FLORIDA POWER CORPORATION
DEBARY FACILITY

TITLE V
AIR OPERATING
PERMIT APPLICATION

Submitted to:

Florida Department of Environmental Protection

Prepared by:

KBN Engineering and Applied Sciences, Inc.
Gainesville, Florida

KBN
A GOLDER ASSOCIATES COMPANY

Letter of Transmittal

Date: 06/14/96

Project No.: 14419-1200

RECEIVED
JUN 14 1996
BUREAU OF AIR REGULATION

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

Re: FLORIDA POWER CORPORATION
DeBary Facility

ID# 1270028 - 001-AV

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

Copies	*Description*
4	Title V Air Operating Permit Application (Hard Copy)

These are transmitted:

☐ *As requested*
☐ *For approval*
☐ *For review*
☐ *For your information*
☐ *For review and comment*
☒ *See Below*

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

RECEIVED BY: _____

DATE: _____ *TIME:* _____

14422Y/F1/WP/ALL-LOT-6 (06/14/96)

6241 Northwest 23rd Street, Suite 500, Gainesville, Florida 32653-1500, 352-336-5600 FAX 352-336-6603
5405 West Cypress Street, Suite 215, Tampa, Florida 33607, 813-287-1717 FAX 813-287-1716
1801 Clint Moore Road, Suite 105, Boca Raton, Florida 33487, 407-994-9910 FAX 407-994-9393
7785 Baymeadows Way, Suite 105, Jacksonville, Florida 32256, 904-739-5600 FAX 904-739-7777
1616 'P' Street NW, Suite 350, Washington, DC 20036, 202-462-1100 FAX 202-462-2270

EQUAL EMPLOYMENT OPPORTUNITY
AN AFFIRMATIVE ACTION EMPLOYER

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: **DeBary Facility**	
3. Facility Identification Number: **1270028**	[ ] Unknown
4. Facility Location Information: Street Address or Other Locator: **West Highbanks Road** City: **DeBary** County: **Volusia** Zip Code: **33713**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	6/14/1996
2. Permit Number:	1270028-001-AV
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 Dep

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

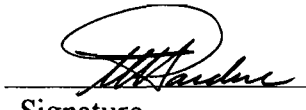
Organization/Firm: **Florida Power Corporation**
Street Address: **3201 34th Street South**
City: **St. Petersburg** State: **FL** Zip Code: **33711**

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

Telephone: **(813) 866-4387** 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	*	Combustion Turbine Peaking Units 1,2,3,4,5 and 6	
2R	*	Combustion Turbine Units 7,8,9 and 10	
3		Facility-wide Fugitive/Deminimis Emissions	

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

Purpose of Application and Category

Check one (except as otherwise indicated):

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

This Application for Air Permit is submitted to obtain:

[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: $ _____ [x] Not Applicable.

Construction/Modification Information

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

Professional Engineer Certification

1. Professional Engineer Name: **Kennard F. Kosky** Registration Number: **14996**
2. Professional Engineer Mailing Address: Organization/Firm: **KBN Eng. and Applied Sciences, Inc.** Street Address: **6241 NW 23rd Street, Suite 500** City: **Gainesville** State: **FL** Zip Code: **32653-1500**
3. Professional Engineer Telephone Numbers: Telephone: **(352)336-5600** Fax: **(352)366-6603**

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

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

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

Signature: Howard F. Kosty Date: 6/9/96

(Seal) HOWARD F. KOSTY REGISTERED ENGINEER STATE OF FLORIDA

* Attach any exception to certification statement.

Application Contact

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

2. Application Contact Mailing Address:

   Organization/Firm: **Florida Power Corporation**
   Street Address: **3201 34th St. 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 DB-AI-AC

ATTACHMENT DB-AI-AC

APPLICATION COMMENT

ATTACHMENT DB-AI-AC

This Title V application is for the Florida Power Corporation's DeBary Facility. The application's structure for regulated emission units is as follows:

Emission Unit	EU1	EU2	EU3
General	Combustion Turbine Peaking Units 1, 2, 3, 4, 5, and 6	Combustion Turbine Units 7, 8, 9, and 10	Facility-Wide fugitive/de minimis emissions
Emission Points	1 Stack per unit	1 Stack per unit	Fugitive
Segments	No. 6 fuel oil No. 2 fuel oil	No. 2 fuel oil	Various
Pollutants	SO_2	SO_2, PM/PM10, NO_x, CO, VOC, SAM	NA
CMS	None	SO_2 (Appendix D), NO_x (Appendix E); water-to-fuel ratio	NA
PSD	Existing baseline source	SO_2, PM/PM10, NO_x	NA

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates:
   Zone: **17** East (km): **467.5** North (km): **3197.2**

2. Facility Latitude/Longitude:
   Latitude (DD/MM/SS): **28 / 54 / 17** Longitude: (DD/MM/SS): **81 / 19 / 55**

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 DeBary Facility consists of 6 combustion turbine peaking units which are fired by No. 6 or No. 2 fuel oil and 4 combustion turbines, which are fired by No. 2 fuel oil and limited in hours of operation.

Facility Contact

1. Name and Title of Facility Contact:
   W.B. Hicks, Plant Manager

2. Facility Contact Mailing Address:
   Organization/Firm: **Florida Power Corporation**
   Street Address: **P.O. Box 79**
   City: **Debary** State: **FL** Zip Code: **32713**

3. Facility Contact Telephone Numbers:
   Telephone: **(407) 668-5103** Fax: **(407) 646-8370**

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)? [x] Yes [ ] No
7. Synthetic Minor Source of HAPs? [ ] Yes [x] No
8. One or More Emissions Units Subject to NSPS? [x] Yes [ ] 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): **Gas Turbine Nos. 7,8,9,10 - NSPS, 40 CFR 60 Subpart GG.**

B. FACILITY REGULATIONS

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

Not Applicable

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

See Attachment DB-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: DB-FI-E1
   [ ] Not Applicable [ ] Waiver Requested

2. Facility Plot Plan:
   [X] Attached, Document ID: DB-FI-E2
   [ ] Not Applicable [ ] Waiver Requested

3. Process Flow Diagram(s):
   [X] Attached, Document ID(s): DB-FI-E3
   [ ] Not Applicable [ ] Waiver Requested

4. Precautions to Prevent Emissions of Unconfined Particulate Matter:
   [X] Attached, Document ID: DB-FI-E4
   [ ] Not Applicable [ ] Waiver Requested

5. Fugitive Emissions Identification:
   [X] Attached, Document ID: DB-FI-E5
   [ ] 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:
   [X] Attached, Document ID: DB-FI-E9
   [ ] 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: **DB-FI-E12**
[ ] 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: **DB-FI-E14**
[ ] Not Applicable

15. Compliance Statement (Hard-copy Required)
[x] Attached, Document ID: **DB-FI-E15**
[ ] Not Applicable

ATTACHMENT DB-FI-B

ATTACHMENT DB-FI-B
APPLICABLE REQUIREMENTS LISTING - POWER PLANTS

FACILITY: FPC DeBary Plant

FDEP Rules:

General Permits:

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

Asbestos NESHAP:

62-204.800(8)(b)8.(State Only)	- Asbestos Removal
62-204.800(8)(d) (State Only)	- General Provisions (Asbetos)

Stationary Sources-General:
62-210.300(2)

Exemptions - Plant Specific:

62-210.300(3)(a)4.	- comfort heating < 1 mmBtu/hr
62-210.300(3)(a)5.	- mobile sources
62-210.300(3)(a)7.	- non-industrial vacuum cleaning
62-210.300(3)(a)8.	- refrigeration equipment
62-210.300(3)(a)9.	- vacuum pumps for labs
62-210.300(3)(a)10.	- steam cleaning equipment
62-210.300(3)(a)11.	- sanders < 5 ft2
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 < 32,000 gal/yr
62-210.300(3)(a)21.	- general purpose engines < 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/month
62-210.300(3)(a)24.	- surface coating <5% VOC
62-210.300(3)(b)	- Temporary Exemptions
62-210.370(3)	- AOR's
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
62-256.700	- 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

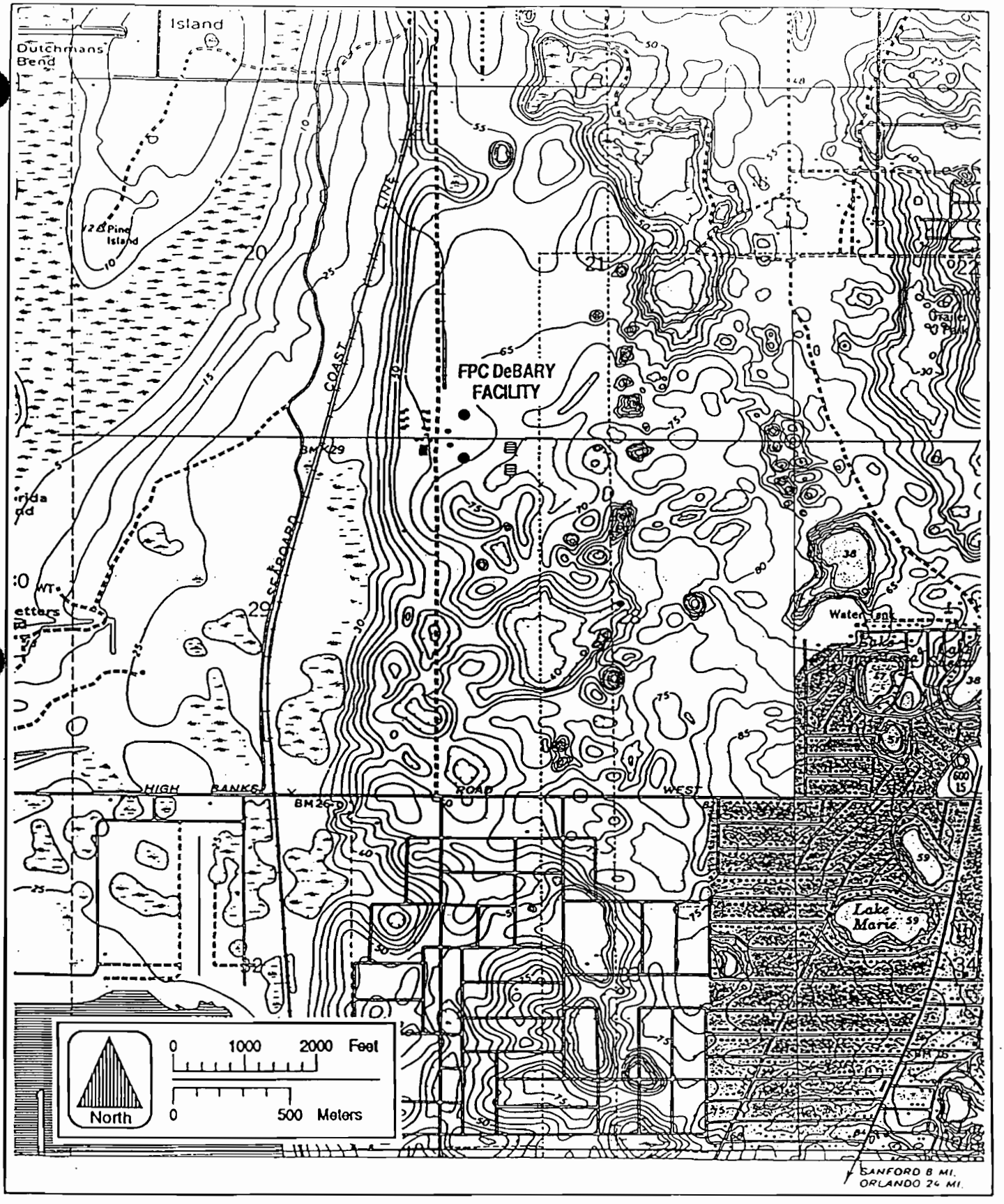
62-297.310(7)(a)10.	- Exemption of annual VE for 210.300(3)(a) sources/Gen. Per.

Federal Regulations:
Asbestos Removal:

40 CFR 61.05	- Prohibited Activities
40 CFR 61.12(b)	- Compliance with work practice standard
40 CFR 61.14	- Monitoring Requirements (if reguired)
40 CFR 61.19	- Circumvention
40 CRF 61.145	- Demolation and Renovation
40 CFR 61.148	- Standard for Insulating Material

ATTACHMENT DB-FI-E1

AREA MAP

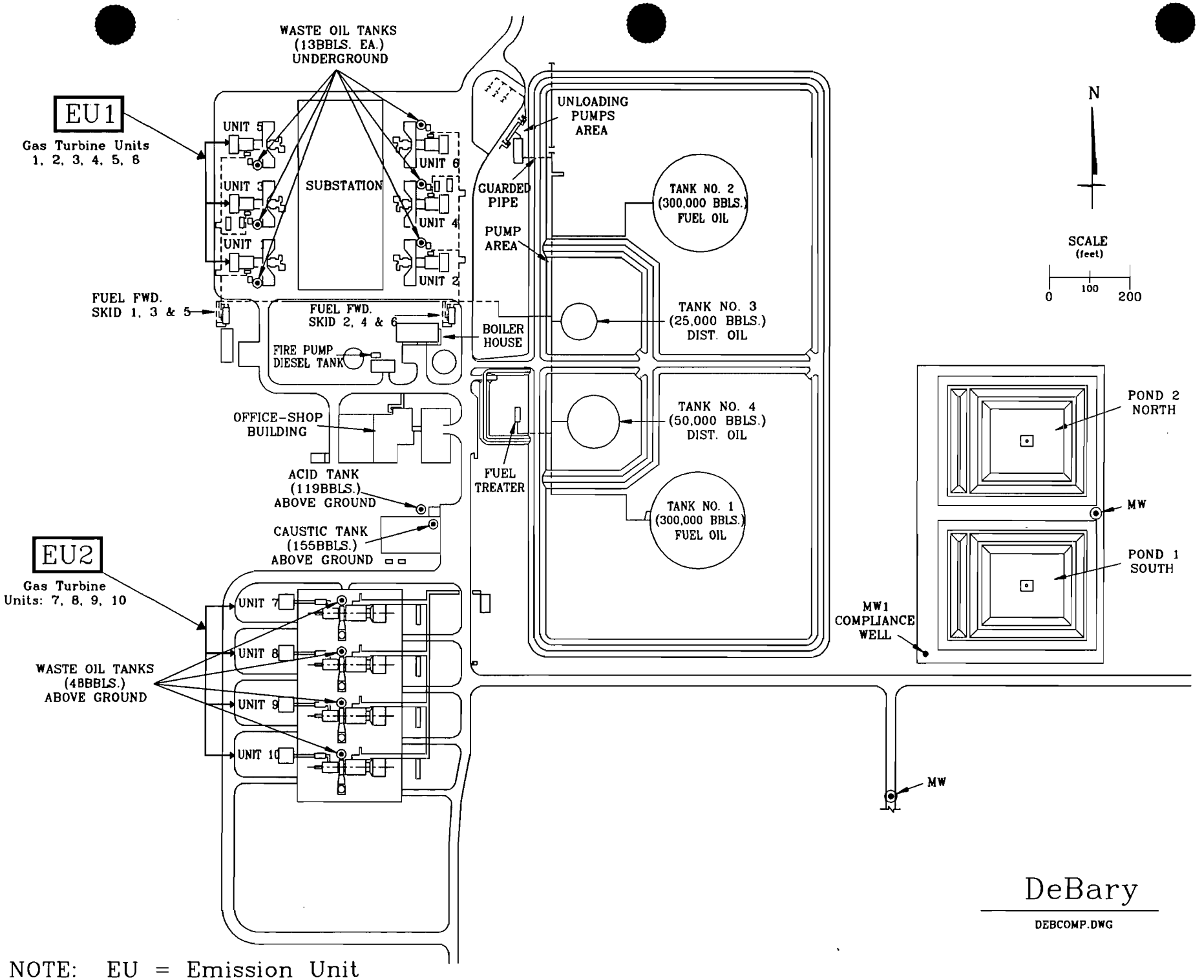


LOCATION OF THE FPC DeBARY FACILITY

KBN

ATTACHMENT DB-FI-E2

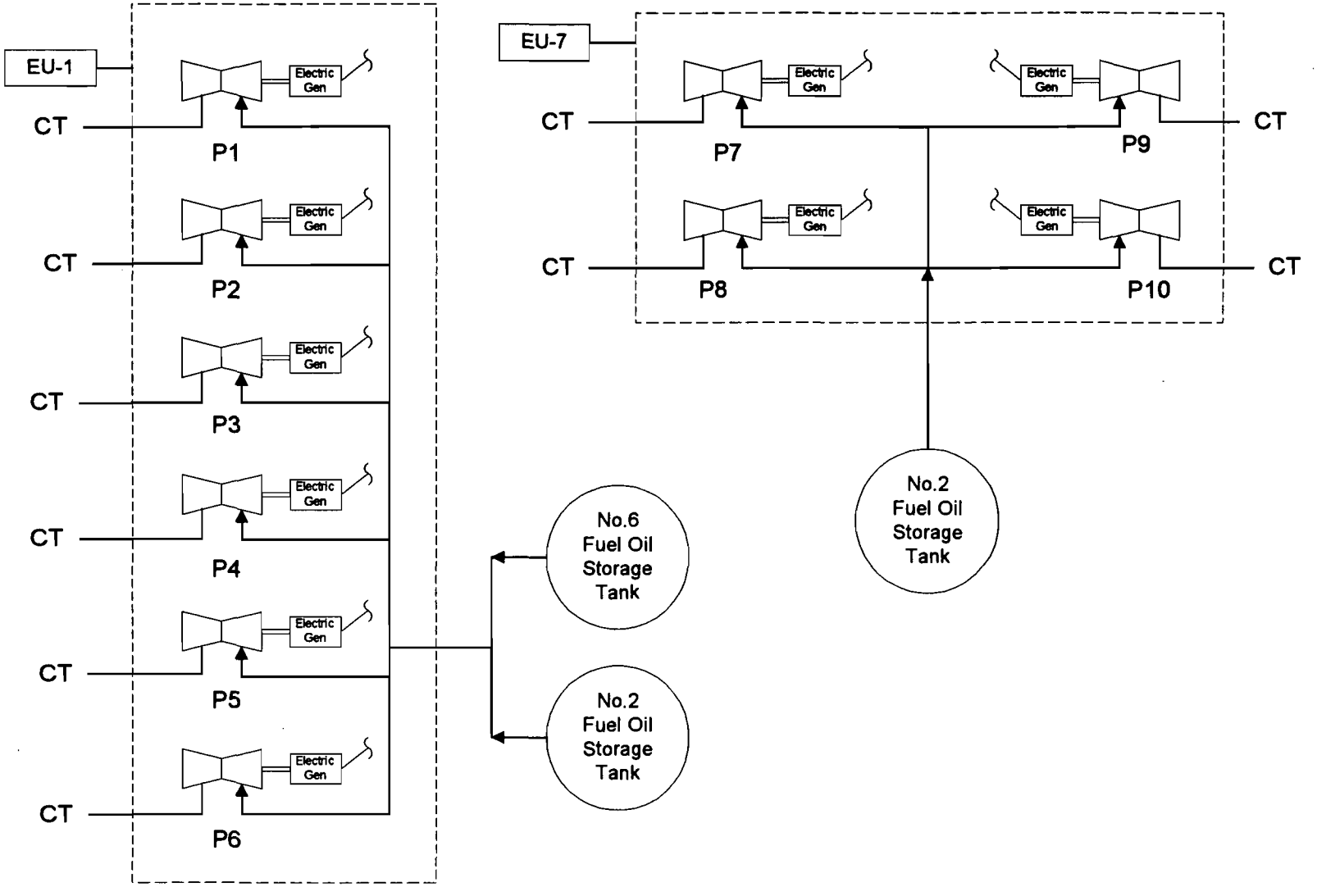
FACILITY PLOT PLAN



NOTE: EU = Emission Unit

ATTACHMENT DB-FI-E3

PROCESS FLOW DIAGRAM



Note:
GT = Gas Turbine
EU = Emission Unit Number
See segment section for the operating rate of each emission unit
EU 3 - Facility-wide Fugitive/Deminimis Emissions not shown.

