Albert Townsend felt the data provided by the applicant was insufficient to establish specific emission limits.

**Steve Smallwood considered 60 ppmv NO₂ 80 ppm SO₂ and 10% opacity to be a reasonable alternative. However, he felt sufficient information was not provided by the applicant to analyze the economic impact of this alternative.

Mr. Joseph W. Landers, Jr.
August 11, 1978
Page Three

Other State and Local Emission Standard Applicable to Gas Turbines*:

<u>Pollutant</u>	<u>Fuel</u>	<u>Typical</u>	<u>Most Stringent</u>
NO _x	Gas	(75 ppm @ 15% O ₂) 0.3 lb NO _x /MMBTU	(42 ppm @ 15% O ₂) 125 ppm @ 3% O ₂)
	Oil	(75 ppm @ 15% O ₂) 0.3 lb NO _x /MMBTU	(75 ppm @ 15% O ₂) 0.3 lb NO _x /MMBTU
SO ₂	Oil	187 ppm 1% Sulfur by Weight (1 lb SO ₂ /MMBTU)	56 ppm 0.3% Sulfur by Weight (0.3 lb SO ₂ /MMBTU)
CO	All	None	None
Visible Emissions	All	20%	0%

*From the EPA's SSEIS document, EPA/450/2-77-017a

EPA's Proposed New Source Performance Standards for Gas Turbines:

The proposed standards were published in the Federal Register October 3, 1977 and are expected to be promulgated January, 1979, as follows:

Nitrogen Dioxide: 75 ppm by volume at 15 percent oxygen on a dry basis.

The standard would include an adjustment factor (see attachment) for gas turbine with thermal efficiencies greater than 75 percent, and also an adjustment factor (see attachment) for turbines burning fuels with fuel bound nitrogen content greater than 0.15 percent by weight. Each factor would result in a larger number. Measured NO_x levels would be adjusted to the International Standards Organization (ISO) reference conditions of 15°C and 60% R.H., 101.3 kilopascals pressure.

Sulfur Dioxide: 150 ppm by volume corrected to 15 percent oxygen, or
0.8% Sulfur by weight in fuel.*

Mr. Joseph W. Landers, Jr.
August 11, 1978
Page Four

BACT Determination by Florida Department of Environmental
Regulation:

Nitrogen Dioxide: 75 ppm by volume at 15 percent oxygen on
a dry basis, adjusted to ISO.

The proposed standard would be EPA's proposed New Source
Performance Standard. NO_x emissions from gas turbines, therefore,
would be limited according to the following equation:

$$STD = (.0075 E) + F$$

Where:

STD = allowable NO_x emission (percent by volume at
15 percent oxygen)

E = efficiency adjustment factor: $\frac{14.4 \text{ kilojoules/watt-hr}}{\text{Actual ISO heat rate}}$

F = fuel-bound nitrogen allowance:

<u>Fuel-Bound Nitrogen</u> <u>percent by weight (N)</u>	<u>F</u> <u>(NO_x - percent by volume)</u>
(N) less than 0.015 percent	0
(N) between 0.015 and 0.1 percent	0.04 (N)
(N) between 0.1 and 0.25 percent	0.004 + 0.0067 (N-0.1)
(N) greater than 0.25 percent	0.005

During performance tests to determine compliance with
the proposed standard, measured NO_x emission at 15 percent
oxygen would be adjusted to ISO ambient atmospheric conditions
by the following correction factor:

$$NO_x = (NO_{x_{obs}}) \left(\frac{P_{ref}}{P_{obs}} \right)^{0.5} e^{19 (H_{obs} - 0.00633)}$$

Where:

NO_x = Emissions of NO_x at 15 percent oxygen and ISO
standard ambient conditions.

Mr. Joseph W. Landers, Jr.
August 11, 1978
Page Five

$NO_{x_{obs}}$ = Measured NO_x emission at 15 percent oxygen, ppmv.
 P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.
 P_{obs} = Measured combustor inlet absolute pressure.
 H_{obs} = Specific humidity of ambient air.
 e = Transcendental constant (2.718)

Sulfur Dioxide: 95 ppm by volume corrected to 15 percent oxygen in a dry basis, or 0.5% Sulfur by weight in fuel

Hydrocarbons: None

Carbon Monoxide: None

Particulates: None

Opacity: Less than 20%

Justification of DER Determination:

Nitrogen Dioxide

The proposed standard was selected after carefully examining the recommendations of the study group and the SSIES document for EPA's proposed standard. The SSIES document showed test data on 8 simple cycle peaking gas turbines. Of these, only 6 were fired with distillate fuel. Tests for controlled emissions were available for 4 of these 6 turbines. Test results showed a range in emission of 55 to 80 ppmv (after EPA's proposed upward correction for turbine efficiencies above 25%). Although three of these four turbines had emissions below or at the 60 ppmv level, the EPA's 75 ppmv standard was preferred because it allowed for the uncertain validity of the limited test data available.

SO₂

The only available and economically feasible technique for sulfur dioxide emission control is low sulfur oil. Other techniques for tail gas cleanup cost two to three times as much as the turbine itself.

In selecting the 0.5% S fuel by weight as the standard, the availability of this fuel and the relative economic advantage of its use were considered.

Mr. Joseph W. Landers, Jr.
August 11, 1978
Page Six

The lower 0.3% S by weight proposed by two members of the study group would result in an increase in fuel cost of 1.8% or about \$53,500/unit per year - a conservative estimate. Increases in ambient air concentrations expected to result from the operation of the turbines do not justify the need for the more stringent standard and increased cost of production.

HC, CO, Particulates:

The SSEIS document shows insignificant impact on ambient air from the limited gas turbines emissions of these pollutants.

Opacity:

The proposed standard is consistent with the SSEIS document and agrees with the recommendation of two of the three members of the group proposing an opacity standard.

Details of Analysis May be Obtained by Contacting:

Victoria Martinez
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32301

Recommendation from: Bureau of Air Quality Management

by: J. P. Subramani
J. P. Subramani

DATE: AUGUST 11, 1978

Approved by:

Victoria Landers, Jr.
J. W. Landers, Jr.
Secretary

DATE:

August 16, 1978

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC61-11862

Date: 11/28/78

- (X) 1. Construction of this installation shall be completed by November 1, 1980. Application for Permit to Operate to be submitted by February 1, 1981.
- (X) 2. This construction permit expires on May 1, 1981 following an initial period of operation for appropriate testing to determine compliance with the Rules of the Florida Department of Environmental Regulation Commission.
- (X) 3. All applicable rules of the Department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
- (X) 4. The applicant shall continue the retention of the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A report of such inspection shall be submitted by the engineer to the Department of Environmental Regulation for consideration toward the issuance of an operation permit.
- (X) 5. This unit shall be tested* for SO₂ and NO_x (con't. on reverse) within sixty days side after it is placed in operation. These test results are required prior to our issuance of an operation permit and shall be submitted in duplicate to the Florida Department of Environmental Regulation Gainesville Branch Office, 825 N.W. 23rd Ave., Suite G, Gainesville, FL 32601.
- * Fuel Analysis May be Submitted for Required Sulfur Dioxide Emission Test.
- (X) 6. The operation of this installation shall be observed for visible emissions in accordance with Method 9-Visible Determination of the Opacity of Emissions from Stationary Sources (36FR24895; Federal Register, December 23, 1971). The observation results are required prior to our issuance of an operation permit, and shall be submitted in duplicate to the Department of Environmental Regulation ~~DUNNWOOD OFFICE~~ Branch Office, 825 N.W. 23rd Ave., Suite G, Gainesville, FL 32601.
- (X) 7. Satisfactory ladders, platforms, and other safety devices shall be provided/available as well as necessary ports to facilitate the carrying out of an adequate sampling program.
- (X) 8. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.
- (X) 9. All fugitive dust generated at this site shall be adequately controlled.

