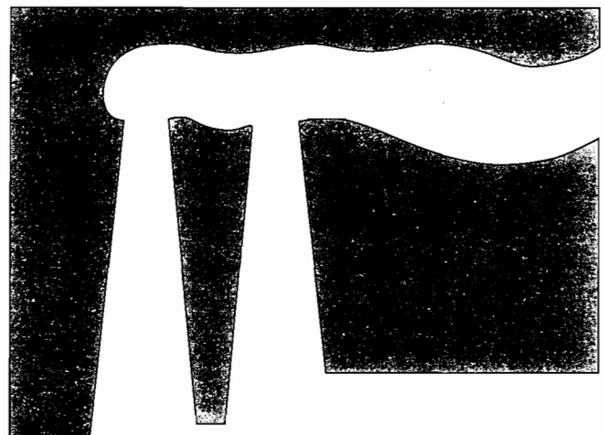
FLORIDA POWER CORPORATION
BAYBORO FACILITY

TITLE V
AIR OPERATING
PERMIT APPLICATION

Submitted to:
Florida Department of Environmental Protection

Prepared by:

KBN Engineering and Applied Sciences, Inc.
Gainesville, Florida



1. Application Information

(FOR INTERNAL USE ONLY)

State of Florida summary checklist for initial Title V permit applications for 'existing' Title V Sources

Facility Owner/Operator Name: Florida Power Corp.
Facility ID No.: 1 0 3 0 0 1 3 Site Name: Bayboro Facility
County: Pinellas
application receipt date 06/14/96

I. Preliminary scanning of application submitted.

a. Was application submitted to correct permitting authority? Y____ N✓
b. Was an application filed? Y*✓ N____
c. Was the application filed timely? Y*✓ N____

d. Application format filed [check one].
Hard copy of official version of form? ✓ ELSA? No
A facsimile of official version of form? ____ Some combination? ____

e. 4 copies (paper/electronic) submitted? Y✓ N____
CURRENT LOCATION: 2 COPIES TO TALLE WITH THIS SHEET, 1 COPY AT SWD, 1 COPY AT PINELLAS CTY.

f. Electronic diskettes protected/virus scanned/marked? Y____ N____ N/A✓ -J.KISSEL 6/29/98
see Note: by YRZ date 6/26/96

g. Entire hard copy of Section I. provided (Pages 1-8 of form)? Y✓ N____
Facility identified (Page 1)? [if not complete a Page 1] Y*✓ [Attached____]
R.O. certification signed and dated (Page 2)? Y*✓ N____
P.E. certification signed and dated (Page 7)? Y*✓ N____

h. Any confidential information submitted? Y____ N✓
If yes, R.O. provided hard copy to us and EPA? Y*____ N____
If yes, hard copy locked up and note filed with application? Y*____ N____

RECEIVED JUN 26 1996 BUREAU OF AIR REGULATION

i. Type of application filed.
TV application for 'existing' Title V Source only? Y✓ N____
Any units subject to acid rain? Y____ N✓

Note(s): [*] = mandatory.

Comment(s): a. Not Acid Rain, under PPS, or MWC.
Note: New discs rec'd 6-26-96 and virus r'd on 6-26-96. pa

Reviewer's initials JK date 06/17/96 Concurrence initials ____ date __/__/__

★ Copy of application sent to Pinellas County DEM by SWD JK

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: **Bayboro Plant**	
3. Facility Identification Number: **1030013**	[ ] Unknown
4. Facility Location Information: Street Address or Other Locator: **13th Ave and 2nd St South** City: **St.Petersburg** County: **Pinellas** Zip Code: **33711**	
5. Relocatable Facility? [ ] Yes [x] No	6. Existing Permitted Facility? [x] Yes [ ] No

Application Processing Information (DEP Use)

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

Owner/Authorized Representative or Responsible Official

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

W. Jeffrey Pardue, C.E.P., Director, Environmental Services

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

Organization/Firm: **Florida Power Corporation**
Street Address: **3201 34th Street South**
City: **St. Petersburg** State: **FL** Zip Code: **33711**

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

Telephone: **(813) 866-5151** Fax: **(813) 866-4926**

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative of the non-Title 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.*

Signature

6-12-96
Date

* 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	*	Peaking Gas Turbine Units 1-4	
2		Facility-wide Fugitive Emissions	
3R		3-820 kw Diesel Generators (Relocatable)	

See individual Emissions Unit (EU) sections for more detailed descriptions.
Multiple EU IDs indicated with an asterisk (*). Regulated EU indicated with an "R".

Purpose of Application and Category

Check one (except as otherwise indicated):

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

This Application for Air Permit is submitted to obtain:

[X] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

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

Current construction permit number: _____

Operation permit to be renewed: _____

[ ] 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** 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 [x] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

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

Kenneth F. Kutz — 6/9/96

Signature (seal) — Date

*Attach any exception to certification statement.

STATE OF FLORIDA REGISTERED ENGINEER KENNETH F. KUTZ CERTIFICATE NO. 14003

Application Contact

1. Name and Title of Application Contact:
   Scott Osbourn, Senior Environmental Engineer

2. Application Contact Mailing Address:

   Organization/Firm: **Florida Power Corporation**
   Street Address: **3201 34th Street South**
   City: **St. Petersburg** State: **FL** Zip Code: **33711**

3. Application Contact Telephone Numbers:

   Telephone: **(813) 866-5158** Fax: **(813) 866-4926**

Application Comment

See Attachment TVAI-1

ATTACHMENT TVAI-1

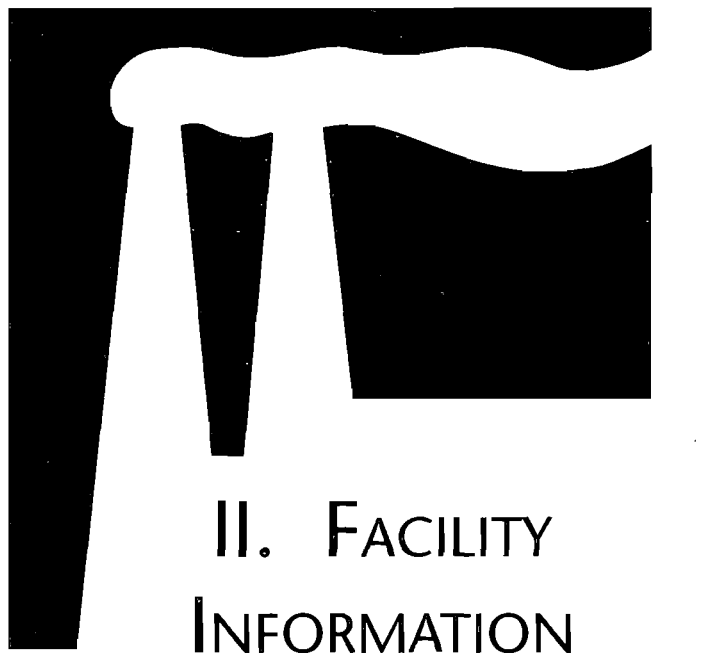
APPLICATION COMMENT

ATTACHMENT TVAI-1

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

Emission Units

	EU1 - Gas Turbines	EU2 - Facility-wide	EU3 - Diesel Gen.
General	4 peaking units	General activities	3 - 820 kW gen. (relocatable)
Emission Points	1 stack per turbine 2 turbines per unit	Fugitive emissions	1 stack per generator
Segments	No.2 fuel oil	Various	Distillate fuel oil
Pollutants	SO_2	NA	SO_2
VE Emissions	VE limits applicable	NA	VE limits applicable
CEM	None	NA	None
PSD	Existing Baseline Sources	NA	SO_2, PM10, NO_2



II. Facility Information

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates:
   Zone: **17** East (km): **338.8** North (km): **3071.3**

2. Facility Latitude/Longitude:
   Latitude (DD/MM/SS): **27 / 45 / 28** Longitude: (DD/MM/SS): **82 / 38 / 13**

3. Governmental Facility Code:	4. Facility Status Code:	5. Facility Major Group SIC Code:	6. Facility SIC(s):
0	**A**	**49**	

7. Facility Comment (limit to 500 characters):

The Bayboro Facility consists of 4 gas turbine peaking units. The peaking units are fired with No.2 fuel oil. Three diesel generators, 820 kW each, can be relocated at this plant or 6 other FPC plants based on need.

Facility Contact

1. Name and Title of Facility Contact:
   M.W. Lentz, Plant Manager

2. Facility Contact Mailing Address:
   Organization/Firm: **Florida Power Corporation**
   Street Address: **1300 Third Street South**
   City: **St. Petersburg** State: **FL** Zip Code: **33701**

3. Facility Contact Telephone Numbers:
   Telephone: **(813) 822-3655** Fax: **(813) 822-3655**

Facility Regulatory Classifications

1. Small Business Stationary Source? [ ] Yes [x] No [ ] Unknown
2. Title V Source? [x] Yes [ ] No
3. Synthetic Non-Title V Source? [ ] Yes, [x] No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? [x] Yes [ ] No
5. Synthetic Minor Source of Pollutants Other than HAPs? [ ] Yes [x] No
6. Major Source of Hazardous Air Pollutants (HAPs)? [ ] Yes [x] No
7. Synthetic Minor Source of HAPs? [ ] Yes [x] No
8. One or More Emissions Units Subject to NSPS? [ ] Yes [x] No
9. One or More Emissions Units Subject to NESHAP? [ ] Yes [x] No
10. Title V Source by EPA Designation? [ ] Yes [x] No
11. Facility Regulatory Classifications Comment (limit to 200 characters):

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 BY-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
VOC	Volatile Organic Compounds	A
SAM	Sulfuric Acid Mist	A
H133	Nickel Compounds	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:
   [X] Attached, Document ID: BY-FE-1
   [ ] Not Applicable [ ] Waiver Requested

2. Facility Plot Plan:
   [X] Attached, Document ID: BY-FE-2
   [ ] Not Applicable [ ] Waiver Requested

3. Process Flow Diagram(s):
   [X] Attached, Document ID(s): BY-FE-3
   [ ] Not Applicable [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [X] Attached, Document ID: BY-FE-4
   [ ] Not Applicable [ ] Waiver Requested

5. Fugitive Emissions Identification:
   [X] Attached, Document ID: BY-FE-5
   [ ] Not Applicable [ ] Waiver Requested

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

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities:
   [ ] Attached, Document ID: _____
   [X] Not Applicable

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

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

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

11. Identification of Additional Applicable Requirements:
[ ] Attached, Document ID: _____
[x] Not Applicable

12. Compliance Assurance Monitoring Plan:
[x] Attached, Document ID: **BY-FE-12**
[ ] Not Applicable

13. Risk Management Plan Verification:

[ ] Plan Submitted to Implementing Agency - Verification Attached
Document ID: _____

[x] Plan to be Submitted to Implementing Agency by Required Date

[ ] Not Applicable

14. Compliance Report and Plan
[x] Attached, Document ID: **BY-FE-14**
[ ] Not Applicable

15. Compliance Statement (Hard-copy Required)
[x] Attached, Document ID: **BY-FE-15**
[ ] Not Applicable

ATTACHMENT BY-FI-B

FACILITY REGULATIONS

ATTACHMENT BY-FI-B
FACILITY REGULATIONS

Applicable Requirements Listing - Power Plants

FACILITY: FPC Bayboro 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

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 ft^2 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

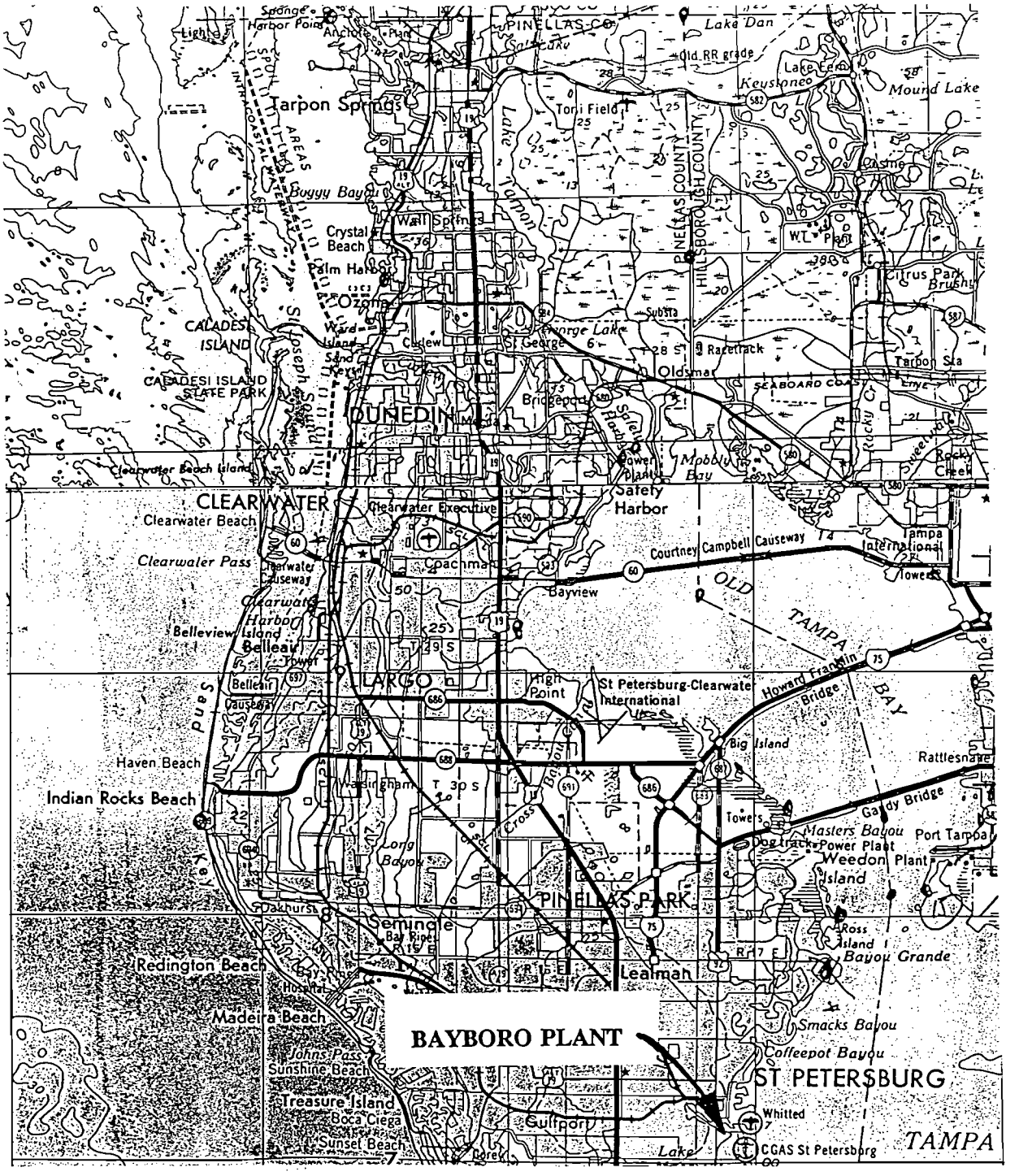
Stationary Sources-Emission Monitoring
62-297.310(7)(a)10. - Exemption of annual VE for 210.300(3)(a) sources/Gen. Per.