Attachment Florida Power Corporation DeBary, Florida Facility Process Flow Diagram	Process Flow Legend: Solid / Liquid Gas Steam	Emission Unit: Significant Units Process Area: Overall Plant *Filename:* FPCDB1.VSD *Latest Revision Date:* 6/4/96	KBN Engineering and Applied Sciences, Inc.

ATTACHMENT DB-FI-E4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT DB-FI-E4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

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

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

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

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

ATTACHMENT DB-FI-E5

FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT DB-FI-E5
FUGITIVE EMISSIONS IDENTIFICATION

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

Fugitive emissions that may result from the operation of activities that are not trivial at the facility are addressed in Emission Unit No. 3. This emission unit contains information on fugitive emissions that occur on a facility-wide basis. A summary of potential fugitive emission sources at the facility is presented in the following sections.

Criteria and Precursor Air Pollutants

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

Volatile Organic Compounds (VOCs)

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

Fugitive HAPs Emissions

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

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

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

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

Chlorine - Used for water treatment at the facility.

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

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

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

Regulated Toxic or Flammable Substances

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

- chlorine
- hydrazine
- hydrochloric acid
- nitric acid
- acetylene

Chlorine, Hydrazine, Hydrochloric Acid - Considered above.

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

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

ATTACHMENT DB-FI-E9

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT DB-FI-E9

ALTERNATIVE METHODS OF OPERATION
COMBUSTION TURBINES P-7 TO P-10

The DeBary Facility's four combustion turbines, P-7, P-8, P-9, and P-10, rated at 92.9 megawatts (MW) at 59 degrees Fahrenheit (°F) (GE PG7111EA), were limited in the air construction permit to an average maximum capacity factor of 38.7 percent (3,390 hours per year operating time) (It should be noted that the air construction permit included six combustion turbines). In addition, the capacity factors for these turbines were limited to 33 percent based on a weighted 12 month rolling maximum sulfur content of 0.3 percent. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.3 percent, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	Percent Capacity Factor
0.3 - 0.295	33.0
0.29 - 0.285	34.4
0.28 - 0.275	35.8
0.27 - 0.265	37.2
0.26 - or less	38.7

The four combustion turbines (GE Frame 7EA) were also limited in fuel oil consumption and heat input rate on a per unit basis, per aggregate units, or prorated consumption based on the table as described above.

Therefore, any combination of the four combustion turbines may operate for up to 8,760 hours per year provided that both the hourly and annual emission limitations, aggregate annual capacity factors, and aggregate fuel oil consumption limits are met.

ATTACHMENT DB-FI-E12

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT DB-FI-E12

COMPLIANCE ASSURANCE MONITORING PLAN

The compliance assurance monitoring plan is to be submitted to the implementing agency by the required date.

ATTACHMENT DB-FI-E14

COMPLIANCE REPORT AND PLAN

COMPLIANCE REPORT AND PLAN

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

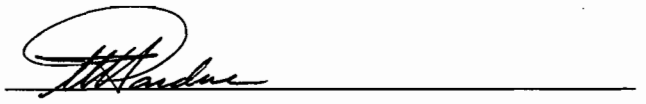
ATTACHMENT DB-FI-E15

COMPLIANCE STATEMENT

ATTACHMENT DB-FI-E15

COMPLIANCE STATEMENT

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



6-12-96

Signature, Responsible Official — Date

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

III. EMISSIONS UNIT INFORMATION

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

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

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

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

[ ] 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): **Combustion Turbine Peaking Units 1,2,3,4,5 and 6**		
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): **1. One Stack per unit 2. Initial startup date for P-1, 6 Feb 1976 (Initial startup date for P-2, 20 MAR 1976; P-3, 31 DEC 1975; P-4, 14 APR 1976; P-5, 22 DEC 1975; P-6, 30 APR 1975) 3. 003,004; 005,006; 007,008; 009,010; 011,012; 013,014**		

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:	**6 Feb 1976**
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer:	**General Electric** Model Number: **MS 7000**
4. Generator Nameplate Rating:	**74** MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	**790**	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):

Maximum heat input rate - firing No. 2 fuel oil (LHV), 40 °F (No.6 fuel oil, max rate 675 MM Btu/hr, 40 °F. Max permitted rate - 588 MM Btu/hr, No. 6 fuel oil; 673 MM Btu/hr No. 2 fuel oil at 95 °F.

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 DB-E01-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **EU1, See DB-FI-E2**	
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): **Combustion turbine gases exhaust through single stack per turbine**	
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:	**45** feet
7. Exit Diameter:	**17.7** feet
8. Exit Temperature:	**1,050** °F

9. Actual Volumetric Flow Rate:	**2,565,000** acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters): **Exit diameter based on a 19.75 ft x 12.52 ft area of rectangular vent. Stack parameters provided for one CT unit.**	

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

Segment Description and Rate: Segment 1 of 2

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

   No. 2 fuel oil

2. Source Classification Code (SCC):

   20100101

3. SCC Units:

   thousand gallons burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
5.4	**47,291**

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
0.5	**0.1**

9. Million Btu per SCC Unit:

   138

10. Segment Comment (limit to 200 characters):

    Maximum hourly rate and annual rate based on ambient temperature at 59 °F. Heat content based on HHV. Data provided for one CT.

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **No. 6 fuel oil**	
2. Source Classification Code (SCC): **20200501**	
3. SCC Units: **thousand gallons burned**	
4. Maximum Hourly Rate: **4.21**	5. Maximum Annual Rate: **36,884**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.7**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **152**	
10. Segment Comment (limit to 200 characters): **Maximum hourly rate and annual rate based ambient temperature at 59 °F. Heat content based on HHV. Data provided for one CT.**	

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
PM			NS
PM10			NS
CO			NS
VOC			NS
H133			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: **490** lb/hour **2,145** tons/year

4. Synthetically Limited? [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor: **0.7 % sulfur**

   Reference: **Permit limit**

7. Emissions Method Code:

   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   See DB-E01-H8

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Emissions, lb/hr and annual emissions - No.6 fuel oil at 59°F. Units permitted to fire No. 2 fuel oil with max. sulfur content of 0.5%. Data provided for one CT.

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: **0.7 % sulfur**	
4. Equivalent Allowable Emissions: **490** lb/hour	**2,145** 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): **Based on permit limit for No. 6 fuel oil.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.5 % Sulfur**	
4. Equivalent Allowable Emissions: **402** lb/hour	**1,759** 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): **Based on permit limit for No. 2 fuel oil.**	

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: **Annual Compliance Test > 400 hours/yr; EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-296.320(4)(b)**

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): **Not to exceed 2 hr in 24-hrs for startup, shutdown, and malfunction. Rule 62-210.700, F.A.C.**

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: DB-E01-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: DB-E01-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: _____	[ ] Not Applicable
	[X] Previously Submitted, Date: 23 Dec 1994	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: DB-E01-L6	[ ] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation [X] Attached, Document ID: DB-E01-L10 [ ] Not Applicable
11.	Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID: _____ [X] Not Applicable
12.	Identification of Additional Applicable Requirements [X] Attached, Document ID: DB-E01-L12 [ ] Not Applicable
13.	Compliance Assurance Monitoring Plan [X] Attached, Document ID: DB-E01-L13 [ ] Not Applicable
14.	Acid Rain Permit Application (Hard Copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [X] Not Applicable

ATTACHMENT DB-E01-D

APPLICABLE REQUIREMENTS LISTING

ATTACHMENT DB-E01-D

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU1: Peaking Units Gas Turbines 1-6- FPC DeBary Plant

FDEP Rules:

Stationary Sources-General:
62-210.700(1)
62-210.700(4) - maintenance
62-210.700(6)

Stationary Sources-Emission Standards:
62-296.320(4)(b)(State Only)- General VE

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 - CTs; Exempts Test <400hrs/yr; 1 per 5 yr
62-297.310(7)(a)9. - FDEP Notification - 15 days
62-297.310(8) - Test Reports

ATTACHMENT DB-E01-H8

CALCULATION OF EMISSIONS

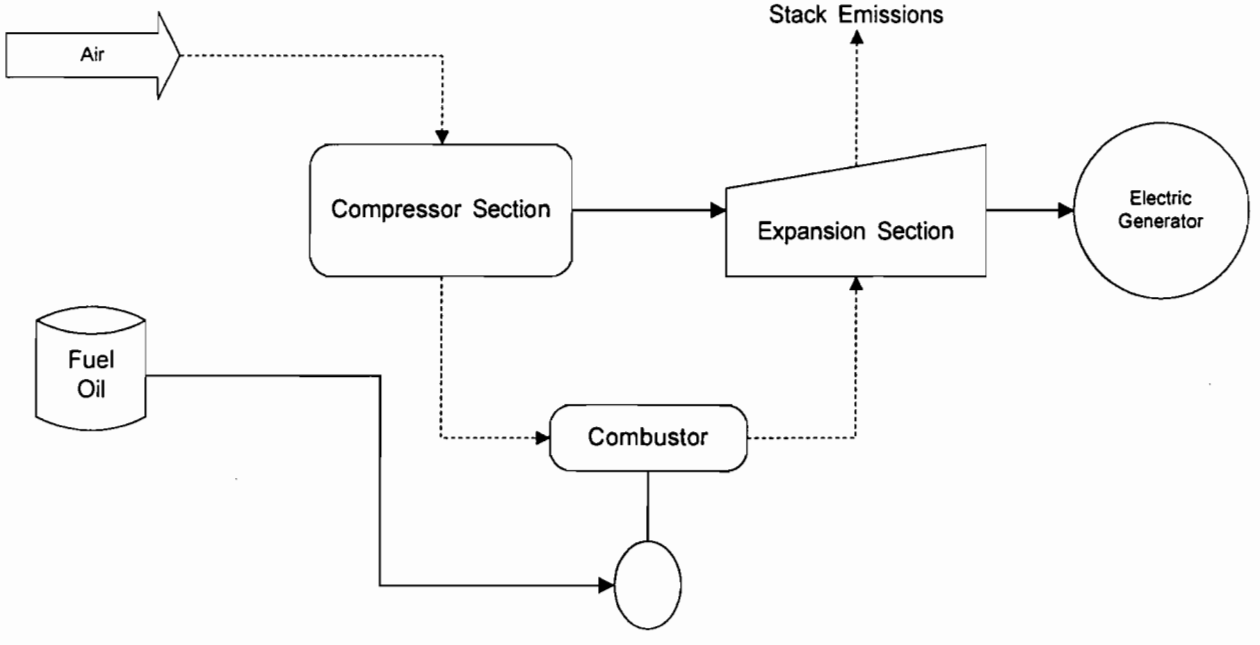
ATTACHMENT DB-E01-H8

Table 1. Maximum Estimated Emissions for Emissions Limited Pollutants, FPC DeBary Plant, Combustion Turbine Units 1 to 6

Pollutant/Units	No. 6 Oil		
	1 Unit @ 40 °F	1 Unit @ 59 °F	6 Units
Hours of Operation	8,760	8,760	
Annual Capacity Factor (%)	100	100	
Sulfur Dioxide (lb/hr) = Fuel oil (lb/hr) x sulfur content(fraction) x (lb SO2/lb S)			
Basis (1)	AC Permit	AC Permit	
Fuel Usage (lb/hr)	36,885	34,973	
Sulfur content (%)	0.70	0.70	
lb SO2/lb S (64/32)	2.0	2.0	
lb/hr	516	490	3.10E+03
TPY	2,262	2,145	1.29E+04

ATTACHMENT DB-E01-L1

PROCESS FLOW DIAGRAM



Florida Power Corporation		*Emission Unit:* Turbines No. 1, 2, 3, 4, 5, 6 *Process Area:* Overall Plant	KBN Engineering and Applied Sciences, Inc.
Emission Units	DeBary	*Filename:* FPCDB.VSD *Latest Revision Date:* 6/20/95 01:12 PM	

ATTACHMENT DB-E01-L2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT DB-E01-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 (LHV)	
% sulfur	0.3 [2]	0.5 [3]
% nitrogen	0.025-0.03	
% ash	negligible	0.1 [1]

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

[1] Data taken from the FPC fuel procurement specification

[2] Data from laboratory analysis

[3] Data from current air permit.

ATTACHMENT DB-E01-L2

FUEL ANALYSIS
NO. 6 FUEL OIL

Parameter	Typical Value	Max Value
API gravity @ 60 F	8 [1]	-
Relative density	8.2 lb/gal [2]	
Heat content	18,300 Btu / lb (LHV)	
% sulfur	0.5 [2]	0.7 [3]
% nitrogen	0.25-0.50	
% ash	0.06 - 0.10	0.1 [1]

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

[1] Data taken from the FPC fuel procurement specification

[2] Data from laboratory analysis

[3] Data from current air permit.

ATTACHMENT DB-E01-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT DB-E01-L6

PROCEDURES FOR STARTUP/SHUTDOWN

Startup for the combustion turbines begins with "lighting off" of the machines on distillate fuel oil.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit from the system electrical grid), shutting off the fuel and coasting down to stop. The CT is then put "on turning gear" to prevent possible disfiguration of the turbine components.

ATTACHMENT DB-E01-L10

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT DB-E01-L10

ALTERNATIVE METHODS OF OPERATION
COMBUSTION TURBINES P-1 TO P-6

Combustion turbines P-1, P-2, P-3, P-4, P-5, and P-6 can operate on both No. 2 and No. 6 fuel oil. Each source is permitted to operate 8,760 hours per year. There are no operating restrictions on these sources.

ATTACHMENT DB-E01-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

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

Florida Power
CORPORATION

bcc: B. M. Cumbie
D. L. Campbell

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

January 6, 1994

File: DBPA.1.1

Mr. Alexander Alexander, P.E.
Director, Central District
Florida Department of Environmental Protection
3319 Maguire Boulevard, Suite 232
Orlando, FL 32803-3767

Dear Mr. Alexander:

Re: Stack Replacement at DeBary Units P1 through P6
DEP Permit Number AO 64-129252

The stacks for Peaking Units P1 through P6 at Florida Power Corporation's (FPC) DeBary facility are in need of replacement. These units were constructed in the mid-1970s, and the stacks have become worn beyond repair. FPC will be replacing the stacks with an improved stack configuration that will benefit air quality. The following paragraphs describe the stack replacement in more detail.

Under the existing configuration, there are two stacks per peaking unit for a total of twelve stacks. The new stack configuration will consist of one stack per peaking unit. A dispersion modeling analysis was performed in order to estimate the effect that the change will have on air quality.

The current version of EPA's SCREEN2 model was used to determine ambient concentrations of NOx from each peaking unit. The current and proposed stack dimensions were input to the model as listed below.

	Current Stacks	Proposed Stacks
Emission Rate (g/s)	75.0	75.0
Stack Height (m)	9.5	13.5
Stack Diameter (m)	4.7	5.4
Exit Velocity (m/s)	16.5	53.0
Exit Temp. (K)	839	839

As shown by the data given above, there will be no changes to the units other than those made to the stacks. The SCREEN2 analysis was also used to evaluate potential building downwash effects which may result from the structures housing the combustion turbines. The following

building dimensions were input to the model:

Building Height = 4.7 m Width = 6.4 m Length = 14.3 m

The model output for the current configuration is included as Attachment 1, and the analysis results for the proposed stacks are included as Attachment 2. For the current stacks, the maximum predicted concentration for each unit is 47.5 ug/m^3. In addition, a substantial cavity concentration is predicted by the model. The proposed configuration results in a maximum predicted concentration of 16.3 ug/m^3, with no cavity concentration. Therefore, the stack change will result in an improvement in ambient air pollution levels from the six combustion turbine units.

The stack replacement will not result in a change in emissions from the units or a change in the method of operation. Therefore, it is FPC's understanding that a permit modification will not be necessary. The stack replacement is scheduled to begin on March 1, 1994.

Please feel free to contact me at (813) 866-4344 if you have any questions or would like additional information.