(X) 10. The emission limiting standards (based on a maximum total process input rate of 37,910 lb/hr of distillate fuel oil) required by the FDER BACT determination are as follows:

Nitrogen Dioxide - 75 ppm by volume at 15 percent oxygen on a dry basis

Sulfur Dioxide - 95 ppm by volume corrected to 15 percent oxygen on a dry basis; or, 0.5 percent sulfur by weight in fuel

Opacity - less than 20 percent

(X) 11. Maximum allowed emission rate for sulfur dioxide is 379 lbs/hr and for particulate matter is 38 lbs/hr.

(X) 5. (con't.) in accordance with Reference Method 20 specified in the Federal Register Vol. 42, No. 191 - Monday, October 3, 1977, paragraph 60.335.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC61-11863

Date: 11/28/78

- (X) 1. Construction of this installation shall be completed by November 1, 1980. Application for Permit to Operate to be submitted by February 1, 1981.
- (X) 2. This construction permit expires on May 1, 1981 following an initial period of operation for appropriate testing to determine compliance with the Rules of the Florida Department of Environmental Regulation Commission.
- (X) 3. All applicable rules of the Department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
- (X) 4. The applicant shall continue the retention of the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A report of such inspection shall be submitted by the engineer to the Department of Environmental Regulation for consideration toward the issuance of an operation permit.
- (X) 5. This unit shall be tested* for SO₂ and NO_x (con't. on reverse within sixty days side) after it is placed in operation. These test results are required prior to our issuance of an operation permit and shall be submitted in duplicate to the Florida Department of Environmental Regulation Gainesville Branch Office, 825 N.W. 23rd Ave., Suite G, Gainesville, FL 32601
- * Fuel Analysis May be Submitted for Required Sulfur Dioxide Emission Test.
- (X) 6. The operation of this installation shall be observed for visible emissions in accordance with Method 9-Visible Determination of the Opacity of Emissions from Stationary Sources (36FR24895; Federal Register, December 23, 1971). The observation results are required prior to our issuance of an operation permit, and shall be submitted in duplicate to the Department of Environmental Regulation District Office, Branch Office, 825 N.W. 23rd Ave, Suite G, Gainesville, FL 32601
- (X) 7. Satisfactory ladders, platforms, and other safety devices shall be provided/available as well as necessary ports to facilitate the carrying out of an adequate sampling program.
- (X) 8. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.
- (X) 9. All fugitive dust generated at this site shall be adequately controlled.

- (X) 10. The emission limiting standards (based on a maximum total process input rate of 37,910 lb/hr of distillate fuel oil) required by the FDER BACT determination are as follows:

Nitrogen Dioxide - 75 ppm by volume at 15 percent oxygen on a dry basis

Sulfur Dioxide - 95 ppm by volume corrected to 15 percent oxygen on a dry basis or, 0.5 percent sulfur by weight in fuel

Opacity - less than 20 percent

- (X) 11. Maximum allowed emission rate for sulfur dioxide is 379 lbs/hr and for particulate matter is 38 lbs/hr.

- (X) 5. (con't.) in accordance with Reference Method 20 specified in the Federal Register Vol. 42, No. 191 - Monday, October 3, 1977, paragraph 60.335.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC61-11864

Date: 11/28/78

- (X) 1. Construction of this installation shall be completed by November 1, 1980. Application for Permit to Operate to be submitted by February 1, 1981.
- (X) 2. This construction permit expires on May 1, 1981 following an initial period of operation for appropriate testing to determine compliance with the Rules of the Florida Department of Environmental Regulation Commission.
- (X) 3. All applicable rules of the Department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
- (X) 4. The applicant shall continue the retention of the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A report of such inspection shall be submitted by the engineer to the Department of Environmental Regulation for consideration toward the issuance of an operation permit.
- (X) 5. This unit shall be tested* for SO₂ and NO_x (con't. on reverse within sixty days side) after it is placed in operation. These test results are required prior to our issuance of an operation permit and shall be submitted in duplicate to the Florida Department of Environmental Regulation Gainesville Branch Office, 825 N.W. 23rd Ave., Suite G, Gainesville, FL 32601
- * Fuel Analysis May be Submitted for Required Sulfur Dioxide Emission Test.
- (X) 6. The operation of this installation shall be observed for visible emissions in accordance with Method 9-Visible Determination of the Opacity of Emissions from Stationary Sources (36FR24895; Federal Register, December 23, 1971). The observation results are required prior to our issuance of an operation permit, and shall be submitted in duplicate to the Department of Environmental Regulation Gainesville Branch Office, 825 N.W. 23rd Ave., Suite G, Gainesville, FL 32601
- (X) 7. Satisfactory ladders, platforms, and other safety devices shall be provided/available as well as necessary ports to facilitate the carrying out of an adequate sampling program.
- (X) 8. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.
- (X) 9. All fugitive dust generated at this site shall be adequately controlled.

- (X) 10. The emission limiting standards (based on a maximum total process input rate of 37,910 lb/hr of distillate fuel oil) required by the FDER BACT determination are as follows:

Nitrogen Dioxide - 75 ppm by volume at 15 percent oxygen on a dry basis

Sulfur Dioxide - 95 ppm by volume corrected to 15 percent oxygen on a dry basis or, 0.5 percent sulfur by weight in fuel

Opacity - less than 20 percent

- (X) 11. Maximum allowed emission rate for sulfur dioxide is 379 lbs/hr and for particulate matter is 38 lbs/hr.