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 CRF 61.145 - Demolition and Renovation
40 CFR 61.148 - Standard for Insulating Material

ATTACHMENT BY-FE-1

AREA MAP



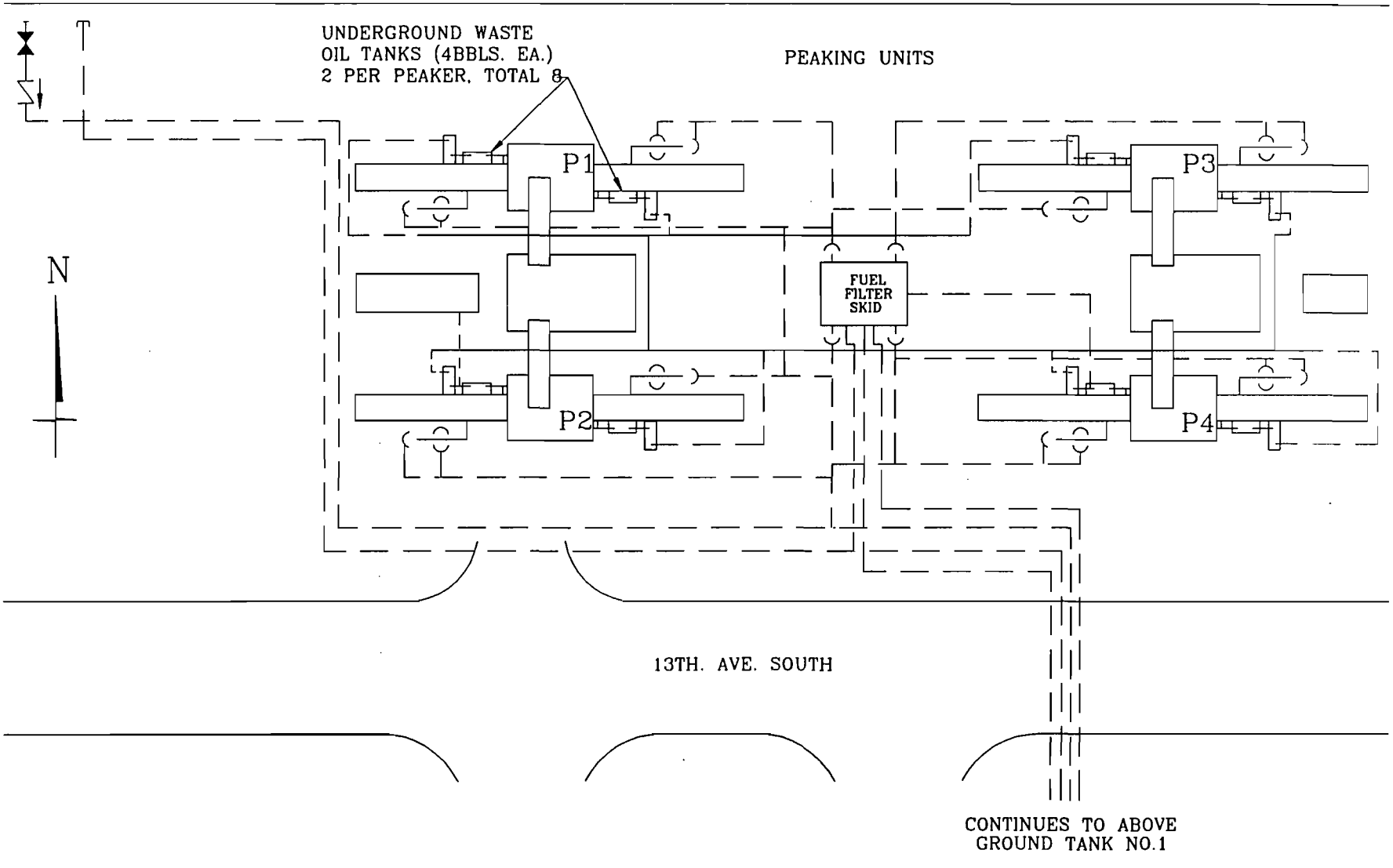
Attachment BY-FE-1
Area Map
Florida Power Corporation, Bayboro Plant

KBN
A GOLDER ASSOCIATES COMPANY

ATTACHMENT BY-FE-2

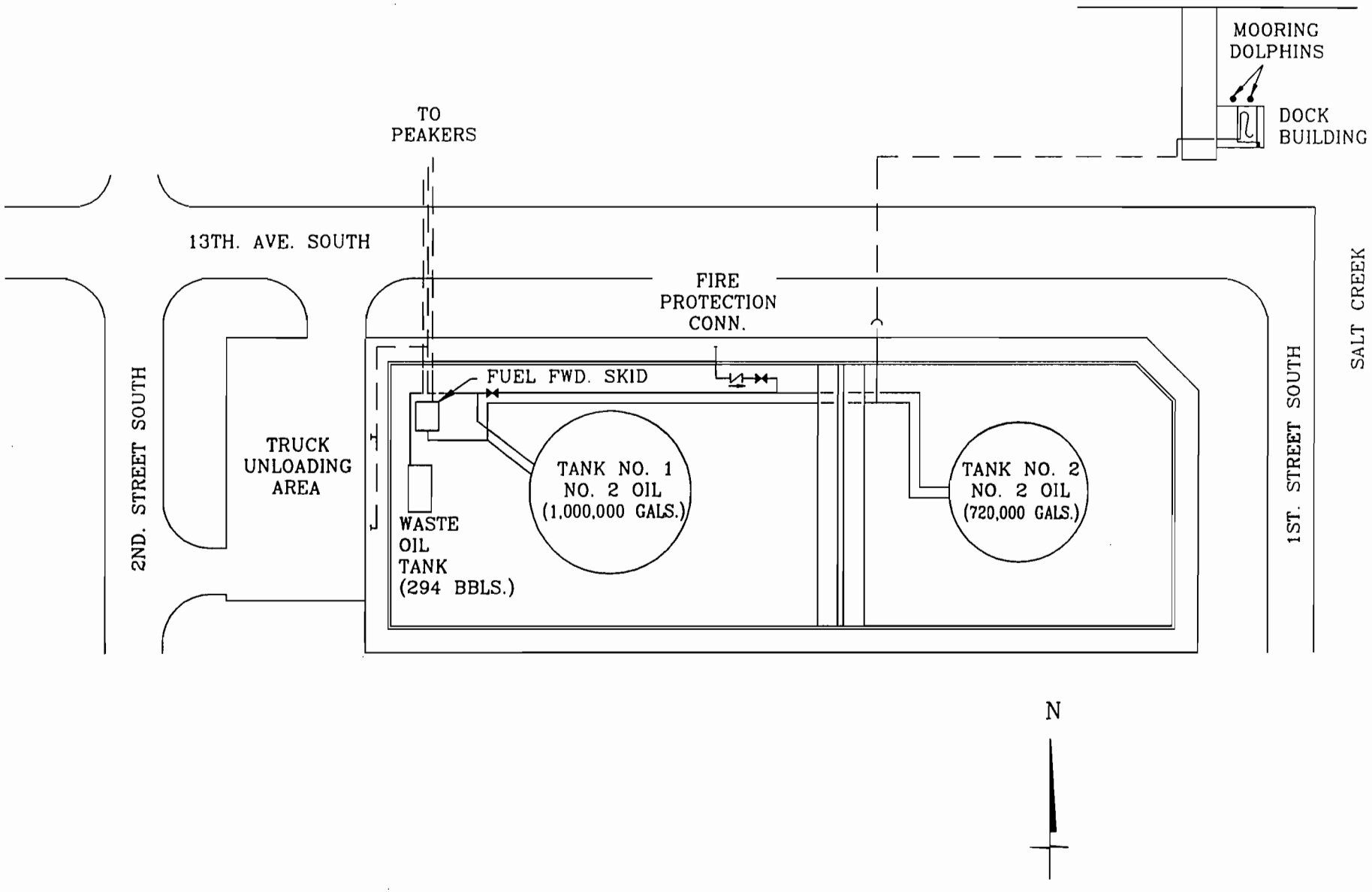
FACILITY PLOT PLAN

BAYBORO HARBOR



BAYBORO

BAYCOMP1.DWG

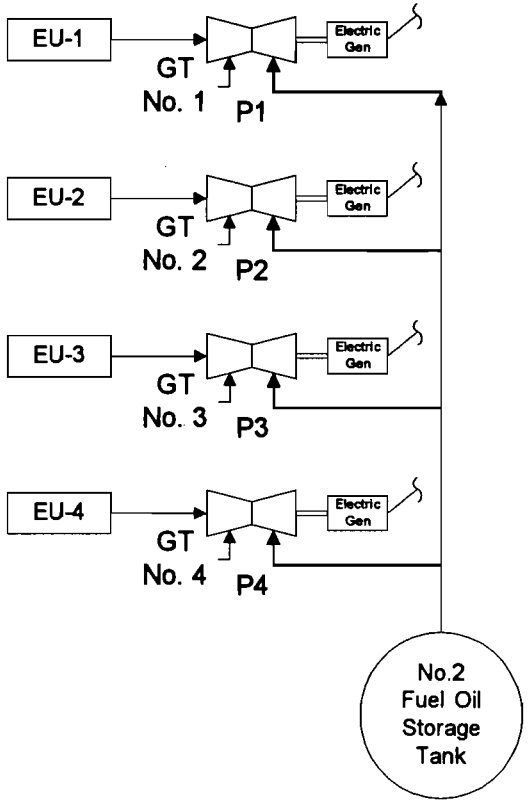


BAYBORO

BAYCOMP2.DWG

ATTACHMENT BY-FE-3

PROCESS FLOW DIAGRAM



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

Process Flow Legend Gas Flow Solid / Liquid Flow	Florida Power Corporation, Bayboro Plant Process Flow Diagram	*Emission Unit:* Overall Plant *Process Area:* Overall Plant *Filename:* FPCBY.VSD *Latest Revision Date:* 6/1/96 04:39 PM	KBN Engineering and Applied Sciences, Inc.

ATTACHMENT BY-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT BY-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

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

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

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 62-296.310(3), F.A.C.:

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

ATTACHMENT BY-FE-5

FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT BY-FE-5
FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as "trivial activities" (as presented in EPA's memorandum, "White Paper for Streamlined Development of Part 70 Permit Applications," July 10, 1995). As a result, these activities are not included as part of this permit application. For example, emissions from general plant maintenance and upkeep activities at the facility would be considered fugitive emissions, but have been judged to be trivial since these activities are not conducted as part of a manufacturing process, not related to the source's primary business activity, and do not otherwise trigger a permit modification.

Fugitive emissions that may result from the operation of activities that are not trivial at the facility are addressed in Emission Unit No. 2. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

FPC has not identified fugitive 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 emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation. VOCs are also emitted by the various fuel oil storage tanks on the plant property.

Fugitive HAPs Emissions

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

- asbestos
- 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.

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

Regulated Toxic or Flammable Substances

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

- acetylene

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

ATTACHMENT BY-FE-12

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT BY-FE-12

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

ATTACHMENT BY-FE-14

COMPLIANCE REPORT AND PLAN

COMPLIANCE REPORT AND PLAN

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

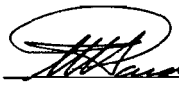
ATTACHMENT BY-FE-15

COMPLIANCE STATEMENT

ATTACHMENT BY-FE-15

COMPLIANCE STATEMENT

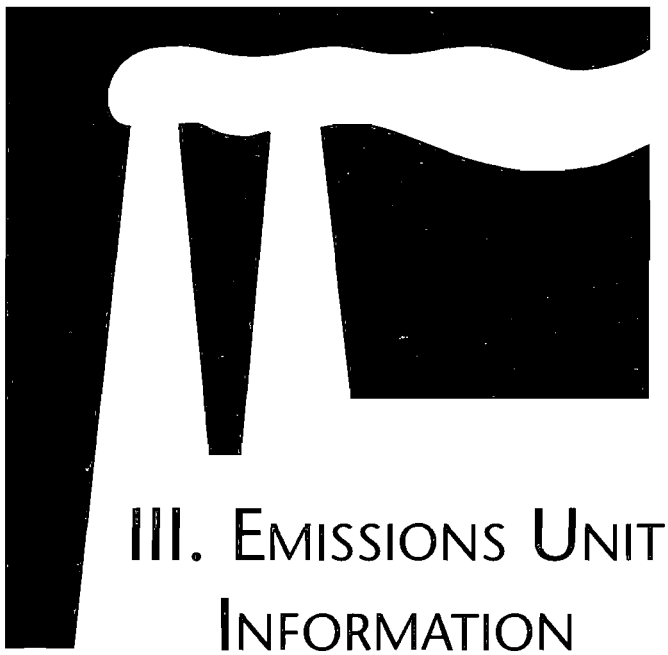
I, the undersigned, am the responsible official as defined in Chapter 62-213, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate, and complete.



Signature, Responsible Official

6-12-96
Date

W. Jeffrey Pardue, C.E.P., Director, Environmental Services



III. Emissions Unit Information

JNK/SHO

RECEIVED
JUN 20 1995
Environmental Svcs Department

Department of Environmental Protection

RTIFIED MAIL

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

In the Matter of Applications for Permits by:

DEP Files: AO52-253207A
AO52-253209A
AO52-253211A
AO52-253213A

Mr. W. Jeffrey Pardue, C.E.P.
Manager - Environmental
Florida Power Corporation
Post Office Box 14042, MAC H2G
St. Petersburg, Florida 33733

Pinellas County

NOTICE OF AMENDED PERMITS

Enclosed are amended air pollution operating permits AO52-253207A, AO52-253209A, AO52-253211A and AO52-253213A for the operation of the Bayboro Peaking Units Nos. 1, 2, 3 and 4, located at 13th Avenue & 2nd Street North, St. Petersburg, Florida, issued pursuant to Section 403.087, Florida Statutes.

These operation permits are being amended per the December 13, 1994 request from Mr. Scott Osbourn, Senior Environmental Engineer, Florida Power Corporation to change the compliance testing to 90-100% of the operating range for each turbine, to incorporate a corrected turbine heat input performance curve, and other changes.