Sincerely,

J. Michael Kennedy

J. Michael Kennedy
Senior Environmental Specialist

ATTACHMENT 1

CURRENT STACKS - MODELING RESULTS

BEST AVAILABLE COPY

01/05/94
17:27:02

*** SCREEN2 MODEL RUN ***
*** VERSION DATED 92245 ***

DEBARY PEAKERS, EXISTING, 2 STACKS, NOx, 1/5/94

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	75.0000
STACK HEIGHT (M)	=	9.5000
STK INSIDE DIAM (M)	=	4.7000
STK EXIT VELOCITY (M/S)	=	16.5000
STK GAS EXIT TEMP (K)	=	839.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	4.7000
MIN HORIZ BLDG DIM (M)	=	6.4000
MAX HORIZ BLDG DIM (M)	=	14.3000

BUOY. FLUX = 581.499 M**4/S**3; MOM. FLUX = 525.060 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.0	1774.7	1773.72	6.20	6.19	NO
100.	8.527	6	1.0	1.0	10000.0	215.37	58.96	58.87	NO
200.	8.648	6	1.0	1.0	10000.0	215.37	59.32	58.96	NO
300.	8.796	6	1.0	1.0	10000.0	215.37	59.88	59.09	NO
400.	8.968	6	1.0	1.0	10000.0	215.37	60.61	59.24	NO
500.	9.163	6	1.0	1.0	10000.0	215.37	61.50	59.42	NO
600.	9.378	6	1.0	1.0	10000.0	215.37	62.54	59.61	NO
700.	9.612	6	1.0	1.0	10000.0	215.37	63.70	59.83	NO
800.	18.56	1	3.0	3.0	960.0	597.57	203.45	303.49	NO
900.	27.58	1	3.0	3.0	960.0	597.57	224.11	381.99	NO
1000.	39.27	1	2.5	2.5	800.0	715.19	258.56	478.83	NO
1100.	45.92	1	2.5	2.5	800.0	715.19	279.24	578.62	NO
1200.	47.52	1	2.5	2.5	800.0	715.19	299.60	689.48	NO
1300.	46.77	1	2.0	2.0	892.6	891.61	347.53	822.84	NO
1400.	45.17	1	2.0	2.0	892.6	891.61	368.45	955.45	NO
1500.	43.03	1	2.0	2.0	892.6	891.61	389.09	1099.40	NO
1600.	42.26	4	20.0	20.0	6400.0	91.37	107.49	50.22	NO
1700.	42.82	4	20.0	20.0	6400.0	91.37	113.25	51.72	NO
1800.	43.17	4	20.0	20.0	6400.0	91.37	118.98	53.21	NO
1900.	43.34	4	20.0	20.0	6400.0	91.37	124.70	54.68	NO
2000.	43.35	4	20.0	20.0	6400.0	91.37	130.40	56.13	NO
2100.	43.24	4	20.0	20.0	6400.0	91.37	136.08	57.56	NO
2200.	43.01	4	20.0	20.0	6400.0	91.37	141.74	58.98	NO
2300.	42.70	4	20.0	20.0	6400.0	91.37	147.38	60.39	NO

2400.	42.30	4	20.0	20.0	6400.0	91.37	153.00	61.77	NO
2500.	41.84	4	20.0	20.0	6400.0	91.37	158.61	63.15	NO
2600.	41.34	4	20.0	20.0	6400.0	91.37	164.19	64.51	NO
2700.	40.79	4	20.0	20.0	6400.0	91.37	169.76	65.86	NO
2800.	40.20	4	20.0	20.0	6400.0	91.37	175.30	67.19	NO
2900.	39.60	4	20.0	20.0	6400.0	91.37	180.84	68.51	NO
3000.	38.97	4	20.0	20.0	6400.0	91.37	186.35	69.82	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

1193.	47.53	1	2.5	2.5	800.0	715.19	297.98	680.20	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** CAVITY CALCULATION - 1 ***			*** CAVITY CALCULATION - 2 ***		
CONC (UG/M**3)	=	.7711E+05	CONC (UG/M**3)	=	.0000
CRIT WS @10M (M/S)	=	19.29	CRIT WS @10M (M/S)	=	99.99
CRIT WS @ HS (M/S)	=	19.29	CRIT WS @ HS (M/S)	=	99.99
DILUTION WS (M/S)	=	9.65	DILUTION WS (M/S)	=	99.99
CAVITY HT (M)	=	5.98	CAVITY HT (M)	=	4.84
CAVITY LENGTH (M)	=	13.86	CAVITY LENGTH (M)	=	8.36
ALONGWIND DIM (M)	=	6.40	ALONGWIND DIM (M)	=	14.30

CAVITY CONC NOT CALCULATED FOR CRIT WS > 20.0 M/S. CONC SET = 0.0

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)	
SIMPLE TERRAIN	47.53	1193.	0.	
BUILDING CAVITY-1	.7711E+05	14.	--	(DIST = CAVITY LENGTH)
BUILDING CAVITY-2	.0000	8.	--	(DIST = CAVITY LENGTH)

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

ATTACHMENT 2

REPLACEMENT STACKS - MODELING RESULTS

01/05/94
17:30:00

*** SCREEN2 MODEL RUN ***
*** VERSION DATED 92245 ***

DEBARY PEAKERS, PROPOSED, 1 STACK, NOx, 1/5/94

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	75.0000
STACK HEIGHT (M)	=	13.5000
STK INSIDE DIAM (M)	=	5.4000
STK EXIT VELOCITY (M/S)	=	53.0000
STK GAS EXIT TEMP (K)	=	839.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	4.7000
MIN HORIZ BLDG DIM (M)	=	6.4000
MAX HORIZ BLDG DIM (M)	=	14.3000

BUOY. FLUX = 2465.659 M**4/S**3; MOM. FLUX = 7151.299 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.0	4124.7	4123.67	15.69	15.69	NO
100.	3.202	6	1.0	1.2	10000.0	328.87	90.20	90.14	NO
200.	3.221	6	1.0	1.2	10000.0	328.87	90.44	90.20	NO
300.	3.244	6	1.0	1.2	10000.0	328.87	90.80	90.28	NO
400.	3.271	6	1.0	1.2	10000.0	328.87	91.29	90.38	NO
500.	3.301	6	1.0	1.2	10000.0	328.87	91.88	90.50	NO
600.	3.333	6	1.0	1.2	10000.0	328.87	92.57	90.62	NO
700.	3.368	6	1.0	1.2	10000.0	328.87	93.37	90.77	NO
800.	3.396	6	1.0	1.2	10000.0	328.87	94.25	90.90	NO
900.	3.423	6	1.0	1.2	10000.0	328.87	95.22	91.04	NO
1000.	3.451	6	1.0	1.2	10000.0	328.87	96.27	91.18	NO
1100.	5.607	1	3.0	3.1	1384.6	1383.56	312.52	595.39	NO
1200.	9.621	1	3.0	3.1	1384.6	1383.56	334.47	705.33	NO
1300.	13.02	1	3.0	3.1	1384.6	1383.56	356.07	826.48	NO
1400.	15.19	1	3.0	3.1	1384.6	1383.56	377.35	958.92	NO
1500.	16.16	1	3.0	3.1	1384.6	1383.56	398.33	1102.70	NO
1600.	16.26	1	3.0	3.1	1384.6	1383.56	419.04	1257.90	NO
1700.	15.88	1	3.0	3.1	1384.6	1383.56	439.50	1424.58	NO
1800.	15.30	1	3.0	3.1	1384.6	1383.56	459.73	1602.79	NO
1900.	14.70	1	3.0	3.1	1384.6	1383.56	479.74	1792.60	NO
2000.	14.12	1	3.0	3.1	1384.6	1383.56	499.55	1994.06	NO
2100.	13.59	1	3.0	3.1	1384.6	1383.56	519.18	2207.23	NO
2200.	13.10	1	3.0	3.1	1384.6	1383.56	538.62	2432.17	NO
2300.	12.64	1	3.0	3.1	1384.6	1383.56	557.89	2668.94	NO

2400.	12.22	1	3.0	3.1	1384.6	1383.56	577.00	2917.59	NO
2500.	11.84	1	3.0	3.1	1384.6	1383.56	595.96	3178.17	NO
2600.	11.47	1	3.0	3.1	1384.6	1383.56	614.78	3450.73	NO
2700.	11.14	1	3.0	3.1	1384.6	1383.56	633.46	3735.32	NO
2800.	10.91	1	3.0	3.1	1384.6	1383.56	646.51	4031.11	NO
2900.	10.70	1	3.0	3.1	1384.6	1383.56	659.28	4339.09	NO
3000.	10.49	1	3.0	3.1	1384.6	1383.56	672.12	4659.35	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

1563.	16.30	1	3.0	3.1	1384.6	1383.56	411.20	1197.58	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** CAVITY CALCULATION - 1 ***		*** CAVITY CALCULATION - 2 ***	
CONC (UG/M**3) =	.0000	CONC (UG/M**3) =	.0000
CRIT WS @10M (M/S) =	99.99	CRIT WS @10M (M/S) =	99.99
CRIT WS @ HS (M/S) =	99.99	CRIT WS @ HS (M/S) =	99.99
DILUTION WS (M/S) =	99.99	DILUTION WS (M/S) =	99.99
CAVITY HT (M) =	5.98	CAVITY HT (M) =	4.84
CAVITY LENGTH (M) =	13.86	CAVITY LENGTH (M) =	8.36
ALONGWIND DIM (M) =	6.40	ALONGWIND DIM (M) =	14.30

CAVITY CONC NOT CALCULATED FOR CRIT WS > 20.0 M/S. CONC SET = 0.0

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	16.30	1563.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL
P 402 742 398

RECEIVED
AUG 10 1992
Environmental Svcs Department

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

Attention: W. Jeffrey Pardue, Manager, Environmental Programs

Volusia County - AP
Peaking Units No. 1, 2, 3, 4, 5, and 6

Dear Mr. Pardue:

Enclosed is Permit Number AO64-207447 to operate the above referenced source issued pursuant to Section(s) 403.087, Florida Statutes.

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

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

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

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

for BZ George Heinis
A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

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

Mary G. DeJesus 8/6/92
Clerk Date

AA/jtt

Copies furnished to:

Barry Appleby

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE and all copies were mailed before the close of business on August, 1992 to the listed persons, by Theresa Boulden.

Rev. 4/91

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Lawton Chiles, Governor — Carol M. Browner, Secretary

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

Attention: W. Jeffrey Pardue,
Manager, Environmental Programs

I. D. Number:
Permit/Certification
Number: A064-207447
Date of Issue:
Expiration Date: July 30, 1997
County: Volusia
Latitude/Longitude:
28°54'17"N/81°19'53"W
UTM: 17-467.7 KmE; 3197.3 KmN
Project: Peaking Units No. 1, 2, 3, 4, 5, and 6

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2. 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:

The permittee can operate Peaking Units No. 1, 2, 3, 4, 5, and 6 which are gas turbine electric generators and are fired with No. 2 or No. 6 fuel oil only.

These sources are located at the Florida Power Corporation facility on Highbanks Road in Debary, Volusia County, Florida.

General Conditions are attached to be distributed to the permittee only.

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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.*

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

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

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

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

6. *The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, 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 reasonable times, access to the premises where the permitted activity is located or conducted to:*

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

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

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

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

GENERAL CONDITIONS:

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 Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-30.300, 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.

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)

( ) Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)

( ) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

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

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

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

PERMITTEE:
Florida Power Corp.

I. D. Number:
Permit/Certification Number:
A064-207447
Date of Issue:
Expiration Date: July 30, 1997

Attention: W. Jeffrey Pardue, Manager
Environmental Programs

GENERAL CONDITIONS:

16. No objectionable odors will be allowed, as per Rule 17-2.620(2), F.A.C.

17. All unconfined emissions of particulate matter generated at this site shall be adequately controlled. (Rule 17-2.610(3), F.A.C.) Area must be watered down should unconfined emissions occur.

18. This permit does not preclude compliance with any applicable local permitting requirements and regulations.

SPECIFIC CONDITIONS:

OPERATING LIMITS

1. Each source is permitted to operate 8760 hours/year.

2. Each source will be fired with No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight or No. 6 fuel oil with a maximum sulfur content of 0.7 percent by weight.

3. The maximum permitted heat input rate for each source is:
   a. 588 MMBtu/hr at 95°F using No. 6 fuel oil or
   b. 673 MMBtu/hr at 95°F using No. 2 fuel oil.

   The heat input rates shall be verified using the design curves which were made part of the application. The gross output and the inlet temperature of each unit are used with the design curve to obtain the heat input for each unit in operation. The heat input and fuel consumption can vary with ambient temperature in accordance with the design curves.

4. Each calendar year on or before March 1, submit to this office and Orange County Environmental Protection Department for each source, an Annual Operations Report DER Form 17-1.202(6) for the preceding calendar year.

EMISSION LIMITS

5. The visible emissions for each unit must comply with Rule 17-2.610(2)F.A.C. (20% opacity limit) and the compliance test must be conducted in accordance with Rule 17-2.700(6)(b)9, (DER Method #9) F.A.C.

PERMITTEE:
Florida Power Corp.

Attention: W. Jeffrey Pardue, Manager
Environmental Programs

I. D. Number:
Permit/Certification Number:
A064-207447
Date of Issue:
Expiration Date: July 30, 1997

SPECIFIC CONDITIONS:
(Continued)

COMPLIANCE TESTING

6. Units No. 1 through 6 must be tested in accordance with DER Method 9 within 10 days after being placed back in operation using No. 6 residual oil.

7. Units No. 1 through 6 must be tested for visible emissions at yearly intervals from the date of January 17, 1992, in accordance with Rule 17-2.700(6)(b)9, (DER Method #9) F.A.C.

8. Oil Analysis by the applicant's fuel supplier may be used to determine compliance with the sulfur limit, if this can be substantiated with purchase order and records of usage.

9. This office (Florida Department of Environmental Regulation, Air Permitting, Orlando) shall be notified in writing at least fifteen (15) days in advance of the compliance tests so that we can witness them (Rule 17-2.700(2)(a)5, F.A.C.).

10. This plant is required to operate within 90 to 100 percent of permitted capacity during the compliance tests.

11. The type of fuel and the heat input to each source must be entered in the visible emission report.

12. The required test report shall be filed with the department as soon as practical but no later than 45 days after the last sampling run of each test is completed (Rule 17-2.700(7)(a),(b) and (c), F.A.C).

EXPIRATION DATE

13. An operation permit renewal must be submitted at least 60 days prior to the expiration date of this permit (Rule 17-4.09, F.A.C.).

PERMITTEE:
Florida Power Corp.

Attention: W. Jeffrey Pardue, Manager
Environmental Programs

I. D. Number:
Permit/Certification Number:
A064-207447
Date of Issue:
Expiration Date: July 30, 1997

SPECIFIC CONDITIONS:
(Continued)

ISSUED August 6, 1992

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

GF George Heinis
for A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

For FLORIDA POWER CORPORATION
P.O. BOX 14042
ST. PETERSBURG, FLORIDA 33733

Permit no. AC 64-2116 Date January 8, 1975

Pursuant to the provisions of section 403.061(16) of Chapter 403 Florida Statutes and Chapter 17-4 Florida Administrative Code. This permit is issued to:

Mr. William S. O'Brien, Supervisor, Licensing Affairs

For the construction of the following :

Oil fired, gas turbine generator, Unit #1, 51,900 Output, 555 MM BTU/hr input with Wa ter Injection system and Hi-Eff Combustion System, utilizing fuel oil not to exceed 0.7% sulfur

Located at: North side of Highbanks Road, 3 miles NW of DeBary, Volusia County, UTM 7467520 E, 3197260 N

In accordance with the application dated November 19, 1973 and in conformity with the statements and supporting data entered therein, all of which are filed with the department and are considered a part of this permit.

This permit shall be effective from the date of issue until January 1, 1977 or until revoked or surrendered and shall be subject to all laws of the state and the rules and regulations of the department.

Charles M. Collins
REGIONAL ENGINEER

PETER P. BALJET
EXECUTIVE DIRECTOR

FS7 1-74

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

For FLORIDA POWER CORPORATION
P.O. BOX 14042
ST. PETERSBURG, FLORIDA 33733

Permit no. AC 64-2117 Date January 8, 1975

Pursuant to the provisions of section 403.061(16) of Chapter 403 Florida Statutes and Chapter 17-4 Florida Administrative Code. This permit is issued to:

Mr. William S. O'Brien, Supervisor, Licensing Affairs

For the construction of the following :

Oil fired, gas turbine generator, Unit #2, 51,900 KW output, 555MM BTU/HR input iwth Water Injection system and Hi-Eff Combustion System, utilizing fuel oil not to exceed 0.7% sulfur

Located at: North Side of Highbanks Road, 3 miles NW of Debary, Volusia County, UTM 7467520 E, 3197260 N

In accordance with the application dated November 19, 1973 and in conformity with the statements and supporting data entered therein, all of which are filed with the department and are considered a part of this permit.

This permit shall be effective from the date of issue until January 1, 1977 or until revoked or surrendered and shall be subject to all laws of the state and the rules and regulations of the department.

Charles M. Collins
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FS7 1-74

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

For FLORIDA POWER CORPORATION
P.O. BOX 14042
ST. PETERSBURG, FLORIDA 33733

Permit no. AC 64-2118 Date JANUARY 8, 1975

Pursuant to the provisions of section 403.061(16) of Chapter 403 Florida Statutes and Chapter 17-4 Florida Administrative Code. This permit is issued to:

MR. WILLIAM S. O'BRIEN, SUPERVISOR, LICENSING AFFAIRS

For the construction of the following :

OIL FIRED, GAS TURBINE GENERATOR, UNIT #3, KW OUTPUT, 555 MM BTU/HR INPUT WITH WATER INJECTION SYSTEM AND HI-EFF COMBUSTION SYSTEM, UTILIZING FUEL OIL NOT TO EXCEED 0.7% SULFUR

Located at: NORTH SIDE OF HIGHBANKS ROAD, 3 MILES NW OF DEBARY, VOLUSIA COUNTY, UTM 7467520 E, 3197260 N

In accordance with the application dated NOVEMBER 19, 1973 and in conformity with the statements and supporting data entered therein, all of which are filed with the department and are considered a part of this permit.

This permit shall be effective from the date of issue until JANUARY 1, 1977 or until revoked or surrendered and shall be subject to all laws of the state and the rules and regulations of the department.

Charles M. Collins
REGIONAL ENGINEER

PETER P. BALJET
EXECUTIVE DIRECTOR

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

FS7 1-74

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

For FLORIDA POWER CORPORATION
P.O. BOX 14042
ST. PETERSBURG, FLORIDA 33733

Permit no. AC 64-2119 Date JANUARY 8, 1975

Pursuant to the provisions of section 403.061(16) of Chapter 403 Florida Statutes and Chapter 17-4 Florida Administrative Code. This permit is issued to:

MR. WILLIAM S. O'BRIEN, SUPERVISOR, LICENSING AFFAIRS

For the construction of the following :

OIL FIRED, GAS TURBINE GENERATOR, UNIT #4, 51,900 KW OUTPUT, 555 MM BTU/HR INPUT, WITH WATER INJECTION SYSTEM AND HI-EFF COMBUSTION SYSTEM, UTILIZING FUEL OIL NOT TO EXCEED 0.7% SULFUR

Located at: NORTH SIDE OF HIGHBANKS ROAD, 3 MILES NW OF DEBARY, VOLUSIA COUNTY, UTM 7467520 E, 3197260 N

In accordance with the application dated NOVEMBER 19, 1973 and in conformity with the statements and supporting data entered therein, all of which are filed with the department and are considered a part of this permit.