- (X) 5. (con't.) in accordance with Reference Method 20 specified in the Federal Register Vol. 42, No. 191 - Monday, October 3, 1977, paragraph 60.335.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION CONSTRUCTION PERMIT

FOR Florida Power Corporation

P. O. Box 14042

St. Petersburg, FL 33733

PERMIT NO. AC61-11862 DATE OF ISSUE November 28, 1978

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403 FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO: Mr. N. B. Spake, Assistant Vice President

FOR THE CONSTRUCTION OF THE FOLLOWING:

Suwannee River Peaking Unit #1, a Distillate Oil Fired Gas Turbine

Electric Generating Unit with a Peak Output of 63,000 KW Firing a
Maximum of 37,910 Lbs/Hr 0.5 Percent or Less Sulfur by Weight

Distillate Oil

LOCATED AT Suwannee River Power Plant, South of Rt. 90 between Live Oak
and Madison, FL Suwannee County UTM: E-503,673 N-2,415,157

IN ACCORDANCE WITH THE APPLICATION DATED July 31, 1978 and additional information
received October 11, 1978

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN, FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL May 1, 1981

OR UNLESS REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

Frank Watkins, Jr.
Frank Watkins, Jr.
Subdistrict Engineer

Joseph W. Landers, Jr.
JOSEPH W. LANDERS, JR.
SECRETARY
G. Doug Dutton
SUBDISTRICT MANAGER
G. Doug Dutton

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION CONSTRUCTION PERMIT

FOR Florida Power Corporation
P. O. Box 14042
St. Petersburg, FL 33733

PERMIT NO: AC61-11863 DATE OF ISSUE November 28, 1978

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403 FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. N. B. Spake, Assistant Vice President

FOR THE CONSTRUCTION OF THE FOLLOWING:

Suwannee River Peaking Unit #2, a Distillate Oil Fired Gas Turbine
Electric Generating Unit with a Peak Output or 63,000 KW Firing a
Maximum of 37,910 Lbs/Hr 0.5 Percent or Less Sulfur by Weight
Distillate Oil

LOCATED AT Suwannee River Power Plant, South of Rt. 90 between Live Oak
and Madison, Suwannee County, FL UTM: E-503,673 N-2,415,157

IN ACCORDANCE WITH THE APPLICATION DATED July 31, 1978 and additional information
received October 11, 1978

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN, FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL May 1, 1981

OR UNLESS REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

Frank Watkins, Jr.
Frank Watkins, Jr.
Subdistrict Engineer

Joseph W. Landers, Jr.
JOSEPH W. LANDERS, JR.
SECRETARY
G. Doug Dutton
SUBDISTRICT MANAGER
G. Doug Dutton

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION CONSTRUCTION PERMIT

FOR Florida Power Corporation

P. O. Box 14042

St. Petersburg, FL 33783

PERMIT NO. AC61-11864 DATE OF ISSUE November 28, 1978

PURSUANT TO THE PROVISIONS OF SECTIONS 403.061 (16) AND 403.707 OF CHAPTER 403 FLORIDA STATUTES AND CHAPTERS 17-4 AND 17-7 FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. N. B. Spake, Assistant Vice President

FOR THE CONSTRUCTION OF THE FOLLOWING:

Suwannee River Peaking Unit #3, a Distillate Oil Fired Gas Turbine
Electric Generating Unit with a Peak Output of 63,000 KW Firing a
Maximum of 37,910 lbs/hr 0.5 Percent or Less Sulfur by Weight
Distillate Oil

LOCATED AT Suwannee River Power Plant, South of Rt. 90 between Live Oak
and Madison, Suwannee County, FL UTM: E-503,673 N-2,415,157

IN ACCORDANCE WITH THE APPLICATION DATED July 31, 1978 and additional information
received October 11, 1978

ANY CONDITIONS OR PROVISOS WHICH ARE ATTACHED HERETO ARE INCORPORATED INTO AND MADE A PART OF THIS PERMIT AS THOUGH FULLY SET FORTH HEREIN, FAILURE TO COMPLY WITH SAID CONDITIONS OR PROVISOS SHALL CONSTITUTE A VIOLATION OF THIS PERMIT AND SHALL SUBJECT THE APPLICANT TO SUCH CIVIL AND CRIMINAL PENALTIES AS PROVIDED BY LAW.

THIS PERMIT SHALL BE EFFECTIVE FROM THE DATE OF ISSUE UNTIL May 1, 1981

OR UNLESS REVOKED OR SURRENDERED AND SHALL BE SUBJECT TO ALL LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

Frank Watkins, Jr.
Frank Watkins, Jr.
Subdistrict Engineer

Joseph W. Landers, Jr.
JOSEPH W. LANDERS, JR.
SECRETARY
G. Doug Dutton
SUBDISTRICT MANAGER
G. Doug Dutton



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30308

MAY 22 1980

REF: 4AH-AF

Mr. Gus Schaefer
Florida Power Corporation
3201 Thirty-fourth Street South
P. O. Box 14042
St. Petersburg, FL 33733

Re: PSD-FL-014

Dear Mr. Schaefer:

This is in response to your April 16, 1980 letter requesting that PSD condition 3(b), for Florida Power Corporation's Suwannee River Peaking Units, be amended.

It has been determined by this Division that based upon the figures presented in your recent submittal, which will become an amendment to your application, condition 3(b) as stated in the Final Determination dated July 9, 1979 is hereby deleted and the following amendment should be inserted in its place to read:

The applicant shall record weekly, the sulfur content, nitrogen content, and lower heating value of the fuel being fired in the gas turbine.

This letter should be attached and made a part of your current PSD Conditions for Approval of Florida Power Corporation's proposed Suwannee River Peaking Units, and will become effective on the date of this letter.

If you have any questions concerning this matter, please contact Bill Wagner of my staff at 404/881-4552.

Sincerely yours,

A handwritten signature in cursive script that reads "Tommie A. Gibbs".

Tommie A. Gibbs
Chief
Air Facilities Branch

cc: FL DER
TRW



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30308

REF: 4AH-AP

July 9, 1979

Mr. W. W. Vierday
Manager
Licensing Affairs
Florida Power Corporation
3201 Thirty-Fourth Street South
P.O. Box 14042
St. Petersburg, Florida 33733



Dear Mr. Vierday:

Review of your August 5, 1978, application to construct four combustion turbines at your Suwannee Power Plant has been completed. The construction is subject to rules for the Prevention of Significant Air Quality Deterioration (PSD), contained in 40 CFR 52.21.

We have determined that the construction as described in the application meets all applicable requirements of the PSD regulations, subject to the conditions in the final determination (enclosed). EPA made a Preliminary Determination concerning the proposed construction, and published a request for public comment on May 5, 1979. The only comments received were from you. Authority to Construct a stationary source is hereby issued for the facility described above, subject to the conditions in the final determination. This Authority to Construct is based solely on the requirements at 40 CFR 52.21, the federal regulations governing significant deterioration of air quality. It does not apply to NPDES or other permits issued by this agency or permits issued by other agencies. Information regarding EPA permitting requirements can be provided if you contact Mr. Joe Franzmathes, Director, Office of Program Integration and Operations, at 404/881-4727. Additionally, construction covered by this Authority to Construct must commence within 18 months from the receipt of this letter.