SPECIAL NOTE: The Department is presently reviewing permitting guidance relative to testing of combustion turbines, and as a result of this review, the Department may develop and issue revised permitting guidelines in the future. Issuance of such revised policy or guidelines by the Department may cause these operational permits to be amended. Also, subsequent permitting of these sources per Chapter 62-213, *Operation Permits for Major Sources of Air Pollution (Title V)* will require an assessment of the applicability of Rule 62-296.700, *F.A.C., Reasonably Available Control Technology (RACT), Particulate Matter.*

A person whose substantial interests are affected by these permits 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
(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.

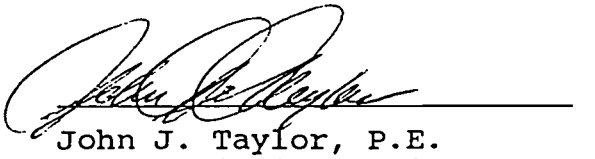
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this permit. Persons whose substantial interests will be affected by any decision of the Department with regard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

These permit amendments are 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 62-103.070, 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 (Permits) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Tampa, Florida.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION



John J. Taylor, P.E.
Air Permitting Engineer
3804 Coconut Palm Drive
Tampa, Florida 33619-8318
Phone: (813) 744-6100 x117

Enclosures

copy to: Mr. Gary Robbins, Environmental Manager,
Pinellas County Department of Environmental Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on JUN 19 1995 to the listed persons.

Clerk Stamp

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

Marilyn Quispe (Clerk) JUN 19 1995 (Date)

Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

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

PERMIT/PROJECT:
Permit: AO52-253207A
County: Pinellas
Original Issue: 11/23/94
Amended Date: 06/19/95
Expiration Date: 11/01/99
Project: Bayboro Peaking Unit No. 1

This amended permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-2 through 62-297. 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 an oil fired, gas turbine driven electrical generating unit rated at 56.7 MW. The unit is designated as the Bayboro Peaking Unit No. 1 and is composed of an Electric Machinery, Serial No. 171184701 electric generator driven by two Pratt & Whitney, Model No. FT4C-1LF gas turbines, designated as 1A (Engine Serial No. P686503, Turbine Serial No. P600406) and 1B (Engine Serial No. P686508, Turbine Serial No. P600407). The manufacturer's fuel flow and heat input ratings for the turbines are 132 barrels per hour and 774 MMBtu per hour, respectively. The unit can operate with one or both turbines in operation. The peak heat input rate of the turbines is a function of the ambient temperature as shown on the graph of *Fuel Heat Input versus Ambient Temperature* included in this permit. The turbines utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight.

Location: 13th Avenue and 2nd Street South, St. Petersburg
UTM: 17-338.80 km E 3071.27 km N
NEDS No: 0013
Point ID: 01

Replaces Permit AO52-253207, issued 11/23/94.

SPECIFIC CONDITIONS:

1. A part of this permit is the attached GENERAL CONDITIONS. [Rule 62-4.160, F.A.C.]

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-200 through 62-299, Florida Administrative Code, or any other requirements under federal, state or local law. [Rule 62-210.300, F.A.C.]

EMISSION LIMITATIONS

3. Visible emissions from Bayboro Peaking Unit No. 1 shall not be equal to or greater than 20% opacity. [Rule 62-296.310(2)(a), F.A.C.]

OPERATION LIMITATIONS

4. The hours of operation for Bayboro Peaking Unit No. 1 are not restricted (8760 hours per year). [Specified in permit application]

5. The peak heat input rate of the Bayboro Peaking Unit No. 1 turbines shall be determined from the graph of *Fuel Heat Input versus Ambient Temperature* shown on Page 8 of this permit using the daily average ambient temperature. [Rule 62-297.310(2)(a), F.A.C.]

6. The Bayboro Peaking Unit No. 1 shall only utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight. "New, No. 2 fuel oil" is defined as fuel oil that has been refined from crude oil and has not been used and which may or may not contain additives.

TESTING AND COMPLIANCE REQUIREMENTS

7. Test the Bayboro Peaking Unit No. 1 for visible emissions annually within 60 days prior to February 1. The visible emissions compliance test can be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if this peaking unit is not expected to use fuel oil for more than 400 hours during the next 12 months.

(Specific Condition No. 7, Continued On Next Page)

SPECIFIC CONDITIONS:

7. (Continued)

In order to request the annual visible emissions test waiver, a letter shall be sent each year, when the visible emissions test is due, to the Air Compliance Section, Southwest District Office of the Department of Environmental Protection, and to the Pinellas County Department of Environmental Management, Air Quality Division, stating the number of hours that fuel oil was utilized, and that the requirements for approval of the waiver have been satisfied. Include a copy of the fuel oil analysis with the waiver request. Regardless of fuel usage, a waiver will not be granted for the visible emission test for the 12 month period prior to permit renewal. A visible emissions test is required and shall be conducted during the 12 month period prior to permit renewal. (See Specific Condition No. 16).
[Rules 62-297.340(1)(d) and 62-297.340(1)(e), F.A.C.]

8. Compliance with the visible emission limitation of Specific Condition No. 3 shall be determined using DEP Method 9 and shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., *Stationary Sources - Emission Monitoring* and 40 CFR 60, Appendix A. [Rule 62-297.420, F.A.C.]

9. Testing of visible emissions should be conducted with the turbines operating within 90-100% of the peak heat input rate based on the average ambient air temperature during the test. The peak heat input rate is defined by the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 1 on Page 8 of this permit. The graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 1 is made a part of this permit. If it is not practical to test at the peak rate, then the source may be tested at less than the peak rate. In this case, subsequent source operation is then limited to 110 percent of the tested rate until a new test is conducted. Once the source is so limited, the maximum rate is then equal to 110 percent of the tested rate, and operation at a higher rate is only allowed for no more than 15 consecutive days for the purpose of additional compliance testing in order to regain the peak rate. Acceptance of a test by the Department of Environmental Protection will automatically amend this permit to a new maximum rate, but the new maximum rate shall not exceed the peak rate.
[Rules 62-297.570(2), 62-297.570(3), and 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

MONITORING REQUIREMENTS

10. In order to document compliance with Specific Condition No. 6, and provide reasonable assurance that new, No. 2 fuel oil is being utilized and that the fuel oil sulfur content limit of 0.5%, by weight, is not exceeded, the permittee shall provide, for each fuel oil delivery, either:

(1) a fuel oil analysis from a fuel oil sample, indicating the sulfur content. The fuel oil analysis shall be determined by the ASTM D-129 method referenced in 40 CFR 60.17 (July 1, 1991), or a Department approved alternate test method, or

(2) a certification of fuel oil analysis, indicating the sulfur content, obtained from the fuel oil supplier for the fuel oil delivered.

This information shall be maintained for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, upon request. [Permit AO52-167163 and Rule 62-4.070(3), F.A.C.]

11. In order to provide reasonable assurance that the fuel oil supplier's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the calendar year period. The fuel oil analysis shall be analyzed for the following:

Btu content
API Gravity
Density
Sulfur content, percent by weight

An audit sample analysis is not required in any calendar year for which the oil supplier certifications were not used to demonstrate compliance with the fuel oil sulfur limitation. Records must be kept for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167163 and Rule 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

NOTIFICATION REQUIREMENTS

12. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which each compliance test is to begin. [Rule 62-297.340(1)(i), F.A.C.]

REPORTING REQUIREMENTS

13. Submit to the Southwest District Office, Air Compliance Section of the Department of Environmental Protection, and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DEP Form 62-210.900(5), *"Annual Operating Report for Air Pollutant Emitting Facility"*, including the *Emissions Report*, for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

The *Annual Operating Report* shall be based on the following:

(1) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis.

(2) Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions (pounds per hour, and tons per year), for the *Annual Operating Report*, by multiplying the total MMBtu from fuel usage by the following emission factors:

	Emission Factors No. 2 Fuel Oil Pounds per MMBtu
Particulate Matter (PM)	0.061 (Total)
PM10	0.48PM
Carbon Monoxide	0.048
Sulfur Dioxide	1.01s
Nitrogen Oxides	0.698
Hydrocarbons (TOC)	0.017

(Specific Condition No. 13, Continued On Next Page)

SPECIFIC CONDITIONS:

13. (Continued)

's' denotes sulfur content, percent by weight. The sulfur dioxide emissions shall be based on a weighted 12 month average 's' value. [Emission factors from AP-42, Table 3.1-1 (7/93)]

NOTE: For reference only, based on the original permit application (at approximately 30 °F), the peak performance of the Bayboro Peaking Unit No. 1. is:

Electrical Generating Rate:	56.7 MW per hour
Heat Input Rate:	774.0 MMBtu per hour
Fuel Usage Rate:	132.0 Barrels per hour

Based on AP-42 emission factors, the following are the potential emission rates expected from this peaking unit and are included for informational purposes only:

	Pounds per Hour	Tons per Year
Particulate Matter (Total)	47.21	206.80
PM10	22.66	99.26
Carbon Monoxide	37.15	162.73
Sulfur Dioxide	390.87	1712.01
Nitrogen Oxides	540.25	2366.30
Hydrocarbons (TOC)	13.16	57.63

14. Submit a copy of the visible emissions test reports required by Specific Condition Nos. 7 and 16, to the Pinellas County Department of Environmental Management, Air Quality Division, within 45 days of testing. Each test report shall include:

(1) a statement of the maximum turbine performance based on the turbine performance criteria defined by Specific Condition No. 5;

(2) a copy of the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 1 noting the maximum heat input and the ambient temperature during the compliance test; and

(3) a copy of the fuel oil analysis.

[Rules 62-297.570(2), and 62-297.570(3), F.A.C.]

SPECIFIC CONDITIONS:

RECORDKEEPING REQUIREMENTS

15. Florida Power Corporation shall maintain a monthly record of the hours of operation of the peaking unit. This record shall be updated monthly and shall be completed by the end of the following month. The records shall be maintained at the facility for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167163 and Rule 62-4.070(3), F.A.C.]

PERMIT RENEWAL

16. A visible emissions test must be conducted, per Specific Condition No. 3, during the 12 month period prior to permit renewal. [Rule 62-297.340(1)(c), F.A.C.]

17. Florida Power Corporation is subject to the permitting requirements of Rule 62-213.420, *F.A.C. - Operation Permits for Major Sources of Air Pollution*, Permit Applications, and shall apply for a Title V operation permit by submitting a completed application, DEP Form 62-210.900(1), to the Division of Air Resources Management, Bureau of Air Regulation, Department of Environmental Protection (Tallahassee) by the appropriate date referenced in Rule 62-213.420(1)(a), F.A.C. The application shall include the test results from Specific Condition No. 16. A copy of the application and the test results from Specific Condition No. 16 shall also be submitted to the Air Permitting Section of the Southwest District Office (Tampa), the Department of Environmental Protection and to the Pinellas County Department of Environmental Management, Air Quality Division. [Rules 62-4.090(1) and 62-213.420, F.A.C.]

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

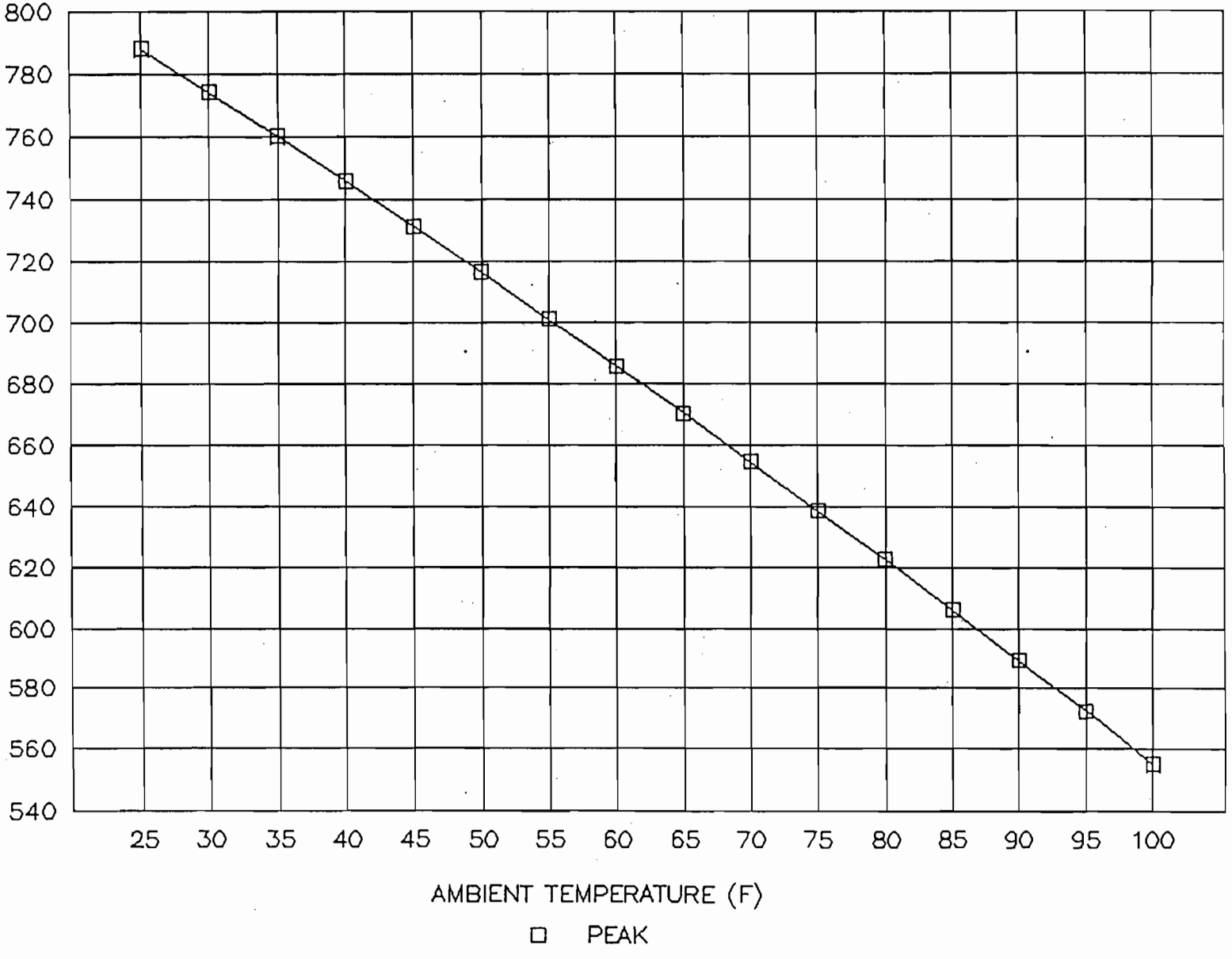
W. C. Thomas

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

5fpc207a.pmt

BAYBORO COMBUSTION TURBINE

FUEL HEAT INPUT vs AMBIENT TEMPERATURE



ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

GENERAL CONDITIONS:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

GENERAL CONDITIONS:

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. 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.