This permit shall be effective from the date of issue until JANUARY 1, 1977 or until revoked or surrendered and shall be subject to all laws of the state and the rules and regulations of the department.

Charles M. Collins
REGIONAL ENGINEER

PETER P. BALJET
EXECUTIVE DIRECTOR

GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST

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STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

For FLORIDA POWER CORPORATION
P.O. BOX 14042
ST. PETERSBURG, FLORIDA 33733

Permit no. AC 64-2120 Date JANUARY 8, 1975

Pursuant to the provisions of section 403.061(16) of Chapter 403 Florida Statutes and Chapter 17-4 Florida Administrative Code. This permit is issued to:

MR. WILLIAM S. O'BRIEN, SUPERVISOR, LICENSING AFFAIRS

For the construction of the following :

OIL FIRED, GAS TURBINE GENERATOR, UNIT #5, 51,900 KW OUTPUT, 555 MM BTU/HR INPUT, WITH WATER INJECTION SYSTEM AND HI-EFF COMBUSTION SYSTEM, UTILIZING FUEL OIL NOT TO EXCEED 0.7% SULFUR

Located at: NORTH SIDE OF HIGHBANKS ROAD, 3 MILES NW OF DEBARY, VOLUSIA COUNTY, UTM 74675520 E, 3197260 N

In accordance with the application dated NOVEMBER 19, 1973 and in conformity with the statements and supporting data entered therein, all of which are filed with the department and are considered a part of this permit.

This permit shall be effective from the date of issue until JANUARY 1, 1977 or until revoked or surrendered and shall be subject to all laws of the state and the rules and regulations of the department.

Charles M. Collins
REGIONAL ENGINEER

PETER P. BALJET
EXECUTIVE DIRECTOR

FS7 1-74

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

For FLORIDA POWER CORPORATION
P.O. BOX 14042
ST. PETERSBURG, FLORIDA 33733

Permit no. AC 64-2121 Date JANUARY 8, 1975

Pursuant to the provisions of section 403.061(16) of Chapter 403 Florida Statutes and Chapter 17-4 Florida Administrative Code. This permit is issued to:

MR. WILLIAM S. O'BRIEN, SUPERVISOR, LICENSING AFFAIRS

For the construction of the following :

OIL FIRED, GAS TURBINE GENERATOR, UNIT #6, 51,900 KW OUTPUT, 555 MM BTU/HR INPUT, WITH WATER INJECTION SYSTEM AND HI-EFF COMBUSTION SYSTEM, UTILIZING FUEL OIL NOT TO EXCEED 0.7% SULFUR.

Located at : NORTH SIDE OF HIGHBANKS ROAD, 3 MILES NW OF DEBARY, VOLUSIA, COUNTY UTM 7467520 E, 3197260 N

In accordance with the application dated NOVEMBER 19, 1973 and in conformity with the statements and supporting data entered therein, all of which are filed with the department and are considered a part of this permit.

This permit shall be effective from the date of issue until JANUARY 1, 1977 or until revoked or surrendered and shall be subject to all laws of the state and the rules and regulations of the department.

Charles M. Collins
REGIONAL ENGINEER

PETER P. BALJET
EXECUTIVE DIRECTOR

FS7 1-74

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC 64-2116 Date: 1/8/75

(X) 1. Construction of this installation shall be completed by July 1, 1976. Application for Permit to Operate to be submitted by _____.

(X) 2. This construction permit expires on January 1, 1977 following an initial period of operation for appropriate testing to determine compliance with the Rules of the Florida Pollution Control Board.

(X) 3. All applicable rules of the Department including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.

(X) 4. The applicant shall continue the retention of the engineer of record for the inspection of the construction of this project. Upon completion the engineer shall inspect for conformity to construction permit applications and associated documents. A report of such inspection shall be submitted by the engineer to the Department of Pollution Control for consideration toward the issuance of an operation permit.

(X) 5. This Gas Turbine shall be tested* for Particulate Emissions within 60 days after it is placed in operation. These test results are required prior to our issuance of an operation permit and shall be submitted in duplicate to the DPC Central Region Florida Regional Office 3319 Maguire Blvd., Suite 232, Orlando, Florida 32803

*FUEL ANALYSIS MAY BE SUBMITTED FOR REQUIRED SULFUR DIOXIDE EMISSION TEST.

(X) 6. The operation of this installation shall be observed for visible emissions in accordance with Method 9 - Visible Determination of the Opacity of Emissions from Stationary Sources (36FR24895; Federal Register, December 23, 1971). The observation results are required prior to our issuance of an operation permit, and shall be submitted in duplicate to the DPC Central Region Florida Regional Office, 3319 Maguire Blvd. Suite 232, Orlando Florida 32803.

(X) 7. Satisfactory ladders, platforms, and other safety devices shall be provided/available as well as necessary ports to facilitate the carrying out of an adequate sampling program.

(X) 8. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

(X) 9. All fugitive dust generated at this site shall be adequately controlled. Permitted only to burn fuel oil containing no greater than 0.7% sulfur by weight.

ATTACHMENT DB-E01-L13

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT DB-E01-L13

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

III. EMISSIONS UNIT INFORMATION

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

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

[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): **Combustion Turbine Units 7,8,9 and 10**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [ ] Unknown *		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [**X**] Yes [ ] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): ***ID No.: P7, P8, P9, P10, 015, 016, 017, 018. Each turbine is permitted to operate up to the equivalent of 3,390 hrs/yr at peak or other lesser loads and 38.7% capacity factor. The capacity factor shall be limited to 33% based on a weighted 12-month rolling average sulfur content not to exceed 0.3%. If the sulfur content is less than 0.3%, the capacity factor can be adjusted up to 38.7%**		

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

   Water injection

2. Control Device or Method Code: **28**

B.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C.

1. Description (limit to 200 characters):

2. Control Device or Method Code:

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

Emissions Unit Details

1. Initial Startup Date:	**1 Nov 1992**
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **General Electric**	Model Number: **PG7111EA**
4. Generator Nameplate Rating:	**93** MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		**1,144**	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): **Maximum heat input rate based on permit limit at 20 °F. Initial startup dates are for P7, P8, P9, and P10.**			

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/yr	**3,390**	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 DB-E02-D

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **See DB-FI-E2**	
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): **Combustion turbine gases exhaust through single stack per turbine.**	
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:	**50** feet
7. Exit Diameter:	**13.8** feet
8. Exit Temperature:	**1,043** °F

9. Actual Volumetric Flow Rate:	**1,551,317** 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): **Exit temperature and flow rate given for ambient temperature of 59 °F. Stack data for one CT. Exit Diameter = 13.75 ft (rounded to 13.8).**	

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: **8.212**	5. Maximum Annual Rate: **27,838**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **131**	
10. Segment Comment (limit to 200 characters): **Data for one CT at 59 °F. Heat content - 131.5 (LHV). Max annual rate - 33% capacity factor, weighted 12-mo. roll. 0.3% avg. sulfur content. If 12-mo. avg. less than 0.3%, cap. adj. to 38.7%.**	

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	028		EL
PM			EL
PM10			EL
CO			EL
VOC			EL
SAM			EL

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: **555** lb/hour **1,925** 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: **AC Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **AC Permit Limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emissions, lb/hr - 1 unit, 0.5% sulfur content fuel oil and ambient temperature of 59 °F. Annual emissions - 4 units, 0.3% sulfur content fuel oil (59°F), 33% capacity factor.**

Emissions Unit Information Section 2 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: **0.3 % Sulfur avg.**	
4. Equivalent Allowable Emissions:	**555** lb/hour **1,925** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Analysis or EPA Method 6**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on 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):	

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

Pollutant Detail Information:

1. Pollutant Emitted: **NOX**

2. Total Percent Efficiency of Control: **80** %

3. Potential Emissions: **182** lb/hour **1,234** tons/year

4. Synthetically Limited? [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor: **42 ppmvd**

   Reference: **AC Permit limit**

7. Emissions Method Code:

   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   AC Permit limit

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Emissions, lb/hr - 1 unit, ambient temperature of 59°F. Annual emissions - 4 units, 59 °F and 38.7% capacity factor.

Emissions Unit Information Section 2 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: **42 ppmvd @ 15% O2**	
4. Equivalent Allowable Emissions:	**182** lb/hour **1,234** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 20**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on 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):	

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **17.2** lb/hour **116** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.015 lb/MMBtu** Reference: **AC Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **AC Permit Limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emissions, lb/hr - 1 unit, ambient temperature of 59°F. Annual emissions - 4 units, 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 **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: **0.015 lb/MMBtu**	
4. Equivalent Allowable Emissions:	**17.2** lb/hour **116** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance test, EPA Method 5 or 17**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on permit limit. If VE limits are met, PM test is not required.**	

B.

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

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

Pollutant Detail Information:

1. Pollutant Emitted: **PM10**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **17.2** lb/hour **116** tons/year

4. Synthetically Limited? [**X**] Yes [ ] No

5. Range of Estimated Fugitive/Other Emissions:

   [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr

6. Emission Factor: **0.015 lb/MMBtu**

   Reference: **AC Permit limit**

7. Emissions Method Code:

   [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5

8. Calculation of Emissions (limit to 600 characters):

   AC Permit Limit

9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

   Emissions, lb/hr - 1 unit, ambient temperature of 59°F. Annual emissions - 4 units, 59°F and 38.7% capacity factor.

Emissions Unit Information Section 2 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: **0.015 lb/MMBtu**	
4. Equivalent Allowable Emissions:	**17.2** lb/hour **116** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance test, EPA Method 5 or 17**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on permit limit. If VE limits are met, PM test is not required.**	

B.

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

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **54** lb/hour **365** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **25 ppmvd** Reference: **AC Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **AC Permit Limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emissions, lb/hr - 1 unit, ambient temperature of 59°F. Annual emissions - 4 units, 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 **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: **54 lb/hr**	
4. Equivalent Allowable Emissions:	**54** lb/hour **365** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance test, EPA Method 10**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on 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):	

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

Pollutant Detail Information:

1. Pollutant Emitted: VOC
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 5 lb/hour 34 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: 5 ppmvd Reference: AC Permit limit
7. Emissions Method Code: [X] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **AC Permit Limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emissions, lb/hr - 1 unit, ambient temperature of 59°F. Annual emissions - 4 units, 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 **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: **5 lb/hr**	
4. Equivalent Allowable Emissions:	**5** lb/hour **34** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance test, EPA Method 25A**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on permit limit. Testing not required if compliance with CO limit is shown.**	

B.

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

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

Pollutant Detail Information:

1. Pollutant Emitted: **SAM**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **69** lb/hour **469** 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 - max*** Reference: **AC Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **AC Permit Limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): *** 0.3% S - avg, 12-mo. roll. avg. Emissions, lb/hr - 1 unit, 0.5% sulfur content fuel oil & ambient temp. 59°F. Annual emissions - 4 units, 0.3% sulfur content fuel oil (59°F), 33% capacity factor.**

Emissions Unit Information Section 2 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 max***
4. Equivalent Allowable Emissions: **69** lb/hour **469** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel analysis or EPA Method 8**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): *** 0.3% sulfur avg (12-mo. rolling avg). Based on 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 2

1.	Visible Emissions Subtype: **VE10**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **10** % Exceptional Conditions: **20** % Maximum Period of Excess Opacity Allowed: min/hour
4.	Method of Compliance: **Annual compliance test. EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. Based on permit limit. 2. Visible emission limit under normal conditions at full load; exceptional conditions are specified for other loads.**

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): **Not to exceed 2 hr in 24 hrs for startup, shutdown, and malfunction. Rule 62-210.700(1), F.A.C.**

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number:	
5. Installation Date: 01 Nov 1992	
6. Performance Specification Test Date: 01 Nov 1992	
7. Continuous Monitor Comment (limit to 200 characters): **Water to fuel ratio is monitored on a continuous basis (40 CFR 60.334).**	

Continuous Monitoring System Continuous Monitor 2 of 2

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number:	
5. Installation Date: 01 Nov 1992	
6. Performance Specification Test Date: 01 Nov 1992	
7. Continuous Monitor Comment (limit to 200 characters): **40 CFR 75, Appendix E**	

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.

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

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

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

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

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

2. Increment Consuming for Nitrogen Dioxide?

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

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

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

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

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

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

3.	Increment Consuming/Expanding Code:			
	PM	[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):			

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: DB-E02-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: DB-E02-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[X] Attached, Document ID: DB-E02-L3	
	[ ] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[X] Attached, Document ID: DB-E02-L4	
	[ ] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[ ] Not Applicable
	[X] Previously Submitted, Date: 17 Jan 1996	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: DB-E02-L6	[ ] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation [X] Attached, Document ID: DB-E02-L10 [ ] Not Applicable
11.	Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID: _____ [X] Not Applicable
12.	Identification of Additional Applicable Requirements [X] Attached, Document ID: DB-E02-L12 [ ] Not Applicable
13.	Compliance Assurance Monitoring Plan [X] Attached, Document ID: DB-E02-L13 [ ] Not Applicable
14.	Acid Rain Permit Application (Hard Copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: DB-E02-L14 [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [ ] Not Applicable

ATTACHMENT DB-E02-D

EMISSION UNIT REGULATIONS

ATTACHMENT DB-E02-D
APPLICABLE REQUIREMENTS LISTING - POWER PLANTS

EMISSION UNIT: Combustion Turbines 7-10 - FPC DeBary Plant

FDEP Rules:

Air Pollution Control-General Provisions:
62-204.800(7)(b)37.(State Only) - NSPS Subpart GG
62-204.800(7)(d) (State Only) - NSPS General Provisions
62-204.800(12) (State Only) - Acid Rain Program
62-204.800(13) (State Only) - Allowances
62-204.800(14) (State Only) - Acid Rain Program Monitoring

Stationary Sources-General:
62-210.700(1) - Startup/shutdown/malfunction
62-210.700(4) - maintenance
62-210.700(6)

Acid Rain:
62-214.300 - Acid Rain Units (Applicability)
62-214.320 - Acid Rain Units (Application Shield)
62-214.330 - Compliance Options (if 62-214.430)
62-214.350(2),(3),(6) - Acid Rain Units (Certification)
62-214.370 - Revisions; corrections; (potentially applicable)
62-214.430 - Acid Rain Units (Compliacne Options)

Stationary Sources-Emission Monitoring (where stack test is required):
62-297.310(1) - Test Runs-Mass Emission
62-297.310(2)(b) - Operating Rate; other than CTs
62-297.310(3) - Calculation of Emission
62-297.310(4)(a) - Applicable Test Procedures;Sampling time
62-297.310(4)(b) - Sample Volume
62-297.310(4)(c) - Required Flow Rate Range-PM/H2SO4/F
62-297.310(4)(d) - Calibration
62-297.310(4)(e) - EPA Method 5-only
62-297.310(5) - Determination of Process Variables
62-297.310(6)(a) - Permanent Test Facilities-general
62-297.310(6)(c) - Sampling Ports
62-297.310(6)(d) - Work Platforms
62-297.310(6)(e) - Access
62-297.310(6)(f) - Electrical Power
62-297.310(6)(g) - Equipment Support
62-297.310(7)(a)2. - FFSG excess emissions
62-297.310(7)(a)3. - Permit Renewal Test Required

62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if <400 hrs/yr
62-297.310(7)(a)6.	- PM exemption if < 200 hrs/6 month
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Compliance Tests (fuel sampling)
62-297.310(8)	- Test Reports

Federal Rules:
NSPS General Requirements:

40 CFR 60.7(b)	- Notification/Recordkeeping (startup/shutdown/malfunction)
40 CFR 60.7(f)	- Notification/Recordkeeping (maintain records-2 years)
40 CFR 60.8(c)	- Performance Tests (representative conditions)
40 CFR 60.8(e)	- Performance Tests (Provide stack sampling facilities)
40 CFR 60.8(f)	- Test Runs
40 CFR 60.11(a)	- Compliance (ref. S. 60.8)
40 CFR 60.11(d)	- Compliance (maintain air pollution control equipment)
40 CFR 60.12	- Circumvention

NSPS Subpart GG:

40 CFR 60.332(a)(1)	- NOx for Electric Utility CTs
40 CFR 60.333	- SO2 limits (0.8% sulfur)
40 CFR 60.334	- Monitoring of Operations (WTF ratio)
40 CFR 60.335	- Test Methods

Acid Rain-Permits:

40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO2 Allowances-violation
40 CFR 72.9(c)(1)(iv)	- SO2 Allowances- other utility units
40 CFR 72.9(c)(4)	- SO2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- SO2 Allowances-no deduction for 72.9(c)(1)(i)
40 CFR 72.9(e)	- Excess Emission Requirements
40 CFR 72.9(f)	- Recordkeeping and Reporting
40 CFR 72.9(g)	- Liability
40 CFR 72.20(a)	- Designated Representative; required
40 CFR 72.20(b)	- Designated Representative; legally binding
40 CFR 72.20(c)	- Designated Representative; certification requirements
40 CFR 72.21	- Submissions
40 CFR 72.22	- Alternate Designated Representative
40 CFR 72.23	- Changing representatives; owners
40 CFR 72.30(a)	- Requirements to Apply (operate)
40 CFR 72.30(c)	- Requirements to Apply (reapply before expiration)
40 CFR 72.30(d)	- Requirements to Apply (submittal requirements)

40 CFR 72.32	- Permit Application Shield
40 CFR 72.33(b)	- Dispatch System ID;unit/system ID
40 CFR 72.33(c)	- Dispatch System ID;ID requirements
40 CFR 72.33(d)	- Dispatch System ID;ID change
40 CFR 72.40(a)	- General; compliance plan
40 CFR 72.40(b)	- General; multi-unit compliance options
40 CFR 72.40(c)	- General; conditional approval
40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield
40 CFR 72.90	- Annual Compliance Certification