The United States Court of Appeals for the District of Columbia Circuit issued a ruling in the case of Alabama Power v. Costle which has significant impact on the EPA prevention of significant deterioration (PSD) program and permits issued thereunder. Although the court has stayed its decision pending resolution of petitions for reconsideration, it is probable that the final decision will require modification of the PSD regulations and could affect permits issued under the existing program. Examples of potential impact areas include the scope of the best available control technology requirement (BACT), source applicability, the amount of increment available (baseline definition), and the extent of preconstruction monitoring that a source may be required to perform. The applicant is hereby advised that this permit may be subject to reevaluation as a result of the terms of the final court decision and its ultimate effect.

Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, will be subject to enforcement action.

Authority to Construct will take effect on the date of this letter. The complete analysis which justifies this approval has been fully documented for future reference, if necessary. Any questions concerning this approval may be directed to Mr. Ray Cunningham, Chief, Air Strategy Development Section (404/881-3286).

Sincerely yours,



Thomas W. Devine, Director
Air & Hazardous Materials Division

Enclosure

cc: Dr. J.P. Subramani, Chief
Bureau of Air Quality Management
Fla. Department of Environmental Regulation

Final Determination

Review of a Proposed Air Pollution Source Pursuant to Environmental
Protection Agency Rules for the Prevention of Significant Deterioration (PSD)

40 CFR 52.21

Suwannee River Power Plant

Four Gas Turbine Peaking Units

Florida Power Corporation, St. Petersburg, Florida

U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30308

I. Introduction

The Florida Power Corporation has applied to the U.S. Environmental Protection Agency to construct four 63 megawatt oil-fired gas turbine peaking units at its Suwannee River Power Plant located in Suwannee County midway between the towns of Live Oak and Madison and on U.S. 90. The proposed construction is subject to review under 40 CFR 52.21, Regulations for the Prevention of Significant Deterioration (PSD). Under these regulations, a modification to a source of air pollution in any one of 28 specified categories which will increase the emission potential of that source by more than 100 tons per year of any pollutant, is subject to review for each of those pollutants. One of these categories is fossil fuel-fired steam electric plants of more than 250 million BTU per hour heat input, of which the Suwannee Plant is one.

Paragraph (r) of the PSD regulations requires, in part, that EPA issue a Preliminary Determination whether the source should be approved, approved with conditions, or disapproved. On April 27, 1979, EPA made a Preliminary Determination that the proposed source could be approved with conditions. The Preliminary Determination was advertized for public comment in three local newspapers and placed on display at the Suwannee County Courthouse. The only comment received was from the applicant, regarding the restriction on yearly hours of operations.

After verbal discussion with Mr. W. W. Vierday, EPA determined that the applicant had further reviewed this condition and no longer objected to it. However, Mr. Vierday requested that the log required by Condition 6 be a monthly log (rather than hourly or daily) since the new units would be equipped with integrating meters measuring both hours of operation and fuel usage. This request has been granted, and Condition 6 is modified accordingly. All other conditions remain the same as those in the Preliminary Determination. It is the decision of EPA that the source should be approved with conditions. The conditions are included to insure that the applicant complies with emission control techniques and emission limits which are a part of the application. The conditions of approval follow on the next page.

Conditions for Florida Power Corporation's Proposed Suwannee
Park Peaking Units (Gas Turbines)

As required pursuant to 40 CFR 52.21(d)(2)(11), a review was conducted to determine if the proposed peaking units would apply the best available control technology. Based on this review, it was determined that the applicant (Florida Power Corporation) must meet emission limits and other requirements as specified by the U.S. Environmental Protection Agency's Standard of Performance for Stationary Gas Turbines proposed on October 3, 1977 (40 CFR 60, Subpart GC).

Condition 1. Standards for Nitrogen Oxides

On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not cause to be discharged into the atmosphere

*75 ppmv @ 15% O₂
- LHV of fuel bound*

(1) From any gas turbine with a heat rate at peak load of less than or equal to 14.4 kilojoules per watt hour, based on the lower heating value of the fuel fired, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \left(\frac{14.4}{Y} \right) + F$$

where:

STD = allowable NO_x emission (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at peak load (kilojoules per watt hour).

F = NO_x emission allowance for fuel-bound nitrogen as defined in part (2) of this paragraph.

(2) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NO _x by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04(N)
$0.1 < N \leq 0.25$	$0.004 + 0.0067(N - 0.1)$
$N > 0.25$	0.005

where:

N = the nitrogen content of the fuel (percent by weight).

Condition 2. Standard for Sulfur Dioxide

(a) On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of a 0.015 percent by volume at 15 percent oxygen and on a dry basis.

(b) The sulfur content of the fuel fired by the gas turbine may be used to determine compliance with paragraph (a) of this section. Under such circumstances, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, the applicant shall not burn in any stationary gas turbine any fuel which contains sulfur in excess of ~~0.8~~ percent by weight.

0.5

Condition 3. Monitoring of Operations

(a) If water injection is used to control NO_x emissions, the applicant shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.

(b) The applicant shall record ~~daily~~ ^{weekly} the sulfur content, nitrogen content, and lower heating value of the fuel being fired in the gas turbine.

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

(1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

Note:

See attached
letter from TA
Gibbs - issued
May 22, 1982
modification to
(b)

(2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds ~~0.8~~ percent.

0.5

Condition 4. Stack Testing

(a) Within sixty (60) days after achieving the maximum production rate at which the source will be operated, but no later than 180 days after initial startup, the applicant shall conduct or cause to be conducted, performance test(s) and furnish the Administrator with a written report of the results of such performance test(s). The results of the performance test(s) shall be submitted to the Administrator within thirty (30) days of the completion of said testing.

(b) Nitrogen oxide and sulfur dioxide performance tests shall be conducted and data reduced in accordance with methods and procedures approved by the Administrator.

(c) The applicant shall provide the Administrator thirty (30) days prior notice of the date of the performance test(s) to afford the opportunity to have an observer present.

(d) All required continuous monitoring systems shall be installed, calibrated, and operating when the performance test(s) are conducted.

(e) The applicant shall provide performance test reports which comply with criteria more fully described in 40 CFR 60, Appendix A.

Condition 5. NO_x Emission Control System

The applicant must submit technical data to the Administrator within ten (10) working days after it becomes available pertaining to the selected NO_x emissions control system. These data would include, but not be limited to, a copy of the formal bid from the successful bidder, guaranteed efficiency or emission rate, and major design parameters such as water/fuel ratio. If "dry" control techniques are to be used, to control NO_x emissions, the applicant must submit test data and other appropriate information for existing similarly sized gas turbines (i.e., approximately 63 MW) to show that dry control techniques are capable of achieving emission limits given in Condition 1 above. The Administrator, upon review of these data, may revoke or modify this application if evaluation of these data is different from data in the application in such a way that it would cause the control system to be inadequate to meet the emission limits specified above.