Department of
Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

RECEIVED
JUN 20 1995
Environmental Svcs
Department

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

PERMIT/PROJECT:
Permit: AO52-253209A
County: Pinellas
Original Issue: 11/23/94
Amended Date: 06/19/95
Expiration Date: 11/01/99
Project: Bayboro Peaking Unit No. 2

This amended permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-2 through 62-297. 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 an oil fired, gas turbine driven electrical generating unit rated at 56.7 MW. The unit is designated as the Bayboro Peaking Unit No. 2 and is composed of an Electric Machinery, Serial No. 371184701 electric generator driven by two Pratt & Whitney, Model No. FT4C-1LF gas turbines, designated as 2A (Engine Serial No. P686501, Turbine Serial No. P600400) and 2B (Engine Serial No. P686514, Turbine Serial No. P600401). The manufacturer's fuel flow and heat input ratings for the turbines are 132 barrels per hour and 774 MMBtu per hour, respectively. The unit can operate with one or both turbines in operation. The peak heat input rate of the turbines is a function of the ambient temperature as shown on the graph of *Fuel Heat Input versus Ambient Temperature* included in this permit. The turbines utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight.

Location: 13th Avenue and 2nd Street South, St. Petersburg
UTM: 17-338.80 km E 3071.27 km N
NEDS No: 0013
Point ID: 02

Replaces Permit AO52-253209, issued 11/23/94

SPECIFIC CONDITIONS:

1. A part of this permit is the attached GENERAL CONDITIONS. [Rule 62-4.160, F.A.C.]

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-200 through 62-299, Florida Administrative Code, or any other requirements under federal, state or local law. [Rule 62-210.300, F.A.C.]

EMISSION LIMITATIONS

3. Visible emissions from Bayboro Peaking Unit No. 2 shall not be equal to or greater than 20% opacity. [Rule 62-296.310(2)(a), F.A.C.]

OPERATION LIMITATIONS

4. The hours of operation for Bayboro Peaking Unit No. 2 are not restricted (8760 hours per year). [Specified in permit application]

5. The peak heat input rate of the Bayboro Peaking Unit No. 2 turbines shall be determined from the graph of *Fuel Heat Input versus Ambient Temperature* shown on Page 8 of this permit using the daily average ambient temperature. [Rule 62-297.310(2)(a), F.A.C.]

6. The Bayboro Peaking Unit No. 2 shall only utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight. "New, No. 2 fuel oil" is defined as fuel oil that has been refined from crude oil and has not been used and which may or may not contain additives.

TESTING AND COMPLIANCE REQUIREMENTS

7. Test the Bayboro Peaking Unit No. 2 for visible emissions annually within 60 days prior to February 1. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if this peaking unit is not expected to use fuel oil for more than 400 hours during the next 12 months.

(Specific Condition No. 7, Continued On Next Page)

SPECIFIC CONDITIONS:

7. (Continued)

In order to request the annual visible emissions test waiver, a letter shall be sent each year, when the visible emissions test is due, to the Air Compliance Section, Southwest District Office of the Department of Environmental Protection, and to the Pinellas County Department of Environmental Management, Air Quality Division, stating the number of hours that fuel oil was utilized, and that the requirements for approval of the waiver have been satisfied. Include a copy of the fuel oil analysis with the waiver request. Regardless of fuel usage, a waiver will not be granted for the visible emission test for the 12 month period prior to permit renewal. A visible emissions test is required and shall be conducted during the 12 month period prior to permit renewal. (See Specific Condition No. 16).
[Rules 62-297.340(1)(d) and 62-297.340(1)(e), F.A.C.]

8. Compliance with the visible emission limitation of Specific Condition No. 3 shall be determined using DEP Method 9 and shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., *Stationary Sources - Emission Monitoring* and 40 CFR 60, Appendix A. [Rule 62-297.420, F.A.C.]

9. Testing of visible emissions should be conducted with the turbines operating within 90-100% of the peak heat input rate based on the average ambient air temperature during the test. The peak heat input rate is defined by the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 2 on Page 8 of this permit. The graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 2 is made a part of this permit. If it is not practical to test at the peak rate, then the source may be tested at less than the peak rate. In this case, subsequent source operation is then limited to 110 percent of the tested rate until a new test is conducted. Once the source is so limited, the maximum rate is then equal to 110 percent of the tested rate, and operation at a higher rate is only allowed for no more than 15 consecutive days for the purpose of additional compliance testing in order to regain the peak rate. Acceptance of a test by the Department of Environmental Protection will automatically amend this permit to a new maximum rate, but the new maximum rate shall not exceed the peak rate.
[Rules 62-297.570(2), 62-297.570(3), and 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

MONITORING REQUIREMENTS

10. In order to document compliance with Specific Condition No. 6, and provide reasonable assurance that new, No. 2 fuel oil is being utilized and that the fuel oil sulfur content limit of 0.5%, by weight, is not exceeded, the permittee shall provide, for each fuel oil delivery, either:

(1) a fuel oil analysis from a fuel oil sample, indicating the sulfur content. The fuel oil analysis shall be determined by the ASTM D-129 method referenced in 40 CFR 60.17 (July 1, 1991), or a Department approved alternate test method, or

(2) a certification of fuel oil analysis, indicating the sulfur content, obtained from the fuel oil supplier for the fuel oil delivered.

This information shall be maintained for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, upon request. [Permit AO52-167164 and Rule 62-4.070(3), F.A.C.]

11. In order to provide reasonable assurance that the fuel oil supplier's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the calendar year period. The fuel oil analysis shall be analyzed for the following:

Btu content
API Gravity
Density
Sulfur content, percent by weight

An audit sample analysis is not required in any calendar year for which the oil supplier certifications were not used to demonstrate compliance with the fuel oil sulfur limitation. Records must be kept for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167164 and Rule 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

NOTIFICATION REQUIREMENTS

12. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which each compliance test is to begin. [Rule 62-297.340(1)(i), F.A.C.]

REPORTING REQUIREMENTS

13. Submit to the Southwest District Office, Air Compliance Section of the Department of Environmental Protection, and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DEP Form 62-213.900(5), *"Annual Operating Report for Air Pollutant Emitting Facility"*, including the *Emissions Report*, for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

The *Annual Operating Report* shall be based on the following:

(1) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis.

(2) Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions (pounds per hour, and tons per year), for the *Annual Operating Report*, by multiplying the total MMBtu from fuel usage by the following emission factors:

	Emission Factors No. 2 Fuel Oil Pounds per MMBtu
Particulate Matter (PM)	0.061 (Total)
PM10	0.48PM
Carbon Monoxide	0.048
Sulfur Dioxide	1.01s
Nitrogen Oxides	0.698
Hydrocarbons (TOC)	0.017

(Specific Condition No. 13, Continued On Next Page)

SPECIFIC CONDITIONS:

13. (Continued)

's' denotes sulfur content, percent by weight. The sulfur dioxide emissions shall be based on a weighted 12 month average 's' value. [Emission factors from AP-42, Table 3.1-1 (7/93)]

NOTE: For reference only, based on the original permit application (at approximately 30 °F), the peak performance of the Bayboro Peaking Unit No. 2 is:

Electrical Generating Rate:	56.7 MW per hour
Heat Input Rate:	774.0 MMBtu per hour
Fuel Usage Rate:	132.0 Barrels per hour

Based on AP 42 emission factors, the following are the potential emission rates expected from this peaking unit and are included for informational purposes only:

	Pounds per Hour	Tons per Year
Particulate Matter (Total)	47.21	206.80
PM10	22.66	99.26
Carbon Monoxide	37.15	162.73
Sulfur Dioxide	390.87	1712.01
Nitrogen Oxides	540.25	2366.30
Hydrocarbons (TOC)	13.16	57.63

14. Submit a copy of the visible emissions test reports required by Specific Condition Nos. 7 and 16, to the Pinellas County Department of Environmental Management, Air Quality Division, within 45 days of testing. Each test report shall include:

(1) a statement of the maximum turbine performance based on the turbine performance criteria defined by Specific Condition No. 5;

(2) a copy of the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 2 noting the maximum heat input and the ambient temperature during the compliance test; and

(3) a copy of the fuel oil analysis.

[Rules 62-297.570(2), and 62-297.570(3), F.A.C.]

SPECIFIC CONDITIONS:

RECORDKEEPING REQUIREMENTS

15. Florida Power Corporation shall maintain a monthly record of the hours of operation of the peaking unit. This record shall be updated monthly and shall be completed by the end of the following month. The records shall be maintained at the facility for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167164 and Rule 62-4.070(3), F.A.C.]

PERMIT RENEWAL

16. A visible emissions test must be conducted, per Specific Condition No. 3, during the 12 month period prior to permit renewal. [Rule 62-297.340(1)(c), F.A.C.]

17. Florida Power Corporation is subject to the permitting requirements of Rule 62-213.420, *F.A.C. - Operation Permits for Major Sources of Air Pollution*, Permit Applications, and shall apply for a Title V operation permit by submitting a completed application, DEP Form 62-210.900(1), to the Division of Air Resources Management, Bureau of Air Regulation, Department of Environmental Protection (Tallahassee) by the appropriate date referenced in Rule 62-213.420(1)(a), F.A.C. The application shall include the test results from Specific Condition No. 16. A copy of the application and the test results from Specific Condition No. 16 shall also be submitted to the Air Permitting Section of the Southwest District Office (Tampa), the Department of Environmental Protection and to the Pinellas County Department of Environmental Management, Air Quality Division. [Rules 62-4.090(1) and 62-213.420, F.A.C.]

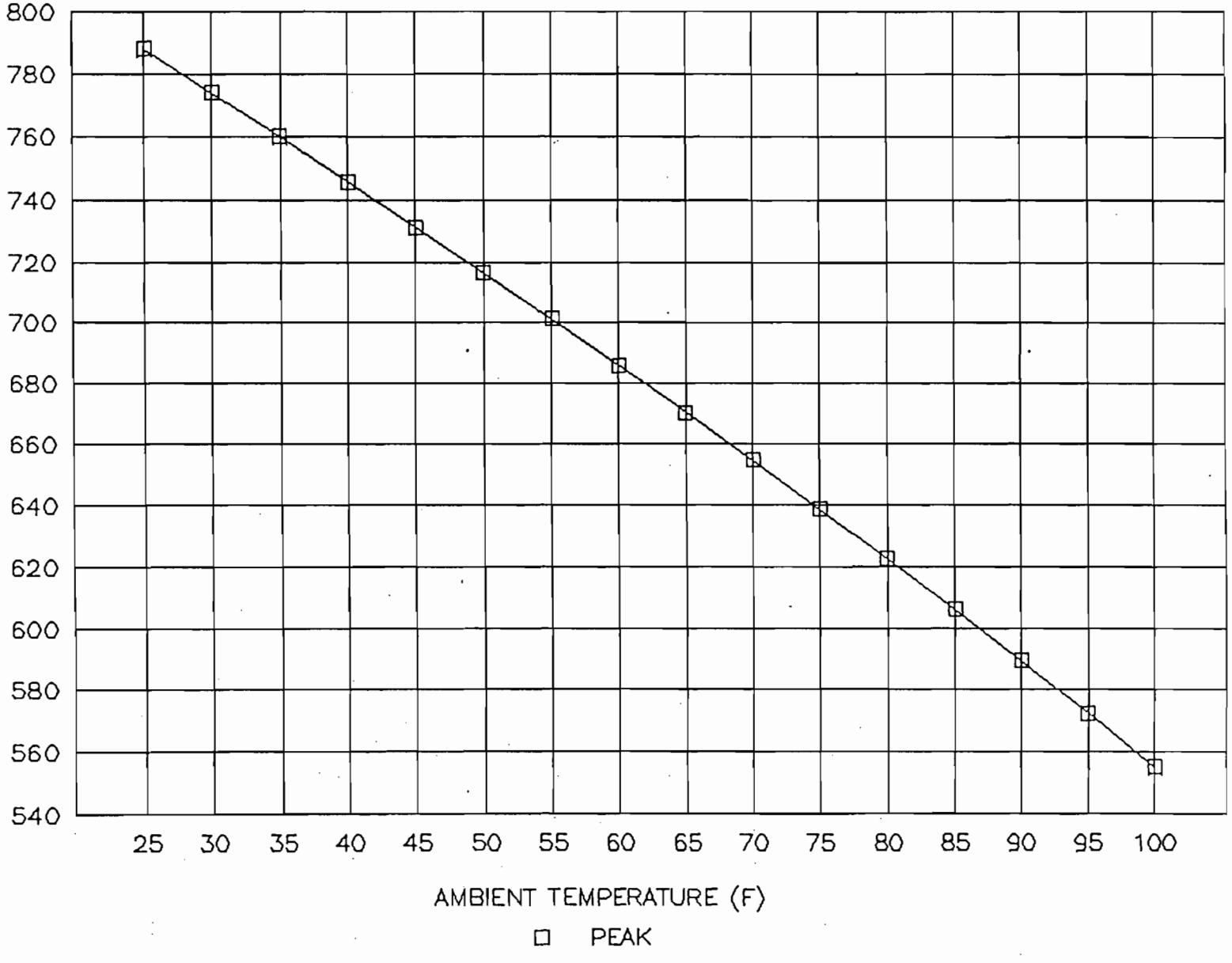
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

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

5fpc209a.pmt

BAYBORO COMBUSTION TURBINE

FUEL HEAT INPUT vs AMBIENT TEMPERATURE



Department of
Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

RECEIVED
JUN 20 1995
Environmental Svcs
Department

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

PERMIT/PROJECT:
Permit: AO52-253211A
County: Pinellas
Original Issue: 11/23/94
Amended Date: 06/19/95
Expiration Date: 11/01/99
Project: Bayboro Peaking Unit No. 3

This amended permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-2 through 62-297. 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 an oil fired, gas turbine driven electrical generating unit rated at 56.7 MW. The unit is designated as the Bayboro Peaking Unit No. 3 and is composed of an Electric Machinery, Serial No. 271184701 electric generator driven by two Pratt & Whitney, Model No. FT4C-1LF gas turbines, designated as 3A (Engine Serial No. P686511, Turbine Serial No. P600405) and 3B (Engine Serial No. P686507, Turbine Serial No. P600402). The manufacturer's fuel flow and heat input ratings for the turbines are 132 barrels per hour and 774 MMBtu per hour, respectively. The unit can operate with one or both turbines in operation. The peak heat input rate of the turbines is a function of the ambient temperature as shown on the graph of *Fuel Heat Input versus Ambient Temperature* included in this permit. The turbines utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight.