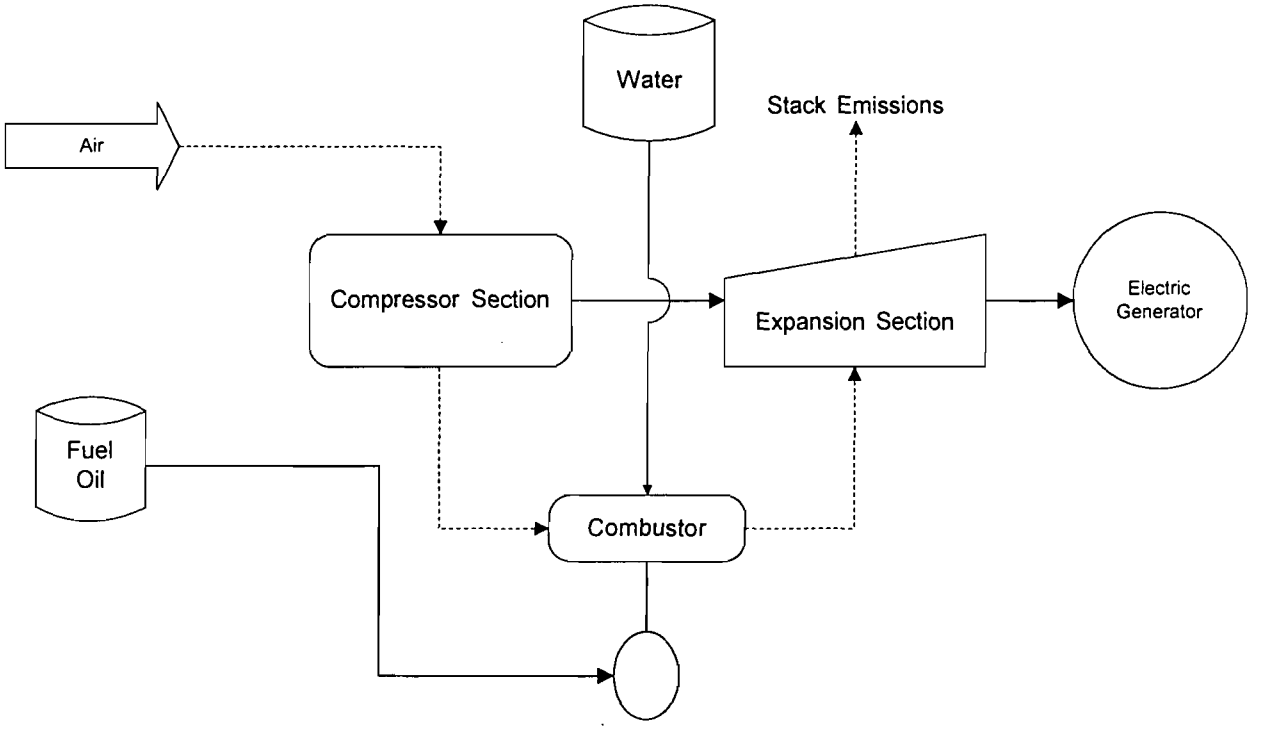
Monitoring Part 75:

40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(2)	- Primary Measurement; NOx; except 75.12&.17; Subpart E
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.11(e)	- SO2 Monitoring; Gaseous fuel firing
40 CFR 75.12(b)	- NOx Monitoring; Determination of NOx emission rate; Appendix F
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Addendix D & E
40 CFR 75.21(a)	- QA/QC; CEMS;
40 CFR 75.21(b)	- QA/QC; Opacity;
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.21(d)	- QA/QC; Notification of RATA
40 CFR 75.21(e)	- QA/QC; Audits
40 CFR 75.21(f)	- QA/QC; CEMS
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NOx
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Porcedures
40 CFR 75.36	- Missing Data Procedures for Heat Input
40 CFR 75.53	- Monitoring Plan (revisions)
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(d)	- Recordkeeping-NOx
40 CFR 75.55(c);(e)	- Recordkeeping; Special Situations (gas & oil firing)
40 CFR 75.56	- Certification; QA/QC Provisions

40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement
40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures
Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NOx & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO2; from combustion sources
Appendix H	- Traceability Protocol
40 CFR Part 77.3	- Offset Plans (future)
40 CFR Part 77.5(b)	- Deductions of Allowances (future)
40 CFR Part 77.6	- Excess Emissions Penalties SO2 and NOx

ATTACHMENT DB-E02-L1

PROCESS FLOW DIAGRAM



Florida Power Corporation		*Emission Unit:* Turbines No. 7, 8, 9, 10 *Process Area:* Overall Plant	KBN Engineering and Applied Sciences, Inc.
Emission Units	DeBary	*Filename:* FPCDB!.VSD *Latest Revision Date:* 6/20/95 01:12 PM	

ATTACHMENT DB-E02-L2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT DB-E02-L2

FUEL ANALYSIS
NO. 2 FUEL OIL

Parameter	Typical Value	Max Value
API gravity @ 60 F	30[1]	-
Relative density	7.09 lb/gal [2]	
Heat content	18,550 Btu/lb (LHV)	
% sulfur	0.3 [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 DB-E02-L3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

GE Mark IV Nox Control Algorithm Description

The GE Mark IV Nox control algorithm utilizes data from digital temperature and humidity monitors located at each combustion turbine. The algorithm receives and processes the ambient temperature and humidity on a continuous basis. A temperature/humidity correction is used in determining the amount of water to inject for Nox control. This correction accounts for the ambient water entering the combustion chamber, and then it adds the correct amount of injection water in order to ensure compliance with the unit's required water to fuel ratio as determined from the water/fuel curve. This algorithm ensures compliance on a continuous basis regardless of the unit load and ambient weather conditions.

ATTACHMENT DB-E02-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT DB-E02-L4

Description of Stack Sampling Facilities

The DeBary Combustion Turbine No. 7, 8, 9, and 10 are required by Permit AO64-233544 to perform annual stack testing in accordance with standard EPA reference methods. Pursuant to Rule 62-297.310, F.A.C., the annual stack test required is performed with the required stack sampling facilities. A diagram depicting stack sampling facilities is presented as an attachment. As specified by Rule 62-297.310(6) , the permanent test facilities meet the following:

- The sampling ports have a minimum effective diameter of 3 inches.
- The location of the sampling ports are 2 stack diameters downstream and 0.5 stack diameters upstream of flow disturbances.
- Sampling ports are provided to allow access to each sampling point in the cross sectional area of the rectangular stack.
- The working platform is at least 24 square feet in area, at least three feet wide, extends 180 degrees around the stack, has safety rails, toeboards, and a hinged floor opening attached to it. There are no obstructions 14 inches below the port and 6 inches on either side of the port.
- The platform access ladder is equipped with a safety cage.

Rectangular Stack Sampling Traverse Point Layout
(EPA Method 1)

Intercession City Power Station

Date:_____ Port + Stack ID: 129 in.

Plant: Florida Power Corporation Port Extension (Ref. Pt.) 25 in.

Source: P-7,8,9,10 Stack ID: 104 in.

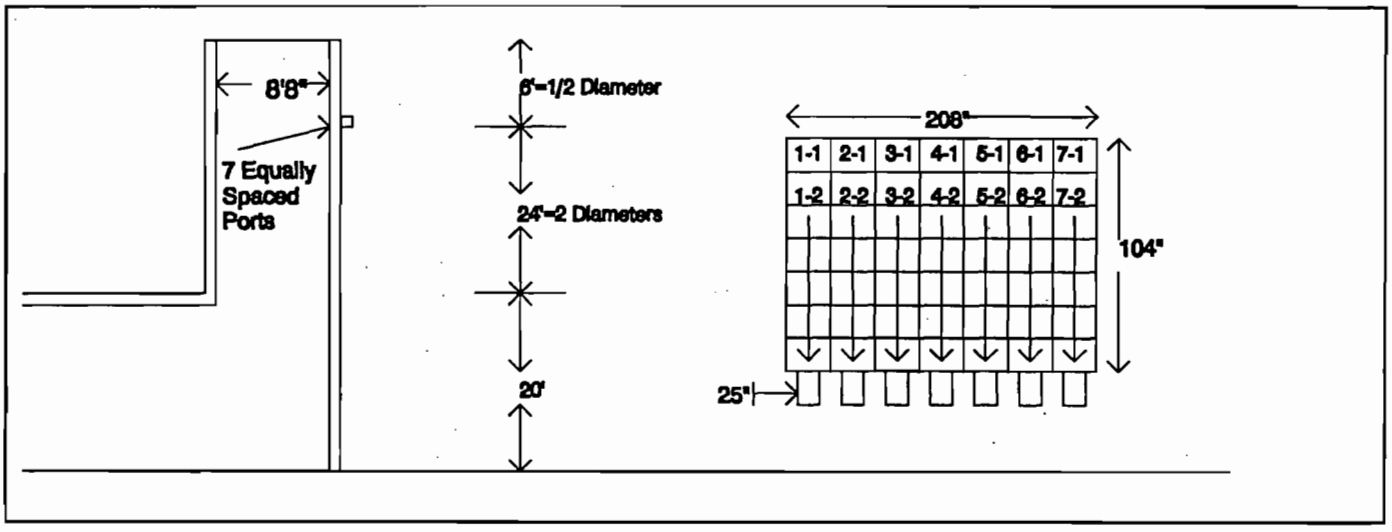
Technician(s)_____ Stack Area 150.2 ft.^{2}.

Stack Length (L) 104 in. Total Req'd Trav. Pts (P). 49

Stack Width (W) 208 in. No. of Traverse Pts. 7 /dimen.

No. of Traverse Pts. 7 /port

Stack Diagram (Side View showing major unit components, dimensions and nearest upstream & downstream flow disturbances. Top view showing length, width, and sample ports.



Calculate the Equivalent Diameter of Rectangular Stack

$$De = \frac{2 \times L \times W}{(L + W)} \qquad 140 \text{ in.} = \frac{2 \times (104 \text{ in}) \times (208 \text{ in.})}{((104 \text{ in.}) + (208 \text{ in.}))}$$

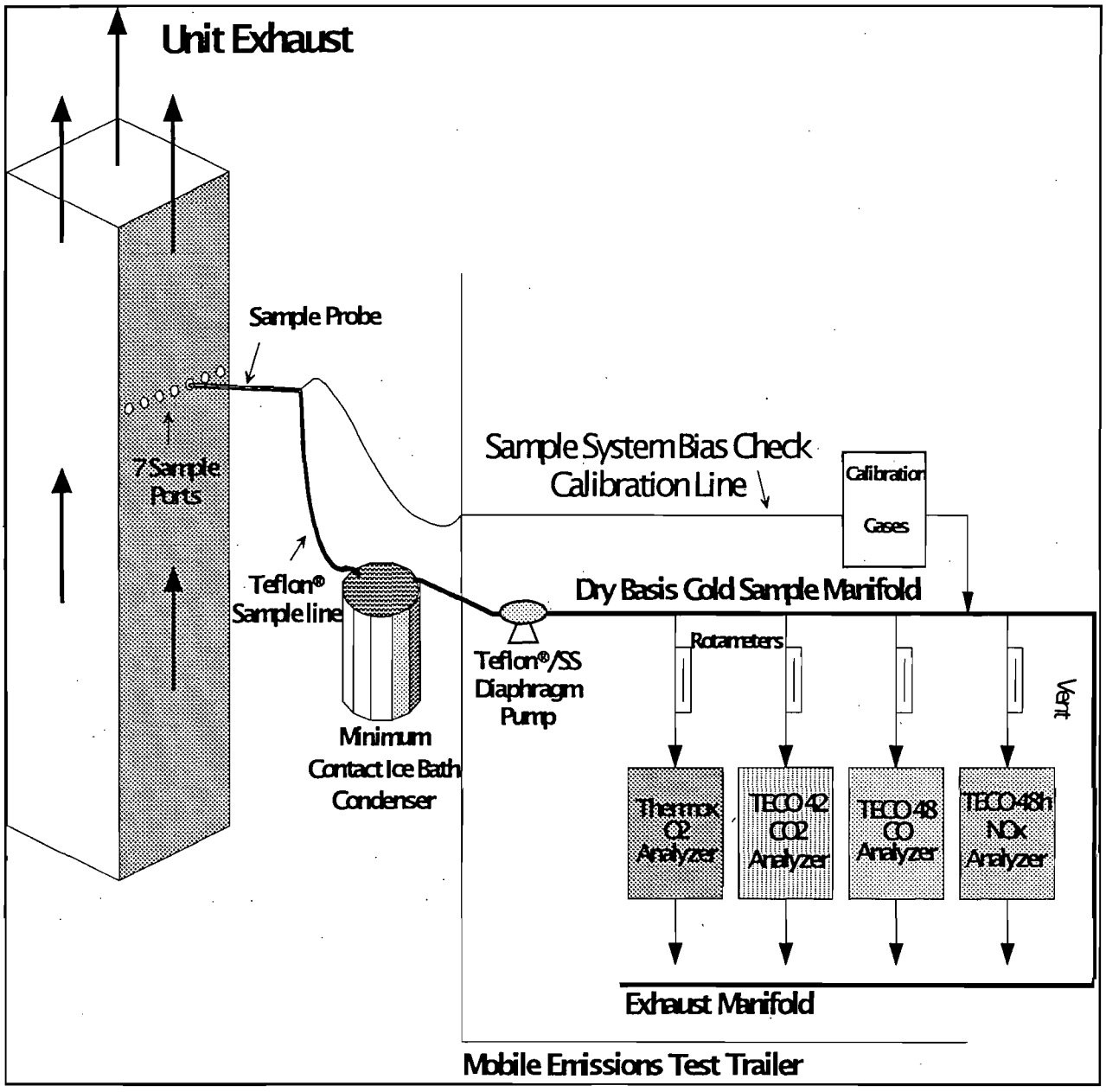
Calculte Distance from Stack Wall to Traverse Points

(Example for Point No. 2)

$$\text{Distance} = \frac{L \times 1.5}{P} \qquad 22.3 \text{ in.} = \frac{(104 \text{ in}) \times 1.5}{7}$$

Point No.	Length Factor	Distance from Ref. Point (inches)	Distance Sample Pt. to Probe Tip
1	0.5	7.4	32.4
2	1.5	22.3	47.3
3	2.5	37.1	62.1
4	3.5	52.0	77.0
5	4.5	66.9	91.9
6	5.5	81.7	106.7
7	6.5	96.6	121.6

Figure 1
Gaseous Sampling and Analysis Diagram



ATTACHMENT DB-E02-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT DB-E02-L6

PROCEDURES FOR STARTUP/SHUTDOWN

Startup for the combustion turbines begins with "lighting off" of the machines on distillate oil.

If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective actions taken or preventative measures adopted. Corrective actions may include switching the unit from automatic (remote) to local control. Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit from the system electrical grid), shutting off the fuel and coasting down to stop. The CT is then put "on turning gear" to prevent possible disfiguration of the turbine components.

ATTACHMENT DB-E02-L10

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT DB-EU2-L10

ALTERNATIVE METHODS OF OPERATION - COMBUSTION TURBINES P-7 TO P-10

The DeBary Facility's four combustion turbines, P-7, P-8, P-9, and P-10, rated at 92.9 megawatts (MW) at 59 degrees Fahrenheit (°F) (GE PG7111EA), were limited in the air construction permit to an average maximum capacity factor of 38.7 percent (3,390 hours per year operating time) (It should be noted that the air construction permit included six combustion turbines). In addition, the capacity factors for these turbines were limited to 33 percent based on a weighted 12 month rolling maximum sulfur content of 0.3 percent. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.3 percent, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	Percent Capacity Factor
0.3 - 0.295	33.0
0.29 - 0.285	34.4
0.28 - 0.275	35.8
0.27 - 0.265	37.2
0.26 - or less	38.7

The four combustion turbines (GE Frame 7EA) were also limited in fuel oil consumption and heat input rate on a per unit basis, per aggregate units, or prorated consumption based on the table as described above.

Therefore, any combination of the four combustion turbines may operate for up to 8,760 hours per year provided that both the hourly and annual emission limitations, aggregate annual capacity factors, and aggregate fuel oil consumption limits are met.

ATTACHMENT DB-E02-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

ATTACHMENT DB-E02-L12

REQUEST TO CHANGE CONDITIONS THAT ARE OBSOLETE AND OUTDATED

This request is to remove from the Title V permit, several conditions of the FDEP issued PSD/air construction permit (AC64-191015; PSD-FL-167; as amended) that are obsolete and outdated. This request is made pursuant to FDEP's Guidance on Implementation of Existing Permit Conditions Into Title V Permits (DARM-PER/V-14; February 8, 1996).

Specific Condition 4:

The inclusion of a fuel use limit (i.e., gal/hr/CT and gal/yr) is redundant to the heat input limits based on ambient temperature and the tons/yr limits for the CTs. The dual limits causes confusion in terms of compliance and are, therefore, outdated. The reference to fuel use limits in this condition is requested not to be included in the Title V permit.

Specific Condition 11 and 13:

These conditions in the original AC/PSD permit required sampling methods for Be and Hg, respectively. Since a subsequent amendment deleted the emission limits for these pollutants, which is consistent with current FDEP policy (DARM May 19, 1995 guidance memorandum), these conditions should not be included in the Title V permit.

Specific Condition 13:

This condition should not be included in the Title V permit, since it is redundant to Specific Condition 18 of the AC/PSD permit that requires using the equation promulgated in 40 CFR 60.335(c)(1) to demonstrate compliance with the NSPS (i.e., 40 CFR Part 60 Subpart GG). Current FDEP policy and more recently issued permits do not contain this equation.

Specific Condition 24:

FPC has installed, when performing compliance tests, stack sampling facilities that can accomplish the requirements of the test methods and compliance tests have been accepted by the Department. Since these emission units are simple cycle combustion turbines without single large stacks for each unit, some of FDEP's criteria in Rule 62-297.310(6) may not be met in all cases.

Specific Condition 25:

This condition should not be included in the Title V permit since construction has been completed and the condition is obsolete.

ADDITIONAL APPLICABLE REQUIREMENTS

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

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Florida Department of
Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

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Department

NOTICE OF PERMIT ISSUANCE

CERTIFIED MAIL
P 185 463 011

Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

Attention: W. Jeffrey Pardue, Manager
Environmental Programs

Volusia County - AP
DeBary Facility
Four Simple Cycle Gas Turbines

Dear Mr. Pardue:

Enclosed is revised Permit Number AO64-233544 to operate the above referenced source issued pursuant to Section(s) 403.087, Florida Statutes.

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

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

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

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

cmc

A. Alexander, P.E.
District Director
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803-3767

FILING AND ACKNOWLEDGEMENT

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

Clerk 10/26/93
Date

AA/lbt

Copies furnished to:

Kent Hedrick

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 10/27/93 to the listed persons, by Theresa Baldwin.