Condition 6. The turbines shall not operate more than 1500 hours per year. A monthly log shall be kept at the plant, showing hours of operation and the amount of fuel used. This log will be available for inspection at the plant at any time.

II. Background

On March 21, 1978, Florida Power Corporation submitted a letter and attachments to EPA to apply under the PSD regulations to construct four combustion turbines at the Suwannee Power Plant. On August 5, 1978, further information was submitted which completed the application. The proposed construction is subject to EPA Regulations for the Prevention of Significant Air Quality Deterioration promulgated on June 19, 1978.

III. Review Requirements

The pollutants for which potential emissions are greater than 100 tons per year, and therefore subject to review, are sulfur dioxide, nitrogen oxides and carbon monoxide. Review of control technology and ambient impacts is required.

Certain portions of the PSD review may not be required if the proposed modification is subject to EPA's interpretative ruling, or if the source is a nonprofit health or education institution, or if the source has previously received approval under PSD and is only relocating. None of these exemptions applies in this case.

Other exemptions can apply to control technology review and ambient impact review. For control technology review, if allowable emissions of any pollutant are less than 50 tons per year, 1000 pounds per day and 100 pounds per hour, or if a modification is made to an existing facility and the emissions are offset by reductions elsewhere, review may not be required. None of these exemptions applies.

For ambient impact review and monitoring requirements, other exemptions are provided for. In addition to the allowable emission threshold, there are exemptions for temporary sources and for sources whose net emissions, after considering decreases, do not increase. None of these exemptions apply to the proposed turbines.

The one exemption which does apply is for air quality monitoring. Since a complete application was submitted before August 7, 1978, no preconstruction monitoring is required.

A. Control Technology Review

The applicant is required to install best available control technology (BACT) for each pollutant, taking into account energy, environmental and economic impacts and other costs. EPA concludes that the systems proposed by the applicant represent BACT for SO₂ and nitrogen oxides. There is currently no applicable technology for reduction of carbon monoxide beyond what is accomplished in the combustion chamber.

1. Sulfur Dioxide

The applicant has proposed to burn 0.5% sulfur distillate fuel oil. At the time the application was submitted, EPA had proposed a revision to the New Source Performance Standards (40 CFR 60) for stationary gas turbines. Part of this revision includes a requirement for burning no fuel which contains sulfur in excess of 0.8 percent by weight. This requirement is considered BACT, and is included as a condition of approval.

2. Nitrogen Oxides

The applicant has proposed to limit nitrogen oxide emissions to 75 ppm (adjusted for heat rate and fuel-bound nitrogen) by water injection. At the time the application was submitted, EPA had proposed a revision to the New Source Performance Standards (40 CFR 60) for stationary gas turbines. Part of this revision includes a requirement to limit nitrogen oxide emissions to 75 ppm. This requirement represents BACT and is included as a condition of approval.

B. Applicability of NSPS

As of this date, EPA has proposed revisions to the New Source Performance Standards for stationary gas turbines. Any future promulgation which applies to stationary gas turbines and is more stringent than any condition of approval, will supercede the conditions of approval.

C. Impact Review

The PSD regulations require the following air quality impacts to be assessed by the applicant:

- 1) National Ambient Air Quality Standards (NAAQS)
- 2) PSD increments
- 3) Visibility, soils and vegetation
- 4) Impacts due to growth caused by proposed source

All of these impacts were assessed by the applicant. Air quality modelling showed no violations of the NAAQS with all sources in the area of the Suwannee in operation. Likewise, the PSD increment analysis showed no violations with the four turbines operating at maximum load.

The maximum predicted ambient concentrations with the proposed turbines in operation are presented in the following table:

Scenario	Concentrations($\mu\text{g}/\text{m}^3$)		
	Sulfur Dioxide		
	Annual Average	24-Hour Maximum	3-Hour Maximum
Maximum Predicted 1981 Concentration in vicinity of Suwannee River Plant	10	184	851
State of Florida Standards	60	260	1300
Federal Secondary Standards	--	--	1300
Federal Primary Standards	80	365	--

The maximum consumption of the Class II PSD increments caused by proposed turbines are presented in the following table:

<u>Increment</u>	<u>Pollutant</u>
Annual	10%
24-Hour	11%
3-Hour	10%

Impacts on visibility, soils and vegetation and on air quality due to growth were judged to be minimal.

The closest Class I area is Okefenokee National Wildlife Refuge in Georgia, about 75 KM to the east-northeast from the plant site.

The maximum consumption of the Class I PSD increments caused by the proposed turbines are presented in the following table:

<u>Increment</u>	<u>Pollutant</u>
Annual	10%
24-Hour	40%
3-Hour	56%



Best Available Copy

Department of Environmental Protection

RECEIVED

MAY 02 1996

Environmental Services Department

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

April 15, 1996

Dr. P.Y. Baynard
Director-Environmental & License Affairs
Florida Power Corporation
Environmental Services Department
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee Co. - AP
Florida Power Corporation
Suwannee Plant

Unit No.	/	ID No.	/	Permit No.
1	/	1210003001 (was 31JAX61000301)	/	AO61-189582
2	/	1210003002 (was 31JAX61000302)	/	AO61-189582
3	/	1210003003 (was 31JAX61000303)	/	AO61-189581

The referenced permits are revised below based on the request received 01-12-96 that on-specification used oil to be allow as a fuel.

Specific Condition #1 is revised by adding on-specification used oil as a fuel as follows:

RATE	FUEL
___ ⁵	on-specification used oil ^{6,7,8}

⁵The rate shall not exceed the permit heat input rate stated for No. 6 fuel oil for each unit and the amount fired shall be recorded.

⁶The on-spec used oil burned shall comply with the limits listed below and the provisions of 40 CFR 279 and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

Specific Condition #1 - continued:

⁷On-specification used oil maximum concentration of PCBs shall be less than 50 ppm. Used oil shall not be blended to meet this requirement. Used oil with PCBs concentration of 2 to 49 ppm shall be fired only during normal operation temperature and used oil with PCBs concentration of less than 2 ppm may be fired during startups and shutdowns.

Specific Condition #5 is revised by adding on-specification used oil test requirements as follows:

POLLUTANT	Interval ⁵	TEST METHOD(S) ⁵
ARSENIC		
CADMIUM		
CHROMIUM		
LEAD		
TOTAL HALOGENS		
FLASH POINT (IGNITABILITY)		
PCBs		

⁵Approved EPA, DEP or ASTM test methods shall be used or a certified on-specification used oil analysis of each delivery shall be retained for inspection or submittal on request by the Department.

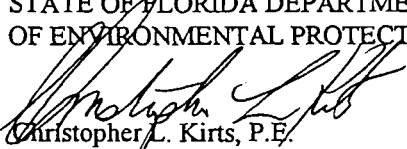
A copy of any applicable marketer's notice or EPA notification shall be submitted.

This letter and the request shall become a part of the permit.