Location: 13th Avenue and 2nd Street South, St. Petersburg
UTM: 17-338.80 km E 3071.27 km N
NEDS No: 0013
Point ID: 03

Replaces Permit AO52-253211, issued 11/23/94

SPECIFIC CONDITIONS:

1. A part of this permit is the attached GENERAL CONDITIONS. [Rule 62-4.160, F.A.C.]

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-200 through 62-299, Florida Administrative Code, or any other requirements under federal, state or local law. [Rule 62-210.300, F.A.C.]

EMISSION LIMITATIONS

3. Visible emissions from Bayboro Peaking Unit No. 3 shall not be equal to or greater than 20% opacity. [Rule 62-296.310(2)(a), F.A.C.]

OPERATION LIMITATIONS

4. The hours of operation for Bayboro Peaking Unit No. 3 are not restricted (8760 hours per year). [Specified in permit application]

5. The peak heat input rate of the Bayboro Peaking Unit No. 3 turbine shall be determined from the graph of *Fuel Heat Input versus Ambient Temperature* shown on Page 8 of this permit using the daily average ambient temperature. [Rule 62-297.310(2)(a), F.A.C.]

6. The Bayboro Peaking Unit No. 3 shall only utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight. "New, No. 2 fuel oil" is defined as fuel oil that has been refined from crude oil and has not been used and which may or may not contain additives.

TESTING AND COMPLIANCE REQUIREMENTS

7. Test the Bayboro Peaking Unit No. 3 for visible emissions annually within 60 days prior to February 1. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if this peaking unit is not expected to use fuel oil for more than 400 hours during the next 12 months.

(Specific Condition No. 7, Continued On Next Page)

SPECIFIC CONDITIONS:

7. (Continued)

In order to request the annual visible emissions test waiver, a letter shall be sent each year, when the visible emissions test is due, to the Air Compliance Section, Southwest District Office of the Department of Environmental Protection, and to the Pinellas County Department of Environmental Management, Air Quality Division, stating the number of hours that fuel oil was utilized, and that the requirements for approval of the waiver have been satisfied. Include a copy of the fuel oil analysis with the waiver request. Regardless of fuel usage, a waiver will not be granted for the visible emission test for the 12 month period prior to permit renewal. A visible emissions test is required and shall be conducted during the 12 month period prior to permit renewal. (See Specific Condition No. 16).
[Rules 62-297.340(1)(d) and 62-297.340(1)(e), F.A.C.]

8. Compliance with the visible emission limitation of Specific Condition No. 3 shall be determined using DEP Method 9 and shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., *Stationary Sources - Emission Monitoring* and 40 CFR 60, Appendix A. [Rule 62-297.420, F.A.C.]

9. Testing of visible emissions should be conducted with the turbines operating within 90-100% of the peak heat input rate based on the average ambient air temperature during the test. The peak heat input rate is defined by the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 3 on Page 8 of this permit. The graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 3 is made a part of this permit. If it is not practical to test at the peak rate, then the source may be tested at less than the peak rate. In this case, subsequent source operation is then limited to 110 percent of the tested rate until a new test is conducted. Once the source is so limited, the maximum rate is then equal to 110 percent of the tested rate, and operation at a higher rate is only allowed for no more than 15 consecutive days for the purpose of additional compliance testing in order to regain the peak rate. Acceptance of a test by the Department of Environmental Protection will automatically amend this permit to a new maximum rate, but the new maximum rate shall not exceed the peak rate.
[Rules 62-297.570(2), 62-297.570(3), and 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

MONITORING REQUIREMENTS

10. In order to document compliance with Specific Condition No. 6, and provide reasonable assurance that new, No. 2 fuel oil is being utilized and that the fuel oil sulfur content limit of 0.5%, by weight, is not exceeded, the permittee shall provide, for each fuel oil delivery, either:

(1) a fuel oil analysis from a fuel oil sample, indicating the sulfur content. The fuel oil analysis shall be determined by the ASTM D-129 method referenced in 40 CFR 60.17 (July 1, 1991), or a Department approved alternate test method, or

(2) a certification of fuel oil analysis, indicating the sulfur content, obtained from the fuel oil supplier for the fuel oil delivered.

This information shall be maintained for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, upon request. [Permit AO52-167165 and Rule 62-4.070(3), F.A.C.]

11. In order to provide reasonable assurance that the fuel oil supplier's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the calendar year period. The fuel oil analysis shall be analyzed for the following:

Btu content
API Gravity
Density
Sulfur content, percent by weight

An audit sample analysis is not required in any calendar year for which the oil supplier certifications were not used to demonstrate compliance with the fuel oil sulfur limitation. Records must be kept for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167165 and Rule 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

NOTIFICATION REQUIREMENTS

12. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which each compliance test is to begin. [Rule 62-297.340(1)(i), F.A.C.]

REPORTING REQUIREMENTS

13. Submit to the Southwest District Office, Air Compliance Section of the Department of Environmental Protection, and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DEP Form 62-213.900(5), *"Annual Operating Report for Air Pollutant Emitting Facility"*, including the *Emissions Report*, for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

The *Annual Operating Report* shall be based on the following:

(1) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis.

(2) Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions (pounds per hour, and tons per year), for the *Annual Operating Report*, by multiplying the total MMBtu from fuel usage by the following emission factors:

	Emission Factors No. 2 Fuel Oil Pounds per MMBtu
Particulate Matter (PM)	0.061 (Total)
PM10	0.48PM
Carbon Monoxide	0.048
Sulfur Dioxide	1.01s
Nitrogen Oxides	0.698
Hydrocarbons (TOC)	0.017

(Specific Condition No. 13, Continued On Next Page)

SPECIFIC CONDITIONS:

13. (Continued)

's' denotes sulfur content, percent by weight. The sulfur dioxide emissions shall be based on a weighted 12 month average 's' value. [Emission factors from AP-42, Table 3.1-1 (7/93)]

NOTE: For reference only, based on the original permit application (at approximately 30 °F), the peak performance for the Bayboro Peaking Unit No. 3 is:

Electrical Generating Rate:	56.7 MW per hour
Heat Input Rate:	774.0 MMBtu per hour
Fuel Usage Rate:	132.0 Barrels per hour

Based AP-42 emission factors, the following are the potential emission rates expected from this peaking unit and are included for informational purposes only:

	Pounds per Hour	Tons per Year
Particulate Matter (Total)	47.21	206.80
PM10	22.66	99.26
Carbon Monoxide	37.15	162.73
Sulfur Dioxide	390.87	1712.01
Nitrogen Oxides	540.25	2366.30
Hydrocarbons (TOC)	13.16	57.63

14. Submit a copy of the visible emissions test reports required by Specific Condition Nos. 7 and 16, to the Pinellas County Department of Environmental Management, Air Quality Division, within 45 days of testing. Each test report shall include:

(1) a statement of the maximum turbine performance based on the turbine performance criteria defined by Specific Condition No. 5;

(2) a copy of the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 3 noting the maximum heat input and the ambient temperature during the compliance test; and

(3) a copy of the fuel oil analysis.

[Rules 62-297.570(2), and 62-297.570(3), F.A.C.]

SPECIFIC CONDITIONS:

RECORDKEEPING REQUIREMENTS

15. Florida Power Corporation shall maintain a monthly record of the hours of operation of the peaking unit. This record shall be updated monthly and shall be completed by the end of the following month. The records shall be maintained at the facility for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167165 and Rule 62-4.070(3), F.A.C.]

PERMIT RENEWAL

16. A visible emissions test must be conducted, per Specific Condition No. 3, during the 12 month period prior to permit renewal. [Rule 62-297.340(1)(c), F.A.C.]

17. Florida Power Corporation is subject to the permitting requirements of Rule 62-213.420, *F.A.C. - Operation Permits for Major Sources of Air Pollution*, Permit Applications, and shall apply for a Title V operation permit by submitting a completed application, DEP Form 62-210.900(1), to the Division of Air Resources Management, Bureau of Air Regulation, Department of Environmental Protection (Tallahassee) by the appropriate date referenced in Rule 62-213.420(1)(a), F.A.C. The application shall include the test results from Specific Condition No. 16. A copy of the application and the test results from Specific Condition No. 16 shall also be submitted to the Air Permitting Section of the Southwest District Office (Tampa), the Department of Environmental Protection and to the Pinellas County Department of Environmental Management, Air Quality Division. [Rules 62-4.090(1) and 62-213.420, F.A.C.]

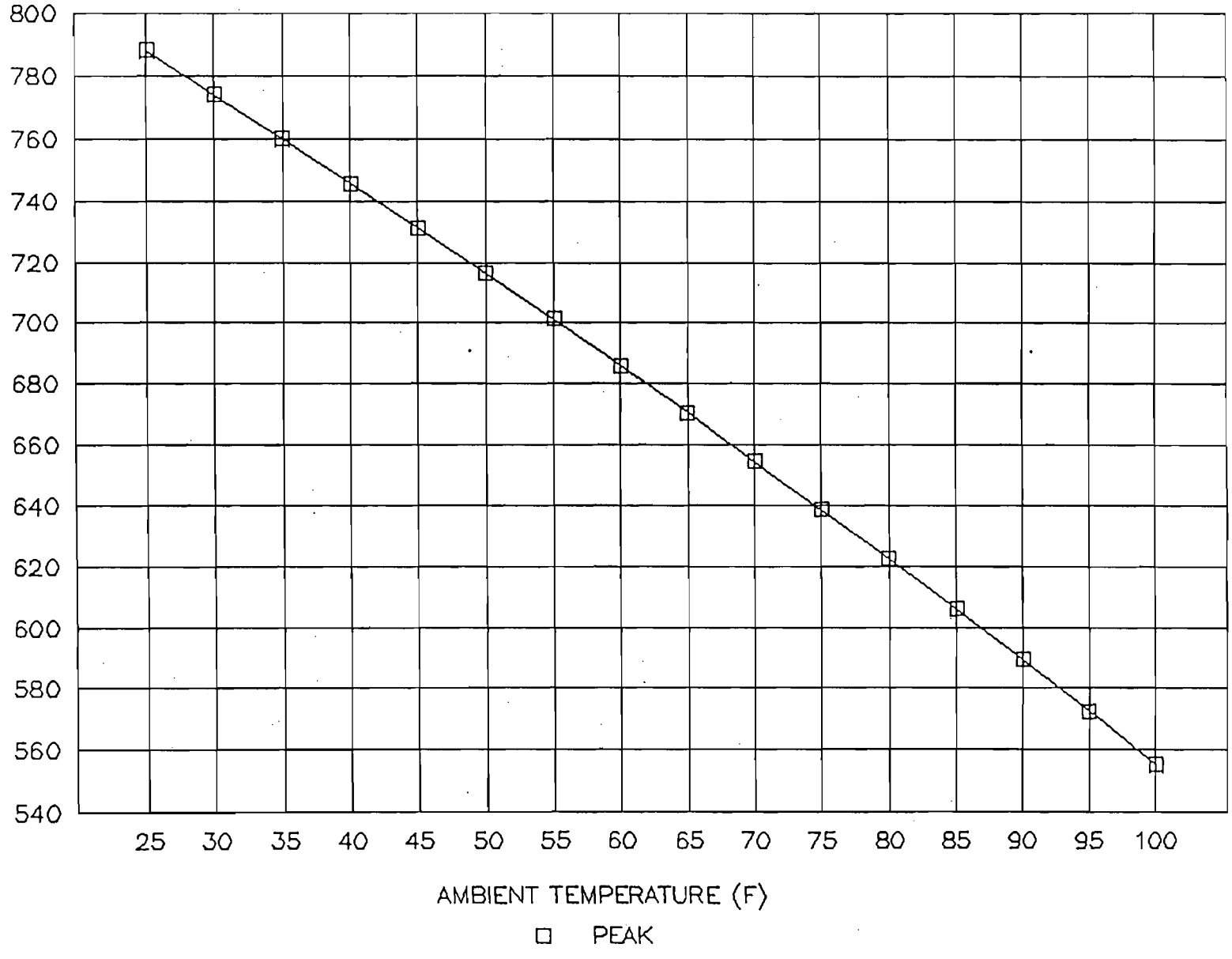
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

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

5fpc211a.pmt

BAYBORO COMBUSTION TURBINE

FUEL HEAT INPUT vs AMBIENT TEMPERATURE



Department of
Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

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JUN 20 1995
Environmental Svcs
Department

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

PERMIT/PROJECT:
Permit: AO52-253213A
County: Pinellas
Original Issue: 11/23/94
Amended Date: 06/19/95
Expiration Date: 11/01/99
Project: Bayboro Peaking Unit No. 4

This amended permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-2 through 62-297. 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 an oil fired, gas turbine driven electrical generating unit rated at 56.7 MW. The unit is designated as the Bayboro Peaking Unit No. 4 and is composed of an Electric Machinery, Serial No. 471184701 electric generator driven by two Pratt & Whitney, Model No. FT4C-1LF gas turbines, designated as 4A (Engine Serial No. P686500, Turbine Serial No. P600399) and 4B (Engine Serial No. P686504, Turbine Serial No. P600408). The manufacturer's fuel flow and heat input ratings for the turbines are 132 barrels per hour and 774 MMBtu per hour, respectively. The peak heat input rate of the turbines is a function of the ambient temperature as shown on the graph of *Fuel Heat Input versus Ambient Temperature* included in this permit. The turbines utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight.

Location: 13th Avenue and 2nd Street South, St. Petersburg
UTM: 17-338.80 km E 3071.27 km N
NEDS No: 0013
Point ID: 04

Replaces Permit AO52-253213, issued 11/23/94

SPECIFIC CONDITIONS:

1. A part of this permit is the attached GENERAL CONDITIONS. [Rule 62-4.160, F.A.C.]

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-200 through 62-299, Florida Administrative Code, or any other requirements under federal, state or local law. [Rule 62-210.300, F.A.C.]

EMISSION LIMITATIONS

3. Visible emissions from Bayboro Peaking Unit No. 4 shall not be equal to or greater than 20% opacity. [Rule 62-296.310(2)(a), F.A.C.]

OPERATION LIMITATIONS

4. The hours of operation for Bayboro Peaking Unit No. 4 are not restricted (8760 hours per year). [Specified in permit application]

5. The peak heat input rate of the Bayboro Peaking Unit No. 4 turbine shall be determined from the graph of *Fuel Heat Input versus Ambient Temperature* shown on Page 8 of this permit using the daily average ambient temperature. [Rule 62-297.310(2)(a), F.A.C.]

6. The Bayboro Peaking Unit No. 4 shall only utilize new, No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight. "New, No. 2 fuel oil" is defined as fuel oil that has been refined from crude oil and has not been used and which may or may not contain additives.

TESTING AND COMPLIANCE REQUIREMENTS

7. Test the Bayboro Peaking Unit No. 4 for visible emissions annually within 60 days prior to February 1. The visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been used to fire this peaking unit for more than 400 hours for the previous 12 months and if this peaking unit is not expected to use fuel oil for more than 400 hours during the next 12 months.