Rev. 4/91

Florida Department of
Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

Permittee:
Florida Power Corporation
3201 34th Street South
St. Petersburg, FL 33733

Attention: W. Jeffrey Pardue, Manager, Environmental Programs

Permit Number: AO64-233544
Date of issue:
Expiration Date: October 19, 1998
County: Volusia
Latitude/Longitude: 28° 54' 14"N/81° 19' 59"W
UTM: Zone 17, 467.5 KmE; 3197.2 KmN

Project: Debary Facility. Four 92.9 MW Simple Cycle Gas Turbines - P7, P8, P9 and P10

This permit is issued under the provisions of Chapter(s) 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2. 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:

The permittee can operate four combustion turbines - P7, P8, P9 and P10 - at this facility. Each combustion turbine is a simple cycle General Electric PG7111EA unit with 92.9MW capacity and a maximum design heat input rating of 1144MMBtu/hr at 20° F (oil). The turbines will fire No. 2 fuel oil only, containing an average not to exceed 0.30%, and a maximum not to exceed 0.5% sulfur content by weight. Nitrogen oxide emissions will be controlled by water injection.

This source is located at the Florida Power Corporation Debary Power Plant on Highland Road, approximately two miles West of State Road 17-92, in the City of Debary, Volusia County, Florida.

General Conditions are attached to be distributed to the permittee on...

BEST AVAILABLE COPY

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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, 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 reasonable times, access to the premises where the permitted activity is located or conducted to:

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

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

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

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

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GENERAL CONDITIONS:

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 Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

11. This permit is transferable only upon Department approval in accordance with Rule 17-4.120 and 17-30.300, 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.

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

13. This permit also constitutes:

(X) Determination of Best Available Control Technology (BACT)

(X) Determination of Prevention of Significant Deterioration (PSD)

( ) Certification of compliance with state Water Quality Standards (Section 401, PL 92-500)

(X) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

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

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

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

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PERMITTEE: Florida Power Corporation

Attention: W. Jeffrey Pardue, Manager, Environmental Programs

Permit Number: AO64-233544
Date of issue: October 20, 1993
Expiration Date: October 19, 1998

SPECIFIC CONDITIONS

OPERATING CONDITIONS

1. The maximum operating heat input rate for each turbine - P7, P8, P9 and P10 - while burning No. 2 fuel at base load, is in accordance with Specific Condition 9 of this operating permit.

2. The turbines shall be fired with No.2 fuel only. The No.2 fuel shall have an average sulfur content not to exceed 0.30% by weight, and a maximum sulfur content not to exceed 0.5% by weight. The sulfur content is based upon a weighted 12 month rolling average of fuel analysis from delivery receipts. [Requested in permit application].

3. The capacity factor shall be limited to 33% based on a weighted 12-month rolling average sulfur content not to exceed 0.30% by weight. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.30% by weight, the capacity factor may be adjusted using the following table:

PERCENT AVERAGE SULFUR CONTENT	PERCENT CAPACITY FACTOR
0.30 - 0.295	33
0.29 - 0.285	34.4
0.28 - 0.275	35.8
0.27 - 0.265	37.2
0.26 OR LESS	38.7

4. Each turbine(P7, P8, P9 and P10) in this facility is permitted to operate up to the equivalent of 3390 hours/year at peak or other lesser loads, and 38.7% capacity factor. [BACT Determination by the Department]

5. Any other operating parameters established during compliance testing and/or inspections, that will ensure the proper operation of this facility, are considered part of this operating permit. Said operating parameters include, but are not limited to: Fuel flow rate, heat input rate and water to fuel ratio.

EMISSION LIMITS

6. Visible emissions shall not exceed 20% opacity except at full load, in which case visible emissions shall not exceed 10% opacity. In the event that the permittee wishes to substitute a visible emissions test for the required annual particulate test, the opacity limit for all turbines shall be 10% opacity at base load at all times during the compliance year, October 1 to September 30, and 20% opacity at all other rates (per NSPS). The permittee must notify the Department of their choice within 30 days of the effective date of the permit, and 30 days prior to the end of

the compliance year, if a change is desired for the following year. A notification for a 5 year period is also acceptable within 30 days of the effective date of this permit.

7. The maximum allowable emission limits from the turbines in accordance with the BACT determination, shall not exceed the following:

POLLUTANT	STANDARD OIL FIRING	EACH UNIT (lb./hr)[e]	4 UNITS (T/yr.)[e]	BASIS
NO_x	42ppm at 15% oxygen - dry basis	182	1234[c]	BACT
SO_2	No. 2 fuel oil with 0.3% avg. and 0.5% max. sulfur	555	1925[d]	BACT
PM/PM_{10}	0.015 lb./MMBtu	17.2	116[c]	BACT
VOC	-	5	34[c]	BACT
CO	-	54	365[c]	BACT
Sulfuric Acid Mist	No. 2 fuel oil with 0.3% avg. and 0.5% max. sulfur	69	469[c]	BACT

POLLUTANT	METHOD OF CONTROL	BASIS
Fluorides	No. 2 Fuel Oil[a]	b
Mercury (Hg)	No. 2 Fuel Oil[a]	b
Lead (Pb)	No. 2 Fuel Oil[a]	b
Inorganic Arsenic	No. 2 Fuel Oil[a]	BACT
Beryllium (Be)	No. 2 Fuel Oil[a]	BACT

(a) The No. 2 Fuel Oil's sulfur content by weight shall not exceed 0.30%, based upon a weighted 12 month rolling average, and 0.5% maximum.
(b) Since this pollutant is an inherent constituent in distillate fuel oil, it will be regulated by specifying that only No. 2 Fuel Oil will be fired at this facility.
(c) Equivalent to 3390 hours per year at peak load and 38.7% capacity factor.
(d) Total TPY for SO_2 assumes 33% capacity factor and fuel sulfur content of 0.30% average by weight.
(e) Emission rates based on 59°F and 15% O_2.

COMPLIANCE TESTING

8. The permittee shall notify the Central District Office of the Department of Environmental Protection, in writing, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time and place of each such test, and the contact person who will be responsible for coordinating and having such tests conducted for the owner. The Department may waive the 15 day notice requirement on a case by case basis. [Rule 17-297.340(1)(i), F.A.C.]. Further, the permittee shall also at this time, schedule a pre - test meeting with the Central District Office to review the compliance test procedures required by this permit and 40 CFR 60, Code of Federal Regulations.

9. Compliance testing of particulate, nitrogen oxides and visible emissions should be conducted while the source is firing No. 2 fuel oil, at between 90% and 100% of its maximum design heat input rating. Testing may be conducted at less than 90% of its maximum design heat input rating; however, if this is done, subsequent source operation is limited to up to 110% of the heat input level at which compliance was demonstrated. Once the unit is so limited, operation at higher heat input rates is allowed for a cumulative total of no more than 15 consecutive calendar days for purposes of additional compliance testing only, to regain the higher heat input rate, with prior notification to and approval from the Department in accordance with Specific Condition 9. [Rule 17-4.070(3), F.A.C.]

   In order to provide the Department with reasonable assurance that this source can comply with the particulate, opacity and NO_X standards simultaneously, the steady state particulate test, the nitrogen oxides test and the 1 - hour visible emissions test per run, should be conducted simultaneously.

   Operating at conditions during testing which do not reflect normal operating conditions may invalidate a test.

10. The stack sampling facility must be permanent and must comply with Rule 17-297.345, F.A.C., regarding minimum requirements that include but are not limited to : location of sampling ports, work platform area hand rails and toe rails, caged ladder, access and electrical power.

11. Compliance tests should be conducted on an annual basis for parameters marked "A" in Specific Condition No. 13 on or within 60 days prior to July 15.

12. Compliance tests shall be performed in accordance with the following methods, 40 CFR 60, Appendix A(July, 1990 version) references and Chapter 17-297, F.A.C. Prior EPA and Department approval must be obtained for the use of other compliance test methods.

PERMITTEE: Florida Power Corporation

Attention: W. Jeffrey Pardue, Manager, Environmental Programs

Permit Number: AO64-233544
Date of issue:
Expiration Date: October 19, 1998

POLLUTANT	TEST METHOD
NO_x (A)	Method 20 * with F factor for volumetric flow rate NO_x and PM/PM10 conducted simultaneously.
SO_2 (A)	Method 6 or Fuel Analysis using ASTM D 4294.
PM/PM10 (A)	Method 1, 2, 3, 4. Method 5. NO_x and PM/PM10 conducted simultaneously. If the stack is rectangular, number of PM test points to be selected from Table 1 - 1 of Method 1 for rectangular stacks. Document verification of absence of cyclonic flow as specified in Section 2.4 of Method 1.
VOC (A)	Testing not required if compliance with CO limit is shown.
CO (A)	Method 10 at full load.
VE (A)	Method 9. Three 1-hr tests for each fuel concurrently with PM. **
SULFURIC ACID MIST (A)	Method 8 or Fuel Analysis using ASTM D 4294 and AP42 factor.
FLUORIDES	N/A. Fuel Oil Usage.
MERCURY	N/A. Fuel Oil Usage.
LEAD	N/A. Fuel Oil Usage.
INORGANIC ARSENIC	N/A. Fuel Oil Usage.
BERYLLIUM	N/A. Fuel Oil Usage.

PARAMETER	METHOD OF DETERMINATION
Btu Per Pound of Fuel	ASTM D240-76
CO_2 and O_2	Method 3A.
AMBIENT TEMP., PRESSURE AND HUMIDITY	Recorded by stack test crew as required by Figure 20-7 and 20-8 of Method 20. This in addition to data recorded by the computer.
30, 50, 75 AND 100% OF PEAK LOAD AS REFERENCED IN 60.335(C)(2), SUBPART GG	Peak load based on Btu input will be established, and megawatts determined. 75, 50 and 30% load based on megawatts determined at peak.
TEST PORT LOCATION(STACK)	Sampling site selected as required by Method 1

* The emission test sampling points will be selected in accordance with 6.1.2.4 of Method 20, which states - "Select the eight sampling points at which the lowest O_2 concentrations or highest CO_2 concentrations were obtained." If the difference between the highest and the lowest measured oxygen concentrations in the stack is less than 0.4% oxygen by volume, it may be assumed that stratification does not exist.

** A 1-hr. visible emissions test for each test run is required to show compliance with the 20% opacity limit on each turbine.

13. A 1-hr. opacity test for each turbine with opacity values no greater than 10% opacity, may serve as the annual particulate test. If however, opacity values are over 10% and less than 20%, then a Method 5 or Method 17 particulate test must be conducted on one turbine to prove compliance with the particulate standard. The turbine chosen for the Method 5 test or Method 17, must be the one that exceeded the 10% opacity limit by the greatest amount.

RECORD KEEPING AND DOCUMENT SUBMITTAL

14. A continuous monitoring system shall be utilized to monitor and record the water and fuel consumption on each unit, as well as the ratio of water to fuel being fired in each unit. Water injection shall be utilized for NO_x control. The water to fuel ratio at which compliance was achieved, as described by the lb. of water/sec. vs. lb. of fuel/sec. graphs submitted by the permittee, shall be incorporated into this permit and shall be continuously monitored (see Appendix 1) . The system shall meet the requirements of 40 CFR Part 60, Subpart GG. The permittee shall provide the Department's Central District Office with the manufacturers name, model identification or number and serial number of those components of the continuous monitoring system having such numbers, within 30 days of the date of issue of this operating permit. No continuous emission monitoring systems are required on this facility at this time.

15. Excess emissions, as defined in 17-297.200(54), resulting from startup, shutdown or malfunction shall be permitted provided best operational practices to minimize emissions are adhered to, and the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless specifically authorized by the Department for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction, are prohibited. [Rule 17-210.700, F.A.C.]

In the event that the permittee is temporarily unable to comply with any of the conditions of the permit, the permittee shall immediately notify the Department's Central District Office. Notification shall be conducted in accordance with General Condition (8) of this permit Such notification does not release the permittee from any liability for failure to comply with Department rules. In the case of excess emissions, a full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rules 17-210.700(6) and 17-4.130, F.A.C.]

16 The NO_x ISO correction algorithm contained in the GE Mark IV Control System shall be placed into service at this facility only after prior approval from the EPA Administrator, and publication of the approved procedure in the Code of Federal Regulations.

17 Sulfur, nitrogen content and higher and lower heating value of the fuel being fired in the combustion turbines shall be based on a weighted 12 month rolling average from fuel delivery

receipts. The records of fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes.

18. A copy of the compliance test results must be submitted to the Department's Central District Office within 45 days after the last test run is complete. The test report should provide the actual heat input rate and at least all of the information listed in Rule 17-297.570(3), F.A.C., including Florida Department of Environmental Protection - approved visible emissions forms . Each test report should also include a fuel oil analysis from a representative sample of the fuel oil burned during the test and a calculation of the sulfur dioxide emission rate in pounds per MMBtu heat input and pounds per hour. Failure to submit any of the above information may invalidate the test. [Rules 17-297.570 and 17-4.070(3), F.A.C.]

19. The permittee shall maintain monthly records, in a permanent form suitable for inspection, documenting the sulfur content of all fuel burned. The records shall contain, at a minimum, the pounds per hour and pounds per MMBtu heat input. Compliance with SO_2 shall be based upon the monthly report. The records shall contain sufficient detail to allow the Department to determine whether or not the emissions were properly computed. All recorded data shall be maintained on file for a period of at least 2 years. The permittee shall submit a monthly summary of the averages for fuel sulfur content and sulfur dioxide emissions on a quarterly basis, within 30 days following each calendar quarter. [Rule 17-4.070(3), F.A.C.]

20. On or before March 1 of each calendar year, a completed DER Form 17-210.900(4), Annual Operations Report, shall be submitted to the Department's Central District Office. The report should provide sufficient detail to allow the Department to determine whether or not the emissions were properly computed. [Rule 17-210.700, F.A.C.]

OBJECTIONABLE ODORS

21. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 17-296.320(2), F.A.C.]

OTHER REQUIREMENTS

22. If the Department of Environmental Protection has reason to believe that any applicable emission standard is being violated, then the Department may require the permittee to conduct compliance tests which identify the nature and quantity of pollutant emissions, and to provide a report on the results of said tests.[Rule 17-297.340(2), F.A.C.]

23. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapter 17-297 or any other requirements under federal, state or local law. Additional regulations may impact this facility at some future date. The permittee shall comply with any applicable future regulations when they become effective. [Rule 17-210.300, F.A.C.]

PERMITTEE: Florida Power Corporation

Attention: W. Jeffrey Pardue, Manager, Environmental Programs

Permit Number: AO64-233544
Date of issue:
Expiration Date: October 19, 1998

OPERATING PERMIT RENEWAL

24. The application to renew this operating permit shall be submitted to the Central District Office of the Department of Environmental Protection at least 60 days prior to the expiration date of this permit. [Rules 17-4.050(2) and 17-4.090(1), F.A.C.]

ISSUED: 10-26-93

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

cmc

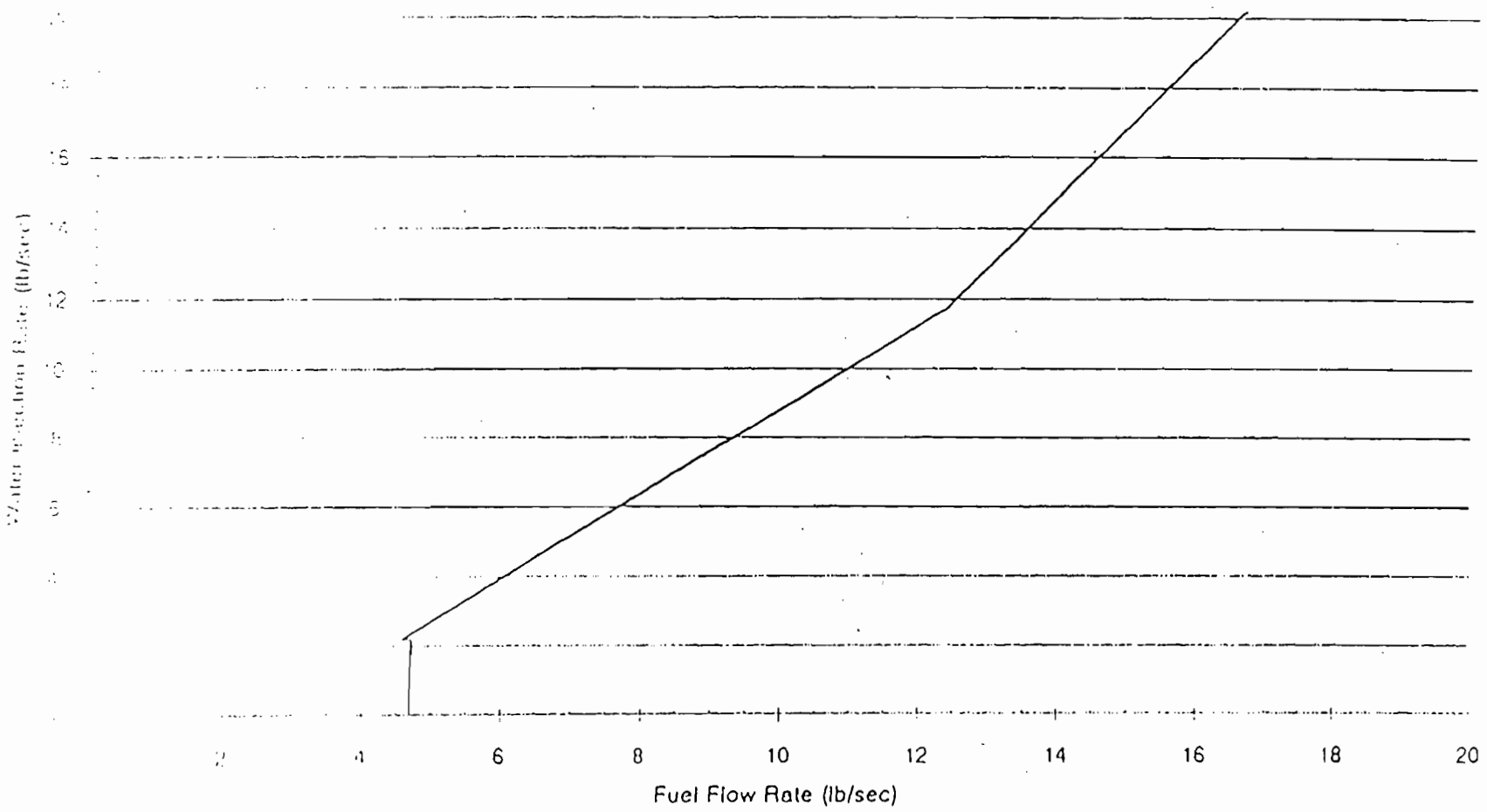
A. Alexander
District Director
3319 Maguire Boulevard
Suite 232
Orlando, FL 32803-3767
(407)894-7555

APPENDIX I

BEST AVAILABLE COPY

DeBary Combustion T[illegible]bine P7

NOx Water Injection Control Curve



de Curve based on compliance test
[illegible] 1993

7/27/93

→ JMK

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Environmental Svcs Department

Department of Environmental Protection

Lawton Chiles
Governor

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Virginia B. Wetherell
Secretary

Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

Attention: W. Jeffrey Pardue, Director

Volusia County - AP
Debary Facility - Four Simple Cycle Gas Turbines
Permit Number: AO64-233544
Change of Conditions

Dear Mr. Pardue:

We are in receipt of your request for a change of the permit conditions. The conditions are changed as follows:

Condition

Specific Condition No. 1

From

1. The maximum permitted heat input rate for each turbine - P7,P8,P9 AND P10 - is 944 MMBTU/hr, while burning No. 2 fuel at base load, is in accordance with Specific Condition 9 of this operating permit.