Any party to this Order (permit) has the right to seek judicial review of the permit 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 this Notice is filed with the Clerk of the Department.

Executed in Jacksonville, Florida.

FILING AND ACKNOWLEDGEMENT
 FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Gene Friedland 4/17/96
 Clerk Date

STATE OF FLORIDA DEPARTMENT
 OF ENVIRONMENTAL PROTECTION

 Christopher L. Kirts, P.E.
 District Air Program Administrator

CLK:RJI:JLC
 Scott H. Osbourn



Department of Environmental Protection

MAY 02 1996
Environmental Services Department

Lawton Chiles
Governor

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Virginia B. Wetherell
Secretary

April 15, 1996

Dr. P.Y. Baynard
Director-Environmental & License Affairs
Florida Power Corporation
Environmental Services Department
P.O. Box 14042
St. Petersburg, Florida 33733

Dear Dr. Baynard:

Suwannee Co. - AP
Florida Power Corporation
Suwannee Plant
No. 1,2 & 3 Peaking Units
ID# 1210003004,005,006 (were 31JAX61000304,05,06)
AO61-189579
Permit Revisions

The referenced permits are revised below based on the request received 01-12-96 that on-specification used oil to be allow as a fuel.

Specific Condition #1 is revised by adding on-specification used oil as a fuel as follows:

RATE	FUEL
--- ⁵	on-specification used oil ^{6,7,8}

⁵The rate shall not exceed the heat input rate 739 MMBTU/hr per unit for No. 2 fuel oil and the amount fired shall be recorded.

⁶The on-spec used oil burned shall comply with the limits listed below and the provisions of 40 CFR 279 and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

Specific Condition #1 - continued:

⁷On-specification used oil maximum concentration of PCBs shall be less than 50 ppm. Used oil shall not be blended to meet this requirement. Used oil with PCBs concentration of 2 to 49 ppm shall be fired only during normal operation temperature and used oil with PCBs concentration of less than 2 ppm may be fired during startups and shutdowns.

Specific Condition #5 is revised by adding on-specification used oil test requirements as follows:

POLLUTANT	Interval ⁵	TEST METHOD(S) ⁵
ARSENIC		
CADMIUM		
CHROMIUM		
LEAD		
TOTAL HALOGENS		
FLASH POINT (IGNITABILITY)		
PCBs		

⁵Approved EPA, DEP or ASTM test methods shall be used or a certified on-specification used oil analysis of each delivery shall be retained for inspection or submittal on request by the Department.

A copy of any applicable marketer's notice or EPA notification shall be submitted.

This letter and the request shall become a part of the permit.

Any party to this Order (permit) has the right to seek judicial review of the permit 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 this Notice is filed with the Clerk of the Department.

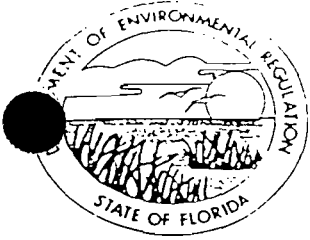
Executed in Jacksonville, Florida.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Debra Benefield 4/17/96
Clerk Date

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION
Christopher L. Kirts
Christopher L. Kirts, P.E.
District Air Program Administrator

CLK:RJL:JLC
~~AS~~ Scott H. Osbourn

Best Available Copy



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

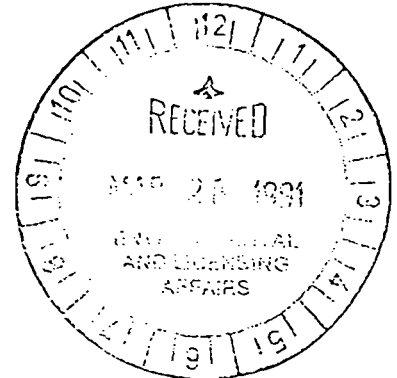
NOTICE OF PERMIT ISSUANCE

CERTIFIED - RETURN RECEIPT

Dr. P.Y. Baynard, Director Environ. & Licens. Affrs.
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

Dear Mr. Baynard:

Suwannee County - AP
Florida Power Corporation
Nos. 1, 2 & 3 Peaking Units



Enclosed is Permit Number A061-189579* (Revised) to operate the subject air pollution source, pursuant to Section 403.087, Florida Statutes (FS).

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 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;

(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 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.

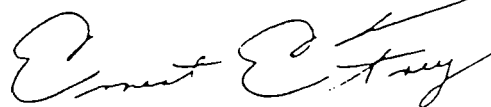
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard 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 allowed 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 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 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 Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

EEF:bt

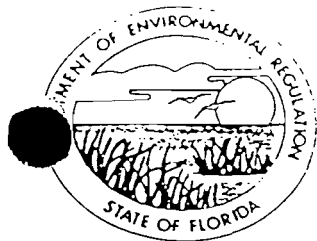
Copies furnished to: Richard O. Frazee, P.E.

FILING AND ACKNOWLEDGEMENT
FILED on this date pursuant to S120.52 Florida
Statutes with the designated Department Clerk
receipt of which is hereby acknowledged.

Deputy Clerk Clerk 3-21-91 Date

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 3/21/91 to the listed persons.



Florida Department of Environmental Regulation

Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:

Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

I.D. Number: 31JAX61000304,05,06
Permit/Cert Number: A061-189579*
Date of Issue: February 14, 1991
Revised: 03-21-91
Expiration Date: ~~March 3, 1996~~
County: Suwannee
Latitude/Longitude: 30°22'35"N; 83°10'50"W
Project: Nos. 1,2,&3 Peaking
Units
UTM: E-(17)290.5; N-3362.2

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 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 Nos. 1,2,&3 Peaking Units (Combustion Turbines Model Turbo Power and Marine Systems FT4C-3 LF water injected twin pac).

*Similar sources with same permit no. and all of the conditions in this permit shall apply to each unit.

Located south of U.S. 90, on east bank of Suwannee River, Northwest of Live Oak, Suwannee County, Florida.

In accordance with:

Construction application dated 03-09-78
Certificate of Completion of Construction application dated 01-30-81
Renewal application dated 01-23-86
Renewal application received 11-20-90
Revision request dated 03-01-91

PERMITTEE:
Florida Power Corporation
Post Office Box 14042
Gainesville, Florida 32601

I.D. Number: 31JAX61000304,05,06
Permit/Cert: A061-189579*
Date of Issue:
Revised:
Expiration Date: August 07, 1996

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants, or representatives.
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), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor 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 does not constitute 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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 at all times 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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

PERMITTEE:
Florida Power Corporation
Post Office Box 14042
Gainesville, Florida 32601

I.D. Number: 31JAX61000304,05,06
Permit/Cert: A061-189579*
Date of Issue:
Revised:
Expiration Date: August 07, 1996

GENERAL CONDITIONS

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. the period of non-compliance, including exact 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 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 arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.
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 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the department.
12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

PERMITTEE:
Florida Power Corporation
Post Office Box 14042
Gainesville, Florida 32601

I.D. Number: 31JAX61000304,05,06
Permit/Cert: A061-189579*
Date of Issue:
Revised:
Expiration Date: August 07, 1996

GENERAL CONDITIONS

13. This permit also constitutes:

- 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 Standards

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.
- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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 date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the department, the permittee shall, within a reasonable period of 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 submitted or corrected promptly.