(Specific Condition No. 7, Continued On Next Page)

SPECIFIC CONDITIONS:

7. (Continued)

In order to request the annual visible emissions test waiver, a letter shall be sent each year, when the visible emissions test is due, to the Air Compliance Section, Southwest District Office of the Department of Environmental Protection, and to the Pinellas County Department of Environmental Management, Air Quality Division, stating the number of hours that fuel oil was utilized, and that the requirements for approval of the waiver have been satisfied. Include a copy of the fuel oil analysis with the waiver request. Regardless of fuel usage, a waiver will not be granted for the visible emission test for the 12 month period prior to permit renewal. A visible emissions test is required and shall be conducted during the 12 month period prior to permit renewal. (See Specific Condition No. 16).
[Rules 62-297.340(1)(d) and 62-297.340(1)(e), F.A.C.]

8. Compliance with the visible emission limitation of Specific Condition No. 3 shall be determined using DEP Method 9 and shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C., *Stationary Sources - Emission Monitoring* and 40 CFR 60, Appendix A. [Rule 62-297.420, F.A.C.]

9. Testing of visible emissions should be conducted with the turbines operating within 90-100% of the peak heat input rate based on the average ambient air temperature during the test. The peak heat input rate is defined by the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 4 on Page 8 of this permit. The graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 4 is made a part of this permit. If it is not practical to test at the peak rate, then the source may be tested at less than the peak rate. In this case, subsequent source operation is then limited to 110 percent of the tested rate until a new test is conducted. Once the source is so limited, the maximum rate is then equal to 110 percent of the tested rate, and operation at a higher rate is only allowed for no more than 15 consecutive days for the purpose of additional compliance testing in order to regain the peak rate. Acceptance of a test by the Department of Environmental Protection will automatically amend this permit to a new maximum rate, but the new maximum rate shall not exceed the peak rate.
[Rules 62-297.570(2), 62-297.570(3), and 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

MONITORING REQUIREMENTS

10. In order to document compliance with Specific Condition No. 6, and provide reasonable assurance that new, No. 2 fuel oil is being utilized and that the fuel oil sulfur content limit of 0.5%, by weight, is not exceeded, the permittee shall provide, for each fuel oil delivery, either:

(1) a fuel oil analysis from a fuel oil sample, indicating the sulfur content. The fuel oil analysis shall be determined by the ASTM D-129 method referenced in 40 CFR 60.17 (July 1, 1991), or a Department approved alternate test method, or

(2) a certification of fuel oil analysis, indicating the sulfur content, obtained from the fuel oil supplier for the fuel oil delivered.

This information shall be maintained for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, upon request. [Permit AO52-167166 and Rule 62-4.070(3), F.A.C.]

11. In order to provide reasonable assurance that the fuel oil supplier's fuel oil analysis is accurate, Florida Power Corporation shall perform at least one audit sample analysis from a fuel oil delivery during the calendar year period. The fuel oil analysis shall be analyzed for the following:

Btu content
API Gravity
Density
Sulfur content, percent by weight

An audit sample analysis is not required in any calendar year for which the oil supplier certifications were not used to demonstrate compliance with the fuel oil sulfur limitation. Records must be kept for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167166 and Rule 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

NOTIFICATION REQUIREMENTS

12. The Permittee shall notify the Pinellas County Department of Environmental Management, Air Quality Division, in writing at least 15 days prior to the date on which each compliance test is to begin. [Rule 62-297.340(1)(i), F.A.C.]

REPORTING REQUIREMENTS

13. Submit to the Southwest District Office, Air Compliance Section of the Department of Environmental Protection, and the Pinellas County Department of Environmental Management, Air Quality Division, each calendar year on or before March 1, completed DEP Form 62-213.900(5), *"Annual Operating Report for Air Pollutant Emitting Facility"*, including the *Emissions Report*, for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

The *Annual Operating Report* shall be based on the following:

(1) The Btu heating value, sulfur content (percent by weight), API gravity and density of the fuel being fired in the peaking unit, shall be based on a weighted 12 month average (calendar year) and be calculated from the fuel delivery receipts and the vendor's fuel oil analysis.

(2) Until further notice by the Pinellas County Department of Environmental Management, Air Quality Division, Florida Power Corporation shall calculate annual emissions (pounds per hour, and tons per year), for the *Annual Operating Report*, by multiplying the total MMBtu from fuel usage by the following emission factors:

	Emission Factors No. 2 Fuel Oil Pounds per MMBtu
Particulate Matter (PM)	0.061 (Total)
PM10	0.48PM
Carbon Monoxide	0.048
Sulfur Dioxide	1.01s
Nitrogen Oxides	0.698
Hydrocarbons (TOC)	0.017

(Specific Condition No. 13, Continued On Next Page)

SPECIFIC CONDITIONS:

13. (Continued)

's' denotes sulfur content, percent by weight. The sulfur dioxide emissions shall be based on a weighted 12 month average 's' value. [Emission factors from AP-42, Table 3.1-1 (7/93)]

NOTE: For reference only, based on the original permit application (at approximately 30 °F), the peak performance for the Bayboro Peaking Unit No. 4 is:

Electrical Generating Rate:	56.7 MW per hour
Heat Input Rate:	774.0 MMBtu per hour
Fuel Usage Rate:	132.0 Barrels per hour

Based on AP 42 emission factors, the following are the potential emission rates expected from this peaking unit and are included for informational purposes only:

	Pounds per Hour	Tons per Year
Particulate Matter (Total)	47.21	206.80
PM10	22.66	99.26
Carbon Monoxide	37.15	162.73
Sulfur Dioxide	390.87	1712.01
Nitrogen Oxides	540.25	2366.30
Hydrocarbons (TOC)	13.16	57.63

14. Submit a copy of the visible emissions test reports required by Specific Condition Nos. 7 and 16, to the Pinellas County Department of Environmental Management, Air Quality Division, within 45 days of testing. Each test report shall include:

(1) a statement of the maximum turbine performance based on the turbine performance criteria defined by Specific Condition No. 5;

(2) a copy of the graph of *Fuel Heat Input versus Ambient Temperature* for Peaking Unit No. 4 noting the maximum heat input and the ambient temperature during the compliance test; and

(3) a copy of the fuel oil analysis.

[Rules 62-297.570(2), and 62-297.570(3), F.A.C.]

SPECIFIC CONDITIONS:

RECORDKEEPING REQUIREMENTS

15. Florida Power Corporation shall maintain a monthly record of the hours of operation of the peaking unit. This record shall be updated monthly and shall be completed by the end of the following month. The records shall be maintained at the facility for a minimum of the most recent three year period and shall be made available to the Department and the Pinellas County Department of Environmental Management, Air Quality Division, upon request. [Permit AO52-167166 and Rule 62-4.070(3), F.A.C.]

PERMIT RENEWAL

16. A visible emissions test must be conducted, per Specific Condition No. 3, during the 12 month period prior to permit renewal. [Rule 62-297.340(1)(c), F.A.C.]

17. Florida Power Corporation is subject to the permitting requirements of Rule 62-213.420, *F.A.C. - Operation Permits for Major Sources of Air Pollution*, Permit Applications, and shall apply for a Title V operation permit by submitting a completed application, DEP Form 62-210.900(1), to the Division of Air Resources Management, Bureau of Air Regulation, Department of Environmental Protection (Tallahassee) by the appropriate date referenced in Rule 62-213.420(1)(a), F.A.C. The application shall include the test results from Specific Condition No. 16. A copy of the application and the test results from Specific Condition No. 16 shall also be submitted to the Air Permitting Section of the Southwest District Office (Tampa), the Department of Environmental Protection and to the Pinellas County Department of Environmental Management, Air Quality Division. [Rules 62-4.090(1) and 62-213.420, F.A.C.]

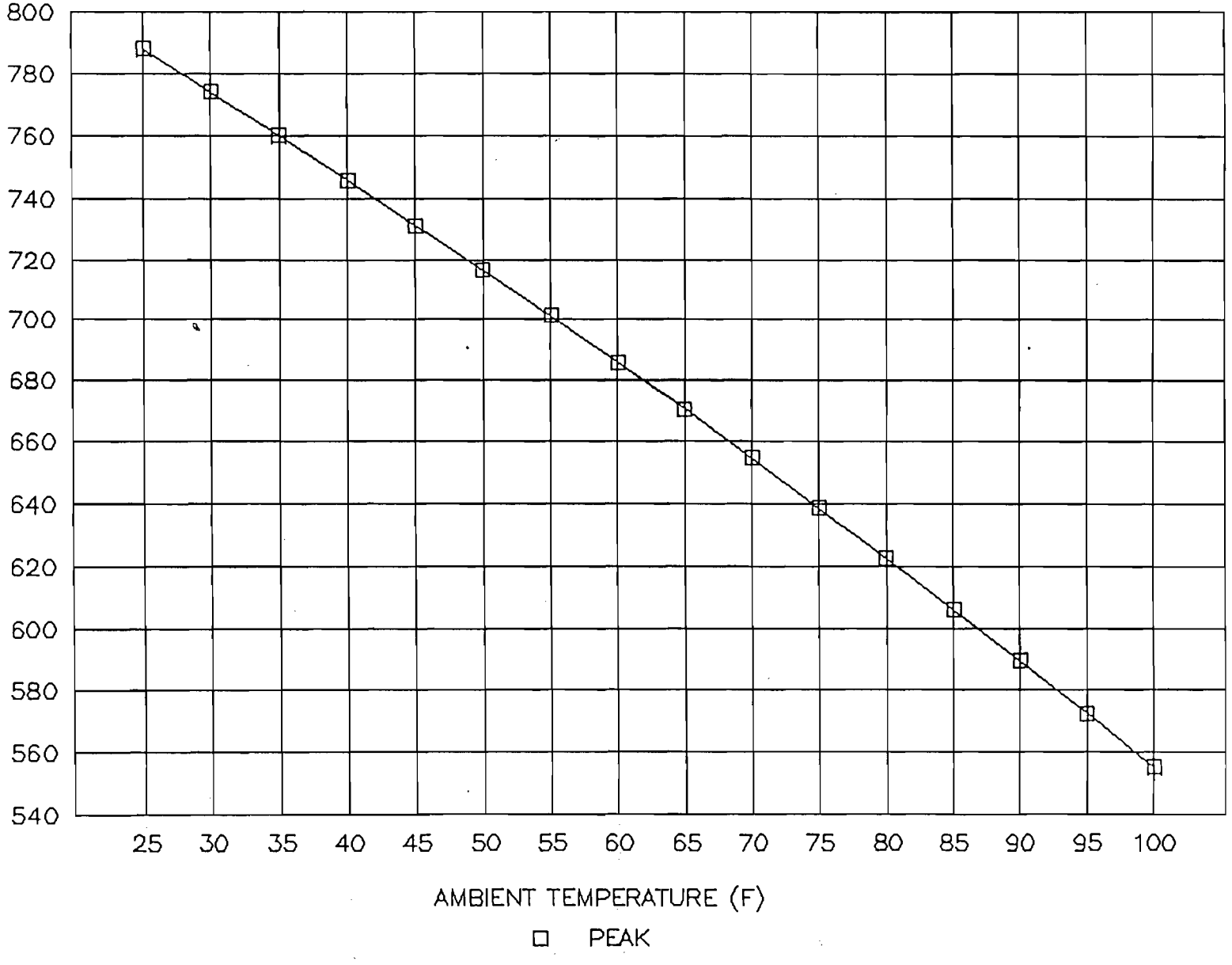
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

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

5fpc213a.pmt

BAYBORO COMBUSTION TURBINE

FUEL HEAT INPUT vs AMBIENT TEMPERATURE



III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

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

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

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

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 Units 1,2,3,4**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown *		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [**X**] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **Two Turbine engines P1A and P1B per combustion turbine unit. Unit 1: P1A,P1B; Unit 2: P2A,P2B; Unit 3: P3A,P3B; Unit 4: P4A,P4B. ARMS ID: Unit 1, 001; Unit 2, 002; Unit 3, 003; Unit 4, 004.**		

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:	**14 Apr 1973**
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer:	**Pratt & Whitney** Model Number: **FT4C-1LF**
4. Generator Nameplate Rating:	**57** MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		**774**	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):

Generator Nameplate Rating: 56.7MW (rounded 57). Maximum heat input based on permit limit firing No.2 fuel oil and is a function of ambient temperature (per permit condition).

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24	hours/day	**7**	days/week
52	weeks/yr	**8,760**	hours/yr

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

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 BY-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**	
2. Emission Point Type Code: [x] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Gas turbine gases exhaust through two stacks per turbine unit, P1A and P1B.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **Not Applicable**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**40** feet
7. Exit Diameter:	**22.9** feet
8. Exit Temperature:	**900** °F

9. Actual Volumetric Flow Rate:	**530,271** acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: **17** East (km): **338.8** North (km): **3071.3**	
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 1

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: **5.609**	5. Maximum Annual Rate: **49,132**
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 8,760 hr/yr. 2. Heat content-HHV.**	

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):	
2. Source Classification Code (SCC):	
3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

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			NS
PM10			NS
NOx			NS
CO			NS
VOC			NS
H133			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: **390.9** lb/hour **1,712** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.5 % sulfur** Reference: **Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **See Attachment BY-EU1-H8**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

Emissions Unit Information Section 1 **of** 3

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 percent sulfur**	
4. Equivalent Allowable Emissions:	**390.9** lb/hour **1,712** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel oil analysis during compliance test**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Permit Condition**	

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: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: **EPA Method 9, annual compliance test**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-296.310(2)(a)**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1.	Visible Emissions Subtype: **VE**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour
4.	Method of Compliance: **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 _____ of _____

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

Continuous Monitoring System Continuous Monitor _____ of _____

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

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION
(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

   [ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and the emissions unit consumes increment.