To

1. The permitted materials and utilization rates for the turbines shall not exceed the maximum heat input of 1,144 mmBtu/hr/unit at 20°F. The heat input will be corrected in accordance with Specific Condition 9 and the heat input vs. ambient temperature curve in Appendix II.

Condition

Specific Condition No. 7

Add

Footnote (f) The 42 ppm NO_x @ 15% O_2 emission limit is a NO_x allowable/observed value and is not based on an ISO correction. Upon achieving compliance with this BACT limit, NO_x observed will be corrected to ISO conditions to meet the requirements of 40 CFR 60.335(c)(2) using the equation in 40 CFR 60.335(c)(1). This footnote is attached to the information in column 2, row 2 of the maximum allowable emission limits table relating to the NO_x limit contained in this specific condition.

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Department

Condition

Specific Condition No. 9

From

9. Compliance testing of particulate, nitrogen oxides and visible emissions should be conducted while the source is firing No. 2 fuel oil, at between 95% and 100% of its maximum design heat input rating. Testing may be conducted at less than 90% of its maximum design heat input rating; however, if this is done, subsequent source operation is limited to up to 110% of the heat input level at which compliance was demonstrated. Once the unit is so limited, operation at higher heat input rates is allowed for a cumulative total of no more than fifteen consecutive calendar days for purposes of additional compliance testing only, to regain the higher heat input rate, with prior notification to and approval from the Department in accordance with Specific Condition 9 [Rule 17-4.070(3), F.A.C.].

To

9. Compliance testing of particulate, nitrogen oxides and visible emissions should be conducted while the source is firing No. 2 fuel oil. Test results will be the average of 3 valid runs. The sources shall operate between 95% and 100% of permitted capacity during the compliance test(s) as adjusted for ambient temperature using the heat input vs. ambient temperature curve in Appendix II. In the event that a combustion turbine does not achieve 95% of the designed heat input capacity as adjusted for average ambient temperature during a compliance test, the entire heat input vs. ambient temperature curve will be adjusted downward by the increment equal to the difference between the design heat input value and 105% of the value reached during the test. The curve will be automatically adjusted upward upon demonstration of compliance at a higher heat input capacity during a subsequent compliance test. Until compliance is demonstrated at a higher heat input capacity during a subsequent compliance test, the combustion turbine shall not be operated at a heat input capacity greater than the adjusted curve values. In no case shall the maximum permitted heat input capacity of 1,144 mmBtu/hr/unit at 20°F (peak load) be exceeded. Compliance test results shall be submitted to the Department's Central District office no later than 45 days after completion pursuant to Rule 62-297.570, F.A.C.

Condition

Specific Condition No. 16

From

16. The NO_X ISO correction algorithm contained in the GE Mark IV Control System shall be placed into service at this facility only after prior approval from the EPA Administrator, and publication of the approved procedure in the Code of Federal Regulations.

To

16. The ISO-correction portion of the algorithm in the Mark IV Computer System cannot be used in the annual test to show compliance with the NSPS limit, unless it has been approved in accordance with 40 CFR 60.335(f)(1). If this algorithm has not been approved, the ISO-correction must be done with the equation in 40 CFR 60.335(c)(1).

All other conditions remain the same.

This letter must be attached to your permit and becomes a part of that permit.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Vivian F. Garfein
Director of District Management

DATE: April 5, 1995

VFG/jtt

Attachment: Appendix II

copies furnished to:

Barry Appleby

Florida Power Corporation

GE Frame 7EA Combustion Turbines

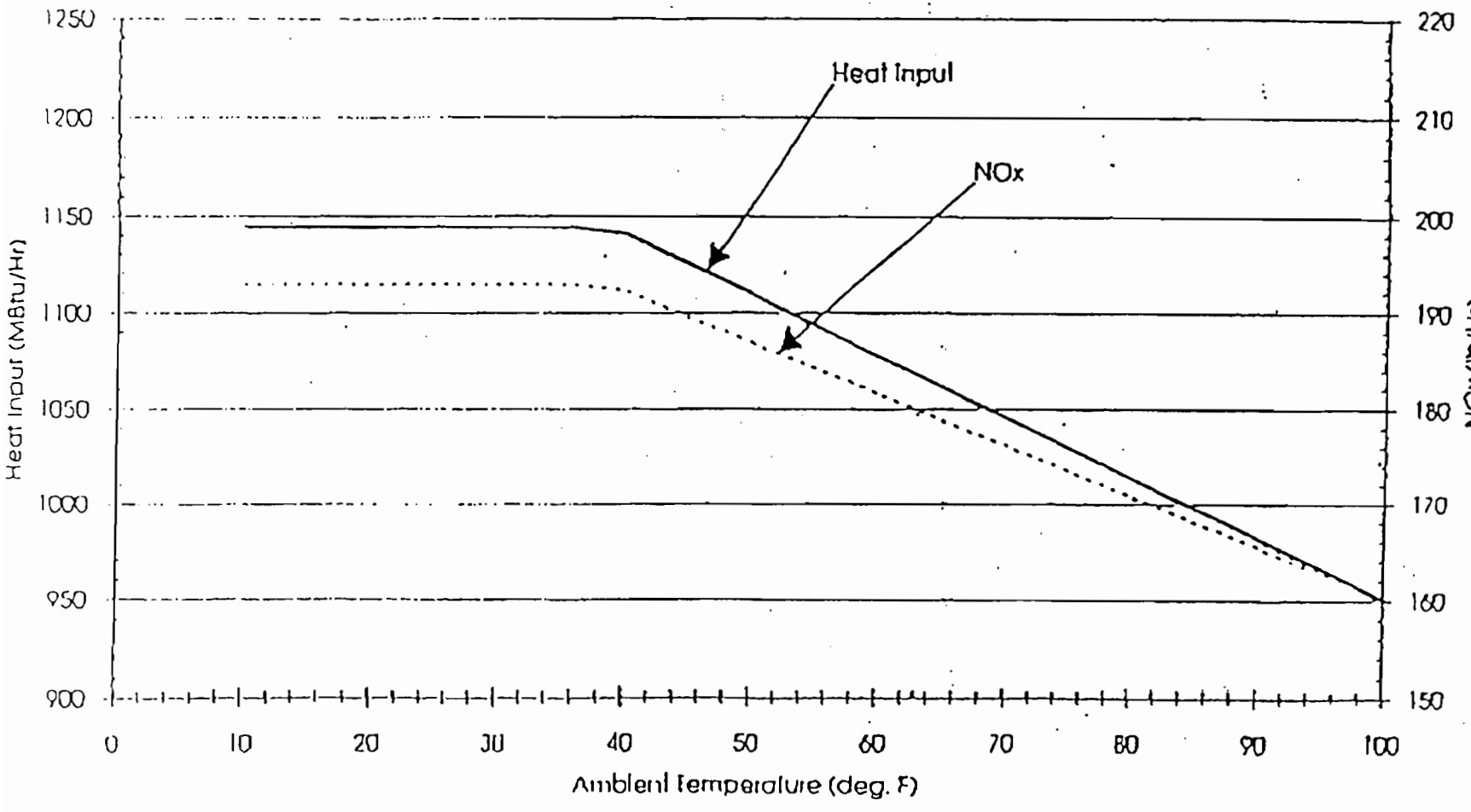

Figure 1L
Florida Power Corporation
DeBary Facility
Heat Input vs. Ambient Temperature Curve

BEST AVAILABLE COPY

Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

September 21, 1994

RECEIVED
SEP 28 1994
Environmental Svcs
Department

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Hedrick
Supervisor, Air Programs
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

Dear Mr. Hedrick:

RE: Amendment to Construction Permit
AC 64-191015 [PSD-FL-167(A)]
DeBary Facility

The Department has reviewed your request to amend the subject permit by A) incorporating an ISO corrected nitrogen oxide (NO_x) emission limit of 57 ppm @ 15% O_2, B) incorporate a fuel bound nitrogen allowance of 6 ppm, and C) clarify language concerning the application of a heat input vs. ambient temperature curve. The Department's determination on these amendment requests are as follows:

A. Incorporation of an ISO NO_x Emission Limit

Your request to amend the construction permit by incorporating an ISO NO_x emission limit of 57 ppm @ 15% O_2 is denied.

The DeBary facility is subject to 40 CFR 60, Subpart GG, which specifically states that no owner or operator shall emit nitrogen oxides which exceed a specific NO_x STD (40 CFR 60.332(a)(1)). Pursuant to 40 CFR 60.330 and Rule 62-296.800, Florida Administrative Code (F.A.C.), the NO_x STD for the subject construction permit was established by the best available control technology (BACT) determination to be an allowable NO_x emission limit of 42 ppm at 15 percent oxygen and on a dry basis. This limit is an allowable/observed value and no mention is made of an ISO NO_x emission limit. Also, observed values of NO_x emissions are to be corrected to ISO conditions to meet the requirements of 40 CFR 60.335(c)(2) using the equation in 40 CFR 60.335(c)(1). The ambient temperature and specific humidity variables in this equation could create potential situations which would restrict the operations of the facility beyond the intent of the permit. Your statement in this request that we have not permitted you to utilize the GE Mark IV Algorithm, which is an integral part of and was specifically designed for the GE Frame 7EA combustion turbine to correct the water/fuel ratio for different ambient temperatures/specific humidity, seems to be incorrect. The subject construction permit does not specify nor is the intent of the permit to specify design criteria, but to only specify performance criteria.

B. Fuel Bound Nitrogen (FBN)

Your request for an FBN allowance of 6 ppm is denied.

Pursuant to 40 CFR.332(a)(1) and (2), and Rule 62-296.800, F.A.C., no owner or operator subject to the provisions of Subpart GG shall cause to be discharged NO_x emissions which exceed a STD. This STD

is equal to the allowable NO_x emissions (percent by volume at 15 percent oxygen on a dry basis) and is the sum of two values, one of which is the NO_x emission allowance for fuel bound nitrogen (F) as defined in 40 CFR 60.332(a)(3). The applicant was given a NO_x emission allowance (F=0) pursuant to 40 CFR 60.332(a)(3) for fuels having a nitrogen content (N) equal to or less than 0.015 percent by weight. To give the applicant an additional NO_x emission allowance, 6 ppm as requested, would be a relaxation of a standard established by a BACT determination, which is a federally enforceable standard. To relax a federally enforceable standard or to increase allowable NO_x emissions would require a modification (40 CFR 60.5, 40 CFR 60.14, Rule 62-210.200(39), F.A.C.). In reference to excess emissions resulting from the nitrogen content of the fuel, pursuant to 40 CFR 60.334(c)(1), the nitrogen content of the fuel is for reporting purposes and is not to be used exclusively for compliance/enforcement purposes.

C. Manufacturers Heat Input vs. Ambient Temperature Curves

- Specific Condition No. 4(a) is amended as follows;

From

The permitted materials and utilization rates for the combined cycle gas turbines shall not exceed: (a) The maximum heat input of 1,144 MMBtu/hr/unit at 20°F.

To

The permitted materials and utilization rates for the combined cycle gas turbines shall not exceed: (a) The maximum heat input of 1,144 MMBtu/hr/unit at 20°F. The heat input will be corrected in accordance with Specific Condition No. 14 and the heat input vs. ambient temperature curve in Figure 1L.

- Specific Condition No. 14 is amended as follows;

From

Test results will be the average of 3 valid runs. The Central District office will be notified at least 15 days in writing in advance of the compliance test(s). The sources shall operate between 90% and 100% of permitted capacity during the compliance test(s) as adjusted for ambient temperature. Compliance test results shall be submitted to the Central District office no later than 45 days after completion.

To

Test results will be the average of 3 valid runs. The Department's Central District office will be notified at least 15 days in writing in advance of the compliance test(s). The sources shall operate between 90% and 100% of permitted capacity during the compliance test(s) as adjusted for ambient temperature using Figure 1L. In the event that a combustion turbine does not achieve 95% of the designed heat input

capacity as adjusted for average ambient temperature during a compliance test, the entire heat input vs. ambient temperature curve will be adjusted downward by the increment equal to the difference between the design heat input value and 105% of the value reached during the test. The curve will be automatically adjusted upward upon demonstration of compliance at a higher heat input capacity during a subsequent compliance test. Until compliance is demonstrated at a higher heat input capacity during a subsequent compliance test, the combustion turbine shall not be operated at a heat input capacity greater than the adjusted curve values. In no case shall the maximum permitted heat input capacity of 1144 MMBtu/hr/unit at 20°F (peak load) be exceeded. Compliance test results shall be submitted to the Department's Central District office no later than 45 days after compliance.

D. Attachments to be Incorporated;

- FPC letter dated June 23, 1994.
- FDEP letter lated July 12, 1994.
- FPC letter dated July 26, 1994.
- Figure 1L, Heat Input vs. Ambient Temperature Curve.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). 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. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. 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, F.S.

The Petition shall contain the following information:

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
(g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect

BEST AVAILABLE COPY

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 amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This letter amendment must be attached to the construction permit, No. AC 64-191015, and the federal permit, No. PSD-FL-167(A), and shall become part of the permit.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/CSL

Attachment
cc: A. Zahm, CD
J. Harper, EPA
J. Bunyak, NPS

CERTIFICATE OF SERVICE

The undersigned duly designated duputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 9/23/94 to the listed persons.

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

Clerk 9/23/94
Date

Attachment

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Florida Power Corporation

GE Frame 7EA Combustion Turbines

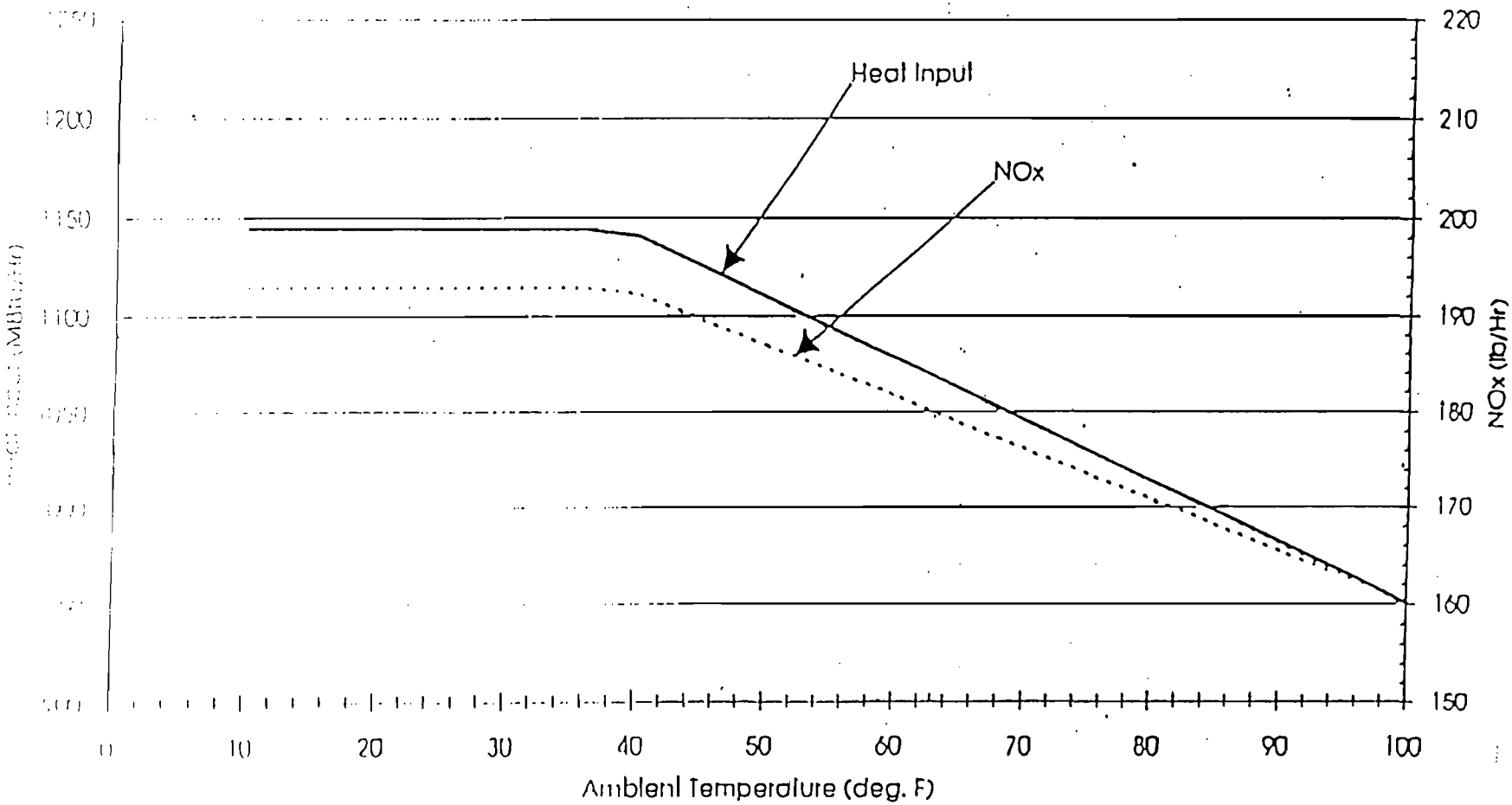

Figure 1L
Florida Power Corporation
DeBary Facility
Heat Input vs. Ambient Temperature Curve

Florida Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 11, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent D. Hedrick, P.E.
Supervisor, Air Programs
Florida Power Corporation
Post Office Box 14042
St. Petersburg, FL. 33733

Dear Mr. Hedrick:

RE: Amendment to Construction Permit
AC 64-191015 [PSD-FL-167]
DeBary Facility

The Department has determined that the above permit should be amended to specify No.2 Fuel Oil, rather than a numerical value, as the allowable emission limits for Fluorides, Mercury, Lead, Inorganic Arsenic and Beryllium. Because of the inherent nature of the fuel fired, these constituents in the fuel oil will be emitted after firing. Consequently, specifying the type of fuel oil (i.e., No.2) is sufficient to control the emissions of the various constituents. Specifying No.2 Fuel Oil is recognized to be BACT for Mercury, Arsenic and Beryllium. Therefore, the following will be changed and/or added:

A. Specific Condition No.1

From:

Table 1
Allowable Emission Limits
Simple Cycle Combustion Turbine

Pollutants	Standard Oil Firing	Each Unit lb/hr[a]	Total 6 Units T/yr	Basis
Fluorides(FR)	-	1.67×10^{-5}	0.34	Application
Mercury(Hg)	3.0×10^{-6}lbs/MMBTU	1.54×10^{-6}	0.031[b]	Application
Lead(Pb)	2.8×10^{-5}lbs/MMBTU	4.6×10^{-6}	0.093[b]	Application
Inorganic Arsenic	-	2.1×10^{-6}	0.4[b]	BACT
Beryllium(Be)	2.5×10^{-3}lbs/MMBTU	1.3×10^{-6}	0.026[b]	BACT

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To: NEW

Table 1-A
Emission Control
Simple Cycle Combustion Turbine

Pollutant	Method of Control	Basis
Fluorides	No.2 Fuel Oil[a]	(b)
Mercury(Hg)	No.2 Fuel Oil[a]	(b)
Lead(Pb)	No.2 Fuel Oil[a]	(b)
Inorganic Arsenic	No.2 Fuel Oil[a]	BACT
Beryllium(Be)	No.2 Fuel Oil[a]	BACT

New: (a) The No.2 Fuel Oil's sulfur content, by weight, shall not exceed 0.3% (annual average) and 0.5% (maximum).