PERMITTEE:
 Florida Power Corporation
 Post Office Box 14042 (H2G)
 St. Petersburg, Florida 33733

I.D. Number: 31JAX61000304,05,06
 Permit/Cert: A061-189579*
 Date of Issue: February 14, 1991
 Revised:
 Expiration Date: March 3, 1996

SPECIFIC CONDITIONS:

1. The maximum input/rate (operating rate) is SEE BELOW and shall not be exceeded without prior approval.

<u>Rate</u>	<u>Material</u>
739 MMBTU/hr ¹	No. 2 fuel oil ^{2,3}

- ¹Rate at 59°F (per ACP dated 03-09-78)
- ²Sulfur content shall not exceed 0.5% by weight (per BACT dated 08-16-78).
- ³Fired No. 2 fuel oil shall not exceed 127 bbls/hr at 59°F

2. Testing of emissions must be performed at an operating rate of at least 90% of the rate in Specific Condition (SC) No. 1, or SC No. 3 will become effective.
3. The operating rate shall not exceed 110% of the operating rate during the most recent test except for testing purposes, but shall not exceed the rate in SC No. 1. After testing at an operating rate greater than 110% of the last test operating rate, the operating rate shall not exceed 110% of the last (submitted) test operating rate until the test report at the higher rate has been reviewed and accepted by the Department.
4. The maximum allowable emission rate for each pollutant is as follows:

<u>Pollutant</u>	<u>FAC Rule</u>	<u>lbs/hr</u>	<u>TPY</u>
NO _x ¹	17-2.630 ^{2,3}	210.22 ⁴	157.66 ⁵
SO ₂ ⁶	17-2.630 ^{7,8}	379 370.48 ⁹	277.86 ⁵
VE ¹⁰	17-2.630 ¹¹	< 20% opacity	

- ¹NO_x - nitrogen oxides
- ²BACT (as nitrogen dioxide) dated 08-16-78
- ³Also, FAC Rule 17-2.660 (NSPS adopted by ref: 40 CFR 60.332)
- ⁴Basis: 75 ppm by vol, dry; 1,255,500 ACFM; 726°; at 15% O₂; 30% moisture
- ⁵Basis: Hours of operation shall be limited to 1500 hrs per calendar year and shall be recorded.
- ⁶SO₂ - sulfur dioxide
- ⁷BACT dated 08-16-78
- ⁸Also, FAC Rule 17-2.660 (NSPS adopted by ref: 40 CFR 60.333)
- ⁹Basis: 95 ppm by vol, dry; 1,255,500 ACFM; 726°F; corrected to 15% O₂; 30% moisture
- ¹⁰VE - visible emissions
- ¹¹BACT dated 08-16-78

PERMITTEE:
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St. Petersburg, Florida 33733

I.D. Number: 31JAX61000304,05,06
Permit/Cert: A061-189579*
Date of Issue: February 14, 1991
Revised:
Expiration Date: March 3, 1996

SPECIFIC CONDITIONS:

5. Test the emission for the following pollutant(s) at the interval(s) indicated, notify the Department 14 days prior to testing, and submit the test report documentation to the Department within 45 days after completion of the testing:

<u>Pollutant</u>	<u>Interval</u>	<u>Test Method</u>
VE	12 months from 01-20-90	EPA 9 ¹
NO ₂	3 months from 10-30-90	(See SC #6)
SO ₂	3 months from 10-30-90	(See SC #6)

¹From Table 700-1, used EPA 9 since limit is same as General VE.

Tests and test reports shall comply with the requirements of Florida Administrative Code Rule 17-2.700(6) and (7), respectively.

6. Submit quarterly report for each source for the following within 30 days at the end of each quarter:

- a. Any one hour period during which water to fuel ratio falls below 0.526 for #1 unit, 0.486 for #2 unit, and 0.505 for #3 unit per 40 CFR 60.334(c)(1) for nitrogen oxides.
- b. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.5 percent by weight per FAC Rule 1702.700(6)(c)1.b.
- c. For each period, the type, reasons and duration of the firing of the emergency fuel.
- d. For each quarter, total hours of operation.

7. In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

8. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1.

9. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

10. The ID No. for this source is to be used on all correspondence.

PERMITTEE:
Florida Power Corporation
Post Office Box 14042 (H2G)
St. Petersburg, Florida 33733

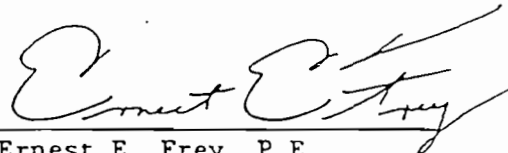
I.D. Number: 31JAX61000304,05,06
Permit/Cert: A061-189579*
Date of Issue: February 14, 1991
Revised:
Expiration Date: March 3, 1996

SPECIFIC CONDITIONS:

- 003 11. Forms for the renewal will be sent 5 months prior to 03-03-96 and the completed forms with test results are due 90 days prior to 03-03-96.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Ernest E. Frey, P.E.
Deputy Assistant Secretary

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52, Florida
Statutes, with the designated Department Clerk,
receipt of which is hereby acknowledged.

Betty Lamm Clerk 3-21-91 Date

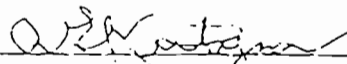
CERTIFICATION

PROJECT NAME: Florida Power Corporation
Nos. 1,2 and Peaking Units

APPLICATION NO: A061-189579* (Revised)

I HEREBY CERTIFY that the engineering features described in application No. A061-189579* (Revised) provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, and geological features).

Andrew G. Kutyna, P.E.
Name, P.E.



Signature and Seal

3-20-81
Date

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.
-] 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).
-] 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.

**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): Facility-wide Fugitive/Deminimis Emissions		
2. Emissions Unit Identification Number: <input checked="" type="checkbox"/> No Corresponding ID <input type="checkbox"/> Unknown		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters): See Attachment SU-E05-B6		

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:

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Petroleum Product Storage - Fugitive Emissions (Storage)	
2. Source Classification Code (SCC): 4-03-888-01	
3. SCC Units: Thousand Gallons Stored	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 10,070	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): Segment refers to combined storage capacity of various petroleum product storage tanks contained in emission unit at time permit appl. submittal. See Attachment SU-E05-B6 for list.	

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Petroleum Product Storage - Fugitive Emissions (Throughput)	
2. Source Classification Code (SCC): 4-03-999-99	
3. SCC Units: Thousand Gallons Throughput	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 127,600	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters): Segment refers to combined throughput of various petroleum product storage tanks contained in emission unit at time permit appl. submittal. See Attachment SU-E05-B6 for list.	