   [ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

   [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

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

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[x] Unknown
	SO_2	[ ] C	[ ] E	[x] Unknown
	NO_2	[ ] C	[ ] E	[x] 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	
	[X] Attached, Document ID: BY-EU1-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: BY-EU1-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[X] Attached, Document ID: BY-EU1-L5	[ ] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: BY-EU1-L6	[ ] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation

[ ] Attached, Document ID: _____ [X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)

[ ] Attached, Document ID: _____ [X] Not Applicable

12. Identification of Additional Applicable Requirements

[X] Attached, Document ID: BY-EU1-L12 [ ] Not Applicable

13. Compliance Assurance Monitoring Plan

[ ] Attached, Document ID: _____ [X] Not Applicable

14. Acid Rain Permit Application (Hard Copy Required)

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

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

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

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

[X] Not Applicable

ATTACHMENT BY-E01-D

EMISSION UNIT REGULATIONS

ATTACHMENT BY-E01-D
EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU1: Peaking Units Gas Turbines 1-4- FPC Bayboro Plant

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	
62-210.700(4)	- Maintenance
62-210.700(6)	

Stationary Sources-Emission Standards/RACT:

62-296.320(4)(b) (State Only)	- General VE
62-296.700(3)	- Specific RACT Limiting Standards*
62-296.700(4)	- Maximum Allowable Emission Rates
62-296.700(5)	- Circumvention
62-296.700(6)(e)	- Records and Inspection

Stationary Sources-Emission Monitoring:

62-297.310(2)(a)	- Operating Rate; reserved for CTs
62-297.310(4)(a)2.	- Applicable Test Procedures; Sampling time
62-297.310(5)	- Determination of Process Variables
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)8.	- CT exemption if < 400 hrs/yr; VE test once every 5 years
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(8)	- Test Reports

*It is the position of the applicant that the use of very low sulfur fuel oil meets the requirements of this section.

ATTACHMENT BY-EU1-H8

CALCULATION OF EMISSIONS

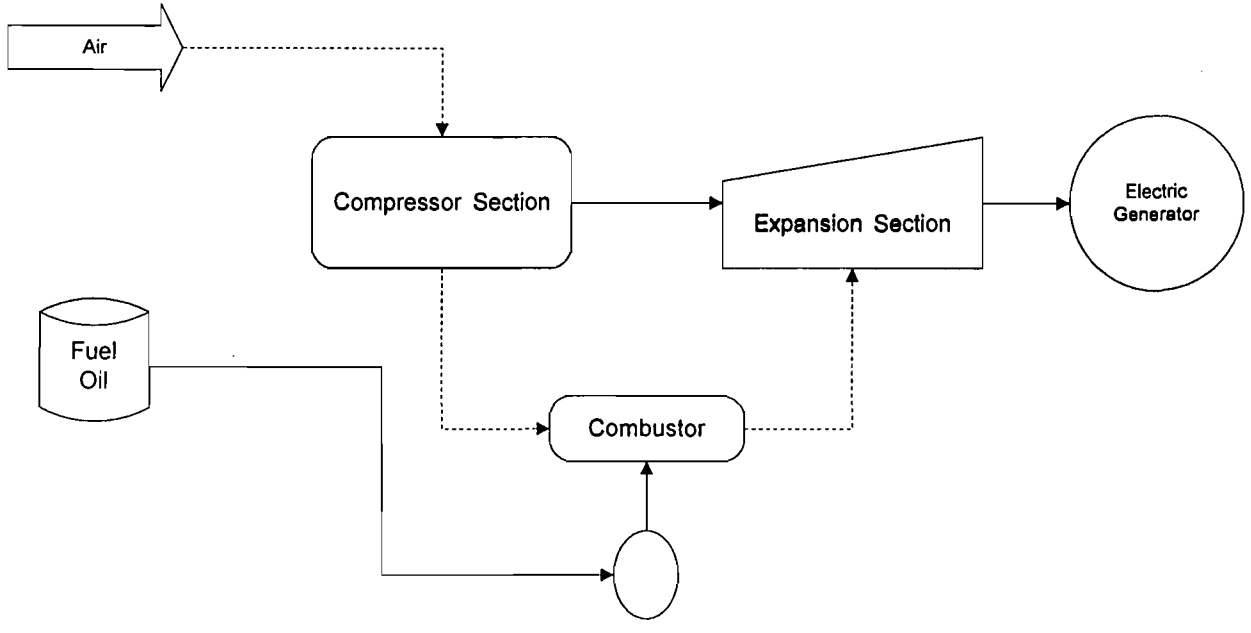
Attachment BY-EU1-H8. Maximum Estimated Emissions for Emissions Limited Pollutants for Bayboro Gas Turbine Peaking Units.

	Gas Turbine			
Pollutant/Units	P-1	P-2	P-3	P-4
Hours of Operation	8,760	8,760	8,760	8,760
Annual Capacity Factor (%)	100	100	100	100
Sulfur Dioxide (lb/hr) = Emission factor (lb/MMBtu) x sulfur content(%) x Heat input rate (MMBtu/hr)				
Basis (1)	AO Permit/AP-42	AO Permit/AP-42	AO Permit/AP-42	AO Permit/AP-42
Emission factor (lb/MMBtu x sulfur content)	1.01 x s	1.01 x s	1.01 x s	1.01 x s
Sulfur content (%)	0.50	0.50	0.50	0.50
Heat input rate (MMBtu/hr)	774	774	774	774
Emission rate (lb/hr)	390.9	390.9	390.9	390.9
(TPY)	1,712	1,712	1,712	1,712

Source: FDEP Permit AO52-253207A, 253209A, 253211A, and 253213A.

ATTACHMENT BY-EU1-L1

PROCESS FLOW DIAGRAM



Process Flow Legend	Florida Power Corporation, Bayboro Plant Process Flow Diagram	*Emission Unit:* Peaking Gas Turbine No. 1, 2, 3, 4	KBN Engineering and Applied Sciences, Inc.
Gas Flow		*Process Area:* Overall Plant	
Solid / Liquid Flow		*Filename:* FPCBY.VSD	
		Latest Revision Date: 11/13/95 02:04 PM	

ATTACHMENT BY-EU1-L2

FUEL ANALYSIS OR SPECIFICATION

Attachment BY-EU1-L2

Fuel Analysis

No. 2 Fuel Oil

Parameter	Typical Value	Max Value
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	0.10 [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 BY-EU1-L5

COMPLIANCE TEST REPORT

ATTACHMENT BY-EU1-L5

A compliance test report for visible emissions (VE) was performed for Bayboro Plant's combustion turbine Units P1, P2, P3, and P4 on January 20 and February 8, 1994. This report was submitted to FDEP. On December 21, 1994, FPC requested a waiver from VE testing since the units did not fire oil for more than 400 hours for previous 12 months and were not expected to fire oil for next 12 months. A similar request was made in December 1995.

ATTACHMENT BY-EU1-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT BY-EU1-L6
PROCEDURES FOR STARTUP/SHUTDOWN

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

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

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

ATTACHMENT BY-EU1-L12

ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

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

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

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

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

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

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 Emissions**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **See Attachment BY-EU2-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: **1,888**	
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 BY-EU3-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: **194,310**	
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 BY-EU3-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.

   [X] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

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

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and the source consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and the emissions unit consumes increment.

[x] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[x] Unknown
	SO_2	[ ] C	[ ] E	[x] Unknown
	NO_2	[ ] C	[ ] E	[x] 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 are not known.			

ATTACHMENT BY-EU2-B6

GENERAL EMISSIONS UNIT INFORMATION FOR UNREGULATED EMISSIONS UNIT

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 BY-EU2-B6
GENERAL EMISSIONS UNIT INFORMATION FOR UNREGULATED EMISSIONS UNIT

Table 1. FPC, Bayboro Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Maintenance shop/ Jet repair shop	Sand blaster, drill press, lathes	ER/TR
	Cabinets with solvents, lube oils, paints, flamm paints, etc.	TR
	Parts washer- mineral spirits	TR
	Cylinders (acetylene, etc.)	TR
Waste solvent storage area (outside maint.)	55 gallon drums- Waste oil, mineral spirits, lube oil, cleaners mineral spirits,	TR
Combustion turbine peaking units (4)	Lube oil vent w/ demister	UR
	Lube oil storage tank- 500 gal	UR
	Overboard tank	UR
Fuel Filter Building	4 tanks vent in building	UR
Substation	Transformers and associated equipment	TR
Oil Storage Area (across street)	Fuel oil tank- 1,088,000 gal. internal floating roof	UR
	Fuel oil tank- 786,000 gal. internal floating roof	UR
	Truck unloading area	TR
	Waste oil tank- 12,000 gal.	UR
—	Pump house with fire system	ER/TR
	Quonset hut- storage area fuel additives- biocide/fungicide equipment storage	TR
Barge Delivery	Moorings and fuel handling equipment peak- 2 barges/week (1994- 1/month)	TR

Note: ER = Exempt by Rule 62-210.300(3)(a); TR = Trivial; UR = Unregulated.

ATTACHMENT BY-EU2-B6
GENERAL EMISSIONS UNIT INFORMATION

Table 2. FPC, Bayboro Plant, Petroleum Product Storage and Throughput Operations

FPC Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons)
#01(West #1)	No. 2 fuel oil	1,088,304	112,791,000
#02(East #2)	No. 2 fuel oil	786,232	81,485,000
	Waste oil	12,000	24,000
#15	Waste oil (below ground)	168	1,008
#16	Waste oil (below ground)	168	1,008
#17	Waste oil (below ground)	168	1,008
#18	Waste oil (below ground)	168	1,008
#19	Waste oil (below ground)	168	1,008
#20	Waste oil (below ground)	168	1,008
#21	Waste oil (below ground)	168	1,008
#22	Waste oil (below ground)	168	1,008
	Lube oil	500	1,000
	TOTAL	1,888,380	194,309,064

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

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

2. Single Process, Group of Processes, or Fugitive Only? Check one:

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

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

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

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): **3-820 kw Diesel Generators (Relocatable)**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **Generators may be located at one of seven FPC plants**		

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:	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: Caterpillar	Model Number: 3508-DITA
4. Generator Nameplate Rating:	MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		9	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): **Generator Nameplate Rating: 0.82 MW. Maximum Heat Input Rate: 8.58 MMBtu/hr. Per unit; hours of operation is sum of individual hours of each generator.**			

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/yr	2,970	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.)

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

See Attachment BY-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:	
2. Emission Point Type Code: [x] 1 [ ] 2 [ ] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	15 feet
7. Exit Diameter:	1 feet
8. Exit Temperature:	1,004 °F

9. Actual Volumetric Flow Rate:	**7,283** acfm
10. 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 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Internal Combustion Engine, Industrial, Distillate Oil (diesel)**
2. Source Classification Code (SCC): **2-02-001-02**
3. SCC Units: **Thousand Gallons Burned**

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
62.1	**184**

6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	8. Maximum Percent Ash:

9. Million Btu per SCC Unit: **138**
10. Segment Comment (limit to 200 characters): **Maximum Percent Ash: 0.01. Million Btu per SCC Unit: 138.24. Max annual rate based on total for 3 units (2,970 hours).**

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):	
2. Source Classification Code (SCC):	
3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment (limit to 200 characters):	

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			NS
CO			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: %
3. Potential Emissions: **4.47** lb/hour **6.64** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.5** **%Sulfur Content** Reference: **Permit Limit**
7. Emissions Method Code: [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [**X**] 5
8. Calculation of Emissions (limit to 600 characters): **From Manufacturer**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **LB/HR - 1 unit; Tons/yr - 1 unit at 2,970 hours (total limit for 3 units)**

Emissions Unit Information Section 3 **of** 3

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 Content**	
4. Equivalent Allowable Emissions:	**4.47** lb/hour **6.64** 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): **Permit Limit**	

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 1

1.	Visible Emissions Subtype: **VE20**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: **EPA Method 9, annual**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-296.320(4)(b)1.**

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

1.	Visible Emissions Subtype:
2.	Basis for Allowable Opacity: [ ] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance:
5.	Visible Emissions Comment (limit to 200 characters):

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor _____ of _____

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

Continuous Monitoring System Continuous Monitor _____ of _____

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

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.

   [X] 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.

[x] 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	[x] C	[ ] E	[ ] Unknown
	SO_2	[x] C	[ ] E	[ ] Unknown
	NO_2	[x] C	[ ] E	[ ] 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):			
	Relocatable source			

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: BY-EU3-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: BY-EU1-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[X] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[X] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[ ] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation

[ ] Attached, Document ID: _____ [X] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)

[ ] Attached, Document ID: _____ [X] Not Applicable

12. Identification of Additional Applicable Requirements

[X] Attached, Document ID: BY-EU3-L12 [ ] Not Applicable

13. Compliance Assurance Monitoring Plan

[ ] Attached, Document ID: _____ [X] Not Applicable

14. Acid Rain Permit Application (Hard Copy Required)

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

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

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

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

[X] Not Applicable

ATTACHMENT BY-E03-D

EMISSION UNIT REGULATIONS

ATTACHMENT BY-E03-D
EMISSION UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU3: Three 820 kW Diesel Generators- FPC Bayboro Plant

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	
62-210.700(4)	- Maintenance
62-210.700(6)	

Stationary Sources-Emission Standards/RACT:

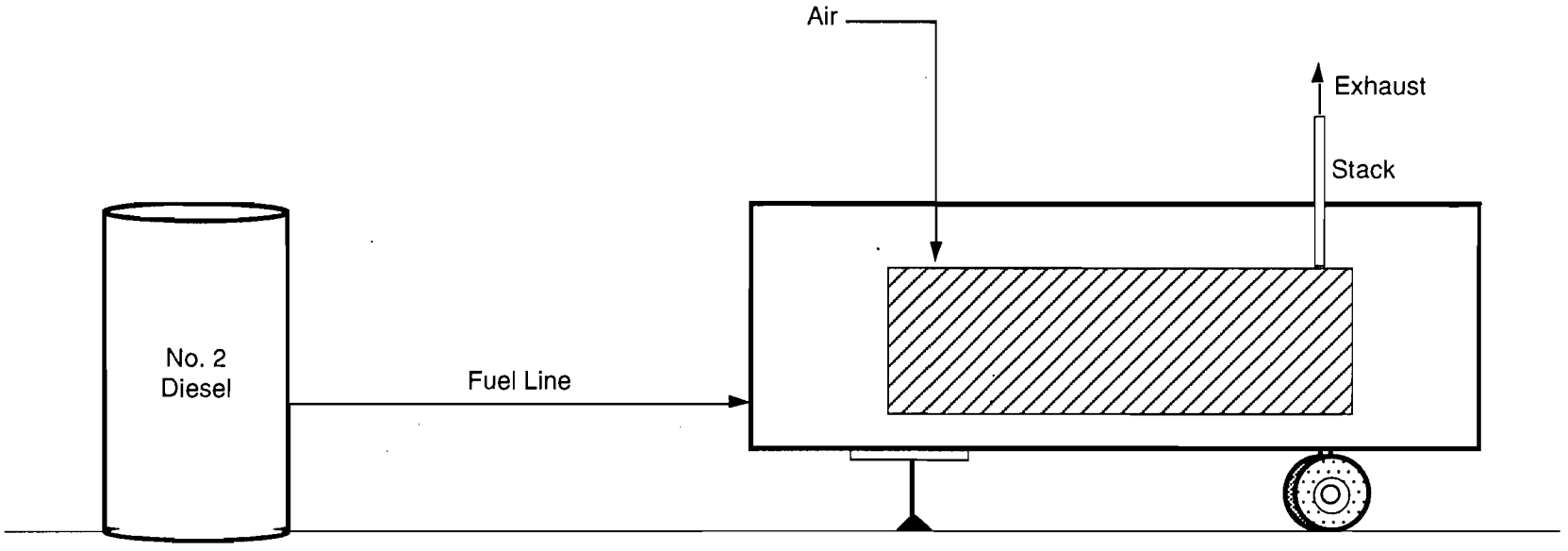
62-296.320(4)(b) (State Only)	- General VE

Stationary Sources-Emission Monitoring:

62-297.310(2)(b)	- Operating Rate
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)9.	- FDEP Notification - 15 days
62-297.310(8)	- Test Reports

ATTACHMENT BY-EU3-L1

PROCESS FLOW DIAGRAM



Caterpillar Model 3508-DITA, 820 kW, 1220 hp at 1,800 rpm

Attachment BY-EU3-LI
Flow Diagram of Diesel Engine/Generator Set

KBN
A GOLDER ASSOCIATES COMPANY

ATTACHMENT BY-EU3-L12

ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

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

Florida Department of Environmental Regulation
Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347
Lawton Chiles, Governor 813-620-6100 Carol M. Browner, Secretary

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

PERMIT/CERTIFICATION
Permit No: AO09-205952
Counties: Citrus, Pasco,
Pinellas, Polk, Sumter
Expiration Date: 03/31/97
Project: Three 820 Kilowatt
Diesel Generators

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the operation of three Caterpillar Model 3508-DITA 820 kilowatt diesel generators. The maximum heat input rate to each diesel generator is 8.58 million Btu per hour (62.1 gallons of diesel fuel per hour). The diesel generators burn new/virgin No. 2 diesel fuel oil with a maximum sulfur content of 0.5% by weight. The diesel generators may be located at any Florida Power Corporation facility listed below.

Locations: (1) The Crystal River Plant, Powerline Road, Red Level, Citrus County.
(2) The Anclote Plant, Anclote Road, west of Alternate 19, Tarpon Springs, Pasco County.
(3) The Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
(4) The Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
(5) The Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
(6) The Wildwood Reclamation Facility, State Road 462, 1 mile east of U.S. 301, Wildwood, Sumter County.
(7) The future FPC Polk County Site, County Road 555, 1 mile southwest of Homeland, Polk County.

UTM: 17-334.4 E 3204.2 N NEDS NO: 0004 Point ID: 12
(Original Citrus County Location)

Replaces Permit No.: AC09-202080

PERMITTEE:
Florida Power Corporation
St. Petersburg, FL 33733

PERMIT/CERTIFICATION
Permit No: AO09-205952
Expiration Date: 03/31/97
Project: Three 820 Kilowatt Diesel Generators

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.

2. Visible emissions from each diesel generator shall not be equal to or greater than 20% opacity.
[Rule 17-2.610(2)(a), F.A.C.].

3. Florida Power Corporation shall not discharge air pollutants which cause or contribute to an objectionable odor.
[Rule 17-2.620(2), F.A.C.].

4. The hours of operation expressed as "engine-hours" shall not exceed 2,970 in any consecutive 12 month period. The hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each diesel generator.
[Permit AC09-202080].

5. Florida Power Corporation is permitted to burn only new/virgin No. 2 diesel fuel oil with a maximum sulfur content of 0.5% by weight in the diesel generators. [Permit AC09-202080].

6. The heat input rate to each diesel generator shall not exceed 8.58 million Btu per hour (62.1 gallons per hour).
[Permit AC09-202080].

7. Florida Power Corporation shall notify the Department, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify,

(A) which diesel generator, by serial number, is being relocated,
(B) which location the diesel generator is being relocated from,
(C) which location the diesel generator is being relocated to, and
(D) the approximate startup date at the new location.

If a diesel generator is to be relocated within Pinellas County, then Florida Power Corporation shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management.
[Rule 17-4.070(3), F.A.C.].

SPECIFIC CONDITIONS:

8. Test each diesel generator for the following pollutants on an annual basis within 30 days of the date October 25. The test reports shall be submitted to the Air Section of the Southwest District Office of the Department within 45 days of testing. A copy of the test reports shall be submitted to the Air Quality Division of the Pinellas County Department of Environmental Management for each diesel generator located in Pinellas County. [Rules 17-2.700(2)(a)1. and 17-2.700(7), F.A.C.].

(X) Opacity
(X) Fuel Sulfur Analysis

9. After each relocation, test each relocated diesel generator for the following pollutants within 30 days of startup. The test reports shall be submitted to the Air Section of the Southwest District Office of the Department within 45 days of testing. A copy of the test reports shall be submitted to the Air Quality Division of the Pinellas County Department of Environmental Management for each diesel generator located in Pinellas County. [Rules 17-4.070(3), 17-2.700(2)(a)1. and 17-2.700(7), F.A.C.].

(X) Opacity
(X) Fuel Sulfur Analysis

10. Compliance with the emission limitation of specific condition #2 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A, and adopted by reference in Rule 17-2.700, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 17-2.700, F.A.C. and 40 CFR 60.

11. Testing of each diesel generator emissions must be accomplished while operating the diesel generator within $\pm$10% of the maximum fuel firing rate of 62.1 gallons per hour. Failure to submit the actual operating rate may invalidate the test. [Rule 17-4.070(3), F.A.C.].

12. Florida Power Corporation shall notify the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. For each diesel generator located in Pinellas County, Florida Power Corporation shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management. [Rule 17-2.700(2)(a)9., F.A.C.].

SPECIFIC CONDITIONS:

13. Compliance with specific condition #4 shall be documented by record keeping. At a minimum, the records shall indicate the daily hours of operation for each individual diesel generator, the daily hours of operation expressed as "engine-hours", and a cumulative total hours of operation expressed as "engine-hours" for each month. The records shall be maintained for a minimum of 2 years and made available to the Department or the Pinellas County Department of Environmental Management upon request. [Rule 17-4.070(3), F.A.C.].

14. In order to document continuing compliance with specific condition #5, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-shipped analyses or on analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department or the Pinellas County Department of Environmental Management upon request. [Rule 17-4.070(3), F.A.C.].

15. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling.

16. Issuance of this permit does not relieve Florida Power Corporation from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.].

17. Construction permit number AC09-202080 might have been subject to the new source review (NSR) requirements of Rule 17-2.500, F.A.C. if any of the federally enforceable limits in the permit had been relaxed. If Florida Power Corporation requests relaxation of any of the federally enforceable limits, then the Department will determine whether the NSR requirements of Rule 17-2.500, F.A.C. shall apply as though construction had not yet commenced. [Rule 17-2.500(2)(g), F.A.C.].

PERMITTEE:
Florida Power Corporation
St. Petersburg, FL 33733

PERMIT/CERTIFICATION
Permit No: AO09-205952
Expiration Date: 03/31/97
Project: Three 820 Kilowatt Diesel Generators

SPECIFIC CONDITIONS:

18. Florida Power Corporation shall submit, for these diesel generators, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Section 403.061(13), Florida Statutes.

(A) The location of each diesel generator, by serial number, at the end of the preceding calendar year.
(B) The annual amount of fuel burned in each diesel generator, by serial number.
(C) The annual hours of operation of each diesel generator, by serial number.
(D) The annual hours of operation expressed in "engine-hours", as defined in specific condition 4.
(E) A copy of the fuel sulfur content records required by specific condition 14 for the preceding calendar year.
(F) Annual emissions of particulate, PM_{10}, carbon monoxide, SO_2, and NOx based upon actual diesel generator operation and fuel use (provide a copy of the calculation sheets and the basis for the calculations).
(G) Any changes in the information contained in the permit application.

If any diesel generator operated within Pinellas County at any time during the preceding calendar year, then Florida Power Corporation shall provide a copy of the emission report to the Air Quality Division of the Pinellas County Department of Environmental Management.

19. Three applications to renew this operation permit shall be submitted to the Department of Environmental Regulation, and one copy shall be submitted to the Air Quality Division of the Pinellas County Department of Environmental Management, by January 30, 1997.
[Rules 17-4.090 and 17-4.050(2), F.A.C. and Pinellas County Ordinance 89-70 as amended by 90-63, Subpart 2.210].

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

For Dr. Richard D. Garrity
Director of District Management

Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347

Lawton Chiles, Governor 813-620-6100 Carol M. Browner, Secretar

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

PERMIT/CERTIFICATION
Permit No: AC09-202080
Counties: Citrus, Pasco
Pinellas, Polk, Sumter
Expiration Date: 06/30/92
Project: Three 820 Kilowatt
Diesel Generators

Issued: 10/07/91
Amended: 04/27/92

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For construction (installation) of three Caterpillar Model 3508-DITA 820 kilowatt diesel generators. The maximum heat input rate to each diesel generator will be 8.58 million Btu per hour (62.1 gallons of diesel fuel per hour). The diesel generators will burn new/virgin No. 2 diesel fuel oil with a maximum sulfur content of 0.5% by weight. The diesel generators may be located at any Florida Power Corporation facility listed below.

Locations:
(1) The Crystal River Plant, Powerline Road, Red Level, Citrus County.
(2) The Anclote Plant, Anclote Road, west of Alternate 19, Tarpon Springs, Pasco County.
(3) The Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
(4) The Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
(5) The Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
(6) The Wildwood Reclamation Facility, State Road 462, 1 mile east of U.S. 301, Wildwood, Sumter County.
(7) The future FPC Polk County Site, County Road 555, 1 mile southwest of Homeland, Polk County.

UTM: 17-334.4 E 3204.2 N NEDS NO: 0004 Point ID: 12
(Original Citrus County Location)

Replaces Permit No.: Not Applicable, New Construction.

PERMITTEE:
Florida Power Corporation
St. Petersburg, FL 33733

PERMIT/CERTIFICATION
Permit No: AC09-202080
Expiration Date: 06/30/92
Project: Three 820 Kilowatt Diesel Generators

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.

2. Visible emissions from each diesel generator shall not be equal to or greater than 20% opacity.
[Rule 17-2.610(2)(a), F.A.C.].

3. Florida Power Corporation shall not discharge air pollutants which cause or contribute to an objectionable odor.
[Rule 17-2.620(2), F.A.C.].

4. In order to exempt this construction permit from the new source review requirements of Rule 17-2.500, F.A.C., the hours of operation expressed as "engine-hours" shall not exceed 2,970 in any consecutive 12 month period. The hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each diesel generator.
[Requested in the permit application].

5. Florida Power Corporation is permitted to burn only new/virgin No. 2 diesel fuel oil with a maximum sulfur content of 0.5% by weight in the diesel generators.
[Requested in the permit application].

6. The heat input rate to each diesel generator shall not exceed 8.58 million Btu per hour (62.1 gallons per hour).
[Requested in the permit application].

7. Florida Power Corporation shall notify the Department, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify,

(A) which diesel generator, by serial number, is being relocated,
(B) which location the diesel generator is being relocated from,
(C) which location the diesel generator is being relocated to, and
(D) the approximate startup date at the new location.

If a diesel generator is to be relocated within Pinellas County, then Florida Power Corporation shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management.
[Rule 17-4.070(3), F.A.C.].

8. Test each diesel generator for the following pollutants within 30 days of initial startup. The test reports shall be submitted to the Air Section of the Southwest District Office of the Department within 45 days of testing in conjunction with a Certificate of Completion of Construction, DER Form 17-1.202(3). [Rules 17-2.700(2)(a)1. and 17-2.700(7), F.A.C.].

(X) Opacity
(X) Fuel Sulfur Analysis

9. After each relocation, test each relocated diesel generator for the following pollutants within 30 days of startup. The test reports shall be submitted to the Air Section of the Southwest District Office of the Department within 45 days of testing. A copy of the test reports shall be submitted to the Air Quality Division of the Pinellas County Department of Environmental Management for each diesel generator located in Pinellas County. [Rules 17-4.070(3), 17-2.700(2)(a)1. and 17-2.700(7), F.A.C.].

(X) Opacity
(X) Fuel Sulfur Analysis

10. Compliance with the emission limitation of specific condition #2 shall be determined using EPA Method 9 contained in 40 CFR 60, Appendix A, and adopted by reference in Rule 17-2.700, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 17-2.700, F.A.C. and 40 CFR 60.

11. Testing of each diesel generator emissions must be accomplished while operating the diesel generator within $\pm$10% of the maximum fuel firing rate of 62.1 gallons per hour. Failure to submit the actual operating rate may invalidate the test. [Rule 17-4.070(3), F.A.C.].

12. Florida Power Corporation shall notify the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. For each diesel generator located in Pinellas County, Florida Power Corporation shall provide the same notification to the Air Quality Division of the Pinellas County Department of Environmental Management. [Rule 17-2.700(2)(a)9., F.A.C.].

13. Compliance with specific condition #4 shall be documented by record keeping. At a minimum, the records shall indicate the daily hours of operation for each individual diesel generator, the daily hours of operation expressed as "engine-hours", and a cumulative total hours of operation expressed as "engine-hours" for each month. The records shall be maintained for a minimum of 2 years and made available to the Department or the Pinellas County Department of Environmental Management upon request. [Rule 17-4.070(3), F.A.C.].

14. In order to document continuing compliance with specific condition #5, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-shipped analyses or on analyses of as-received samples. The records shall be maintained for a minimum of 2 years and shall be made available to the Department or the Pinellas County Department of Environmental Management upon request. [Rule 17-4.070(3), F.A.C.].

15. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 17-2.610(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling.

16. Issuance of this permit does not relieve Florida Power Corporation from complying with applicable emission limiting standards or other requirements of Chapter 17-2, or any other requirements under federal, state, or local law. [Rule 17-2.210, F.A.C.].

17. This construction permit might have been subject to the new source review (NSR) requirements of Rule 17-2.500, F.A.C. if any of the federally enforceable limits in this permit had been relaxed. If Florida Power Corporation requests relaxation of any of the federally enforceable limits in this permit, then the Department will determine whether the NSR requirements of Rule 17-2.500, F.A.C. shall apply as though construction had not yet commenced. [Rule 17-2.500(2)(g), F.A.C.].

PERMITTEE:
Florida Power Corporation
St. Petersburg, FL 33733

PERMIT/CERTIFICATION
Permit No: AC09-202080
Expiration Date: 06/30/92
Project: Three 820 Kilowatt
Diesel Generators

SPECIFIC CONDITIONS:

18. Florida Power Corporation shall submit
(A) four applications for an operating permit (Certificate of Completion of Construction),
(B) the appropriate application fee,
(C) the test reports required by specific condition #7, and
(D) an up-to-date copy of the records required by specific conditions #11 and #12,

to the Southwest District Office of the Department of Environmental Regulation within 45 days of compliance testing, or by May 1, 1992, whichever date is earliest.
[Rule 17-4.090, F.A.C.].

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

For Dr. Richard D. Garrity
Director of District Management