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

**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	<input type="checkbox"/> C	<input type="checkbox"/> E <input checked="" type="checkbox"/> Unknown
	SO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E <input checked="" type="checkbox"/> Unknown
	NO ₂	<input type="checkbox"/> C	<input type="checkbox"/> E <input checked="" type="checkbox"/> Unknown
4.	Baseline Emissions:		
	PM	lb/hour	tons/year
	SO ₂	lb/hour	tons/year
	NO ₂		tons/year
5.	PSD Comment (limit to 200 characters):		

ATTACHMENT SU-E05-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 SU-E05-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Suwannee Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status	
Unit 1 Turbine	Lube Oil Vent w/ Demister	UR	●
	Hydrogen Venting & Purge	TR	
	CO2 Purge	TR	
Unit 2 Turbine	Lube Oil Vent w/ Demister	UR	●
	Hydrogen Venting & Purge	TR	
	CO2 Purge	TR	
Unit 3 Turbine	Lube Oil Vent w/ Demister	UR	●
	Hydrogen Venting & Purge	TR	
	CO2 Purge	TR	
Turbine Bldg.	Building Ventilation	TR	
	Emergency Generator 100 kW Diesel	ER/TR	● <i>assumption < 10,000 gal/yr</i>
	Diesel Tank	UR	●
In-Plant Tanks	Seal Water Tanks (2)	TR	
	Surge Tanks (2)	TR	
	Condensate Tank	TR	
	Bearing Water Tanks (3)	TR	
	Service Water Tank	TR	

Attachment SU-E05-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Suwannee Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Unit 1	Main Boiler	R
	Various Steam Vents & Pressure Relief Valves	TR
	Condensate and Blow-down vents	TR
	Natural Gas Blow-off	TR
	Building Ventilation	TR
	Condensate Tank	TR
	Unit 2	Main Boiler
Various Steam Vents & Pressure Relief Valves		TR
Condensate and Blow-down vents		TR
Natural Gas Blow-off		TR
Building Ventilation		TR
Condensate Tank		TR
Unit 3		Main Boiler
	Various Steam Vents & Pressure Relief Valves	TR
	Condensate and Blow-down vents	TR
	Natural Gas Blow-off	TR

Attachment SU-E05-B6
 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Suwannee Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	Building Ventilation	TR
Electric Shop	Degreaser Non-halogenerated Solvent	ER/TR
	Routine Maintenance	TR
	Indoor Fugitives	TR
Storage Area	Water Treatment Chemicals 50 gal drums	TR
Steam Shop	Degreaser Non-halogenerated Solvent	TR
	Routine Maintenance	TR
	Indoor Fugitives & Small Sand Blasting Machine	TR
Water Lab ??	Solvent Use and Hood	ER/TR
Water Treatment	Neutralization Tanks (2)	TR
	Raw Water Tank	TR
	Demineralizers	TR
	Sodium Hydroxide	TR
	Sulfuric Acid	TR
	Neutralization Ponds	TR
	Water Washing Tank	TR
Natural Gas Station	Natural Gas Blow-off	TR

Attachment SU-E05-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Suwannee Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	Line Purge	TR
Gas Turbine 1	Two GTs per Generator	R ●
	Lube Oil Vent	ER UR ●
	Dump Tank Vent	ER UR ●
	Ventilation	TR
	Halon Fire System	ER/TR
Gas Turbine 2	Two GTs per Generator	R ●
	Lube Oil Vent	ER UR ●
	Dump Tank Vent	ER UR ●
	Ventilation	TR
	Halon Fire System	ER/TR
Gas Turbine 3	Two GTs per Generator	R ●
	Lube Oil Vent	ER UR ●
	Dump Tank Vent	ER UR ●
	Ventilation	TR
	Halon Fire System	ER/TR
Turbine	Turbine Air Compressors	TR
Turbine Shop	Degreaser Non-halogenerated Solvent	ER/TR
	Routine Maintenance	TR
	Indoor Fugitives & Small Sand Blasting Machine	TR

Attachment SU-E05-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Suwannee Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Fuel Storage	No. 2 Diesel Fuel Oil Tank	UR ●
	No. 6 High-Sulfur Fuel Oil (HSFO) Tank	UR ●
	No. 6 Low-Sulfur Fuel Oil (HSFO) Tank	UR ●
	No. 2 Unloading (3-Stations)	UR ●
	No. 6 HSFO Unloading (9-Stations)	UR ●
	No. 6 LSFO Unloading (4-Stations)	UR ●
	Propane Tank	TR
	Diesel Vehicle Tank E2	UR ●
	Gasoline Tank	UR ●
	Foam Fire Protection System	ER/TR
General Site	Surface Coating < 6.0 gal/day	ER/TR ●
	Brazing, Soldering or Welding	ER/TR
	Plant Grounds Maintenance	TR
	Routine Maintenance	TR
	Oil water separators	TR

Attachment SU-E05-B6
 General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Suwannee Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	CEM Equipment & Calibration Gas Venting	TR
	Compressed Air System & Misc. Compressors	TR
	Non-halogenerated Solvent	ER/TR
	Fire Water Tank	ER/TR
	Diesel Fire Pump	ER/TR
	Diesel Tank	ER
Offices	Office Equipment Operation	TR
	Routine Repairs	TR
	Heating & Cooling Systems	TR (except PMT 82)
Substation	Transformers and Associated Equipment	TR
Parking Lot	Vehicles	ER/TR
T&D Bldg.	Non-halogenerated Solvent	ER/TR
	Routine Maintenance	TR
	Indoor Fugitives	TR

210.300(3)(a) →
 misc. might be ER
 re fuel
 method



Status Key: TR = Trivial; ER = Exempt by Rule 62-210.300(3)(a);
 US = Unregulated; R= Regulated.

Attachment SU-E05-B6
General Emissions Unit Information

Table 2. FPC, Suwannee Plant, Petroleum Product Storage and Throughput Operations

FPC Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons)
CT #10	No. 2 fuel oil	4,315,920	23,926,500
CT #11	Waste oil	546	600
CT #12	Waste oil	546	600
CT #13	Waste oil	546	600
CT #14	Waste oil	546	600
CT #15	Waste oil	546	600
CT #16	Waste oil	546	600
CT #17	Waste oil	546	600
CT #18	Waste oil	546	600
CT #19	Waste oil	546	600
Plant #3	Unleaded gas	500	3,000
Plant #4	Diesel (generator) ER	250	500
Plant #5	Diesel (fire pump) ER	150	300
Plant #6	Diesel (vehicle) ER	500	750
Plant #7	No. 6 fuel oil	2,342,886	42,250,528
Plant #8	No. 6 fuel oil	3,405,276	61,409,180
	TOTAL	10,070,396	127,596,158