(b) Since this pollutant is an inherent constituent in distillate fuel oil, it will be regulated by specifying that only No.2 Fuel Oil be fired at this facility.

B. Attachment to be Incorporated:

o Ms. Jewell Harper's letter received November 21, 1991.

A person whose substantial interests are affected by the Department's proposed permitting decision 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. Petitions filed by the applicant of the amendment request/ application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the

amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;
(g) A statement of the relief sought by petitioner, stating precisely the action the 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 amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/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 amendment

in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to (request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

This letter amendment must be attached to Construction Permit, No. AC 64-191015 (PSD-FL-167), and shall become part of the permit.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources Management

HLR/CSL

Attachment

cc: A. Zahm, CD
J. Harper, EPA
J. Bunyak, NPS

Attachment

[RECEIVED 05/31 16:04 1996 AT 3523366603 PAGE 8 (PRINTED PAGE 8)]
MAY 31 '96 04:38PM FPC ENVIRONMENTAL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

4APT-AEB

NOV 18 1991
RECEIVED
NOV 21 1991
Division of Air
Resources Management

Mr. Clair H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Florida Power Corporation/DeBary Plant (PSD-FL-167)

Dear Mr. Fancy:

This is to acknowledge receipt of your final determination and Prevention of Significant Deterioration (PSD) permit for the above referenced facility's proposed construction, by your letter dated October 18, 1991. The facility will consist of six simple-cycle combustion peaking units, each rated 92.9 MW, fired with No. 2 distillate fuel oil. Your determination proposes to limit NO_x emissions through wet injection, to limit SO_2 and H_2SO_4 mist emissions through limiting the sulfur content of the fuel oil, to limit PM and PM_{10} through combustion design and the use of clean fuel, to limit CO through combustion design, and to limit Hg, Be, and As emissions through the specifications on No. 2 distillate fuel oil.

We have reviewed the package as submitted and have no adverse comments. Thank you for the opportunity to review and comment on this package. If you have any questions or comments, please contact Mr. Scott Davis of my staff at (404) 347-5014.

Sincerely yours,

Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

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Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Virginia B. Wetherell, Secretary

June 30, 1993

RECEIVED
JUL 0 6 1993
Environmental Svcs Department

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kent Hedrick, P.E.
Supervisor of Air Programs
Florida Power Corporation
Post Office Box 14042
St. Petersburg, FL. 33733

Dear Mr. Hedrick:

The Department received your request to amend the construction permit listed below. The permit is amended as shown.

Permit No. AC 64-191015, PSD-FL-167, DeBary Facility

From:

- Method 3. Gas Analysis

TO:

- Method 3A. Gas Analysis

This letter shall become Attachment No. 14 to this permit.

A person whose substantial interests are affected by the Department's proposed permitting decision 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. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this amendment, whichever occurs first. 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

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to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

(a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;

(g) A statement of the relief sought by petitioner, stating precisely the action the 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 amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment 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.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources Management

HLR/CSL

c: A. Zahm, CD
J. Harper, EPA
J. Bunyak, NPS

RECEIVED
OCT 2 1 1991
Environmental Svcs
Department

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

Mr. W. W. Vierday
Environmental Programs & Licensing
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

DER File No. AC 64-191015
PSD-FL-167
Volusia County

Enclosed is Permit Number AC 64-191015 to construct and operate six simple cycle combustion peaking units rated 92.9 MW each at the Florida Power Corporation, DeBary facility in DeBary, Volusia County, Florida, issued pursuant to Section(s) 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 10-18-91 to the listed persons.

Clerk Stamp

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

Martha Jane Wise (Clerk) 10-18-91 (Date)

Copies furnished to:
Alan Zahm, DER
Kenneth Kosky, P.E., KBN
Jewell Harper, EPA
Julia Thomas, Fish & Wildlife

Final Determination

Florida Power Corporation
DeBary Facility
Debary, Volusia County, Florida

Six 92.9 MW Simple Cycle Combustion Turbines
for Peaking Service

Permit Number: AC 64-191015
PSD-FL-167

Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

October 16, 1991

FINAL DETERMINATION

Florida Power Corporation (FPC) submitted an application for an air pollution source construction permit authorizing construction of six simple-cycle combustion turbine peaking units at their DeBary Electric Generating Station. Each unit is rated at 92.9 MW and will fire #2 distillate fuel oil. The DeBary facility has six existing simple-cycle combustion turbines with a generating capability of 330 MW. The Florida Department of Environmental Regulation (FDER) reviewed the application and issued a Preliminary Determination and Technical Evaluation, along with its Notice of Intent to Issue a permit for the six proposed combustion turbines on August 2, 1991.

The U.S. Environmental Protection Agency (EPA) submitted a letter commenting on the Preliminary Determination on September 10, 1991. EPA submitted one comment concerning the emission limit regarding opacity. As a result, the words, "at peak load" were removed from specific condition 2 of the permit.

On September 9, 1991, the U.S. Fish and Wildlife Service (FWS) submitted a letter commenting on the Preliminary Determination. With regard to the air quality modeling analysis, FWS indicated that neither the FDER nor FPC calculated the impact of the proposed project on the Class I sulfur dioxide (SO_2) increment at the Chassahowitzka Wilderness Area because this area is located more than 100 km away from the project. The FWS took exception to this, stating that the EPA recognizes the possible impacts of sources located more than 100 km from a class I area. To asses the proposed project's impact at the Chassahowitzka Wilderness Area, the FWS used the ISCST model, stack parameters included in the FPC permit application, and one year of meteorological data (Tampa 1986). The results of this analysis showed the highest second highest (HSH) 24-hour SO_2 concentration to be 5.20 micrograms per cubic meter (ug/m^3). Thus, there appeared to be a potential to violate the allowable Prevention of Significant Deterioration (PSD) Class I increment of 5 ug/m3 for a 24-hour averaging time.

In response to the analysis done by the FWS, on September 24, 1991, FPC submitted a letter to FDER detailing air quality modeling using the ISCST model and five years of meteorological data (Orlando/Ruskin 1982-86). Three cases for the proposed project were analyzed. The first case represents the six proposed turbines using worst-case emissions (at 20°F) and operating conditions of minimum flow (at 90°F). The second case represents the six proposed turbines using emissions and flowrates at 20°F. The last case represents emissions and flowrates at 90°F. Each of the above cases includes all other significant increment consuming sources which may interact with the FPC facility at the Class I area. The HSH 24-hour predicted impacts are 4.98, 4.89, and 4.76 ug/m^3 for cases 1, 2, and 3 respectively. Both the annual and 3-hour averaging time results also meet the allowable PSD Class I

increments. The modeling done by FPC can be considered conservative for three reasons. The first reason is that the modeling analysis assumes that the maximum fuel sulfur content will occur continuously. While a maximum sulfur content of 0.5 percent has been approved, the average sulfur content for any 12 month rolling period must not be more than 0.30 percent. The second reason is that the hours of operation for the six combustion turbines are limited by permit. The maximum annual hours of operation at 0.30 percent average fuel sulfur is 2,890. This corresponds to a 33 percent capacity factor. The capacity factor could increase to as much as 38.7 percent if the average fuel sulfur content drops to 0.26 percent or less. This permit condition significantly limits the hours of operation which reduces the probability that the six turbines would operate during "worst case" meteorological conditions. The last reason is the maximum impacts predicted are due to the most stable conditions which occur at night. However, the turbines are peaking units which will be operated during peak load periods which occur during the morning to evening hours.

The modeling results from FPC have been made available to FDER, and FWS. All parties have reviewed this modeling and have determined that the proposed project including all other PSD sources will meet all allowable PSD Class I increments.

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:
Florida Power Corporation
DeBary Facility
3201 34th Street South
St. Petersburg, FL 33733

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: January 31, 1993
County: Volusia
Latitude/Longitude: 28°54'14"N
81°19'59"W
Project: Six 92.9 MW Simple Cycle Gas Turbines

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

For six 92.9 MW simple cycle combustion turbines (CT's) with maximum heat input of 1,144 MMBtu/hr/unit at 59°F (oil) to be located at the DeBary facility in DeBary, Florida. The turbines are to be GE PG7111EA equipped with wet injection. The UTM coordinates are Zone 17, 467.5 km East and 3197.2 km North.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Florida Power Corp.'s application received December 31, 1990.
2. Department's letter dated January 30, 1991.
3. Florida Power Corp.'s letter received February 18, 1991.
4. Florida Power Corp.'s letter dated July 8, 1991.
5. Florida Power Corp.'s letter dated July 12, 1991.
6. Florida Power Corp.'s letter dated July 18, 1991.
7. KBN's faxed letter dated July 24, 1991.
8. U.S. Fish and Wildlife Service's letter dated September 9, 1991.
9. U.S. Environmental Protection Agency's letter dated September 10, 1991.
10. Florida Power Corp.'s letter dated September 24, 1991.

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 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, 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.

GENERAL CONDITIONS:

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:

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.

GENERAL CONDITIONS:

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, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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 17-30.300, 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.

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

13. This permit also constitutes:

(x) Determination of Best Available Control Technology (BACT)
(x) Determination of Prevention of Significant Deterioration (PSD)
(x) 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.

GENERAL CONDITIONS:

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.

SPECIFIC CONDITIONS:

Emission Limits

1. The maximum allowable emissions from these sources shall not exceed the emission rates listed in Table 1.

2. Visible emissions shall not exceed 20% opacity except at full load in which case visible emissions shall not exceed 10% opacity.

Operating Rates

3. These sources are allowed to use only No. 2 fuel oil with a 0.30% average and 0.5% sulfur content maximum, by weight. The sulfur content is based upon a weighted 12 month rolling average of fuel oil analysis from delivery receipts.

SPECIFIC CONDITIONS:

4. The permitted materials and utilization rates for the combined cycle gas turbines shall not exceed: (a) the maximum heat input of 1,144 MMBtu/hr/unit at 20°F. (b) maximum No. 2 fuel oil consumption shall not exceed 7,826 (at 59°F) gal/hr/unit or 159,200,000 gal/yr for 6 CT's. (c) SO_2 emissions for the six combustion turbines not exceed 2,888 tons/year. (d) the maximum capacity factor shall be limited to 38.7%.

5. The capacity factor shall be limited to 33% based on a weighted 12 month rolling average sulfur content of 0.30%. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.30%, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	% Capacity Factor
0.30 - 0.295	33
0.29 - 0.285	34.4
0.28 - 0.275	35.8
0.27 - 0.265	37.2
0.26 - or less	38.7

6. Any change in the method of operation, equipment or operating hours shall be submitted to DER's Bureau of Air Regulation.

7. Any other operating parameters established during compliance testing and/or inspection that will ensure the proper operation of this facility shall be included in the operating permit.

Compliance Determination

8. Compliance with the NO_x, SO_2, CO, PM, PM_{10} and VOC standards shall be determined (on each unit within 10% maximum heat rate input) within 180 days of initial operation and annually thereafter, by the following reference methods as described in 40 CFR 60, Appendix A (July, 1990 version) and adopted by reference in F.A.C. Rule 17-2.700.

- Method 1. Sample and Velocity Traverses
- Method 2. Volumetric Flow Rate
- Method 3. Gas Analysis
- Method 5. Determination of Particulate Matter Emissions from Stationary Sources
- Method 9. Determination of the Opacity of the Emissions from
- Method 8. Determination of the Sulfuric Acid of the Emissions from Stationary Sources

SPECFIC CONDITIONS:

- Method 10. Determination of the Carbon Monoxide Emission from Stationary Sources
- Method 20. Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines.
- Method 25A Determination of the Volatile Organic Compounds Emissions from Stationary Sources.

Other DER approved methods may be used for compliance testing after prior Departmental approval.

9. Method 5 must be performed on one combustion turbine to determine the initial compliance status of this type unit. Thereafter, the opacity emissions test may be used unless 10% opacity is exceeded at peak load.

10. Compliance with the SO_2 emission limit can also be determined by calculations based on fuel analysis using ASTM D4292 for the sulfur content of liquid fuels.

11. Trace elements of Beryllium (Be) shall be tested during initial compliance test using EMTIC Interim Test Method. As an alternative, Method 104 may be used; or Be may be determined from fuel sample analysis using either Method 7090 or 7091, and sample extraction using Method 3040 as described in the EPA solid waste regulations SW 846.

12. Mercury (Hg) shall be tested during initial compliance test using EPA Method 101 (40 CFR 61, Appendix B) or fuel sampling analysis using methods acceptable to the Department.

13. During performance tests, to determine compliance with the proposed NO_X standard, measured NO_X emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_X = (NO_{X\ obs}) \left(\frac{P_{ref}}{P_{obs}}\right)^{0.5} e^{19\ (H_{obs} - 0.00633)} \left(\frac{288°K}{T_{AMB}}\right)^{1.53}$$

where:

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

$NO_{X\ obs}$ = Measured NO_X emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

H_{obs} = Specific humidity of ambient air at test.

e = Transcendental constant (2.718).

T_{AMB} = Temperature of ambient air at test.

14. Test results will be the average of 3 valid runs. The Central District office will be notified at least 15 days in writing in advance of the compliance test(s). The sources shall operate between 90% and 100% of permitted capacity during the compliance test(s) as adjusted for ambient temperature. Compliance test results shall be submitted to the Central District office no later than 45 days after completion.

15. A continuous monitoring system shall be installed to monitor and record the fuel consumption on each unit. Water injection shall be utilized for NOx control. The water to fuel ratio at which compliance is achieved shall be incorporated into the permit and shall be continuously monitored. The system shall meet the requirements of 40 CFR Part 60, Subpart GG.

16. Sulfur, nitrogen content and lower heating value of the fuel being fired in the combustion turbines shall be based on a weighted 12 month rolling average from fuel delivery receipts. The records of fuel oil usage shall be kept by the company for a two-year period for regulatory agency inspection purposes.

Rule Requirements

17. This source shall comply with all applicable provisions of Chapter 403, Florida Statutes, Chapters 17-2 and 17-4, Florida Administrative Code and 40 CFR (July, 1990 version).

18. The sources shall comply with all requirements of 40 CFR 60, Subpart GG, and F.A.C. Rule 17-2.660(2)(a), Standards of Performance for Stationary Gas Turbines.

19. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (F.A.C. Rule 17-2.210(1)).

20. The sources shall comply with F.A.C. Rule 17-2.700, Stationary Point Source Emission Test Procedures.

SPECIFIC CONDITIONS:

21. If construction does not commence within 18 months of issuance of this certification/permit, then the permittee shall obtain from DER a review and, if necessary, a modification of the control technology and allowable emissions for the unit(s) on which contruction has not commenced (40 CFR 52.21(r)(2)).

22. Quarterly excess emission reports, in accordance with the July 1, 1988 version of 40 CFR 60.7 and 60.334 shall be submitted to DER's Central District office.

23. Literature on equipment selected shall be submitted as it becomes available. A CT-specific graph of the relationship between NOx emissions and steam injection and also another of ambient temperature and heat inputs to the CT shall be submitted to DER's Central District office and the Bureau of Air Regulation.

24. Stack sampling facilities shall be provided for each of the stacks.

25. Construction period fugitive dust emissions shall be minimized by covering or watering dust generation areas.

26. Pursuant to F.A.C. Rule 17-2.210(2), Air Operating Permits, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur nitrogen contents and the lower heating value of the fuel being fired, fuel usage, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Central District office by March 1 of each calendar year.

27. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

28. An application for an operation permit must be submitted to the Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rules 17-4.055 and 17-4.220).

PERMITTEE:
Florida Power Corp.

Permit Number: AC 64-191015
PSD-FL-167
Expiration Date: Jan. 31, 1993

Issued this 18 day
of October, 1991

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Carol M. Browner
Secretary

Best Available Control Technology (BACT) Determination
Florida Power Corporation
DeBary Facility
Volusia County

The applicant proposes to operate six No. 2 fuel oil fired 92.9 MW peaking cycle combustion turbine systems to be used for peaking power at their DeBary facility on Highlands Road, DeBary, Volusia County, Florida.

The applicant states that the maximum heat input will be 1,144 MMBtu/hr per turbine. The applicant has indicated the maximum annual tonnage of regulated air pollutants emitted from the six turbines based on sea level conditions at 59°F and 100 percent capacity (8760 hours/year) to be as follows:

Pollutant	Potential Emissions (tons/yr)	PSD Significant Emission Rate (tons/yr)
NOx	4794	40
SO_2	14581	40
PM	394	25
PM_{10}	394	15
CO	1411	100
VOC	131	40

Florida Administrative Code Rule 17-2.500(2)(f)(3) requires a BACT review for all regulated pollutants emitted in an amount equal to or greater than the significant emission rates listed in the previous table.

Date of Receipt of a BACT Application

December 31, 1990

BACT Determination Requested by the Applicant

Pollutant	Determination
NOx	42 ppmvd @ 15% O_2
SO2 and H_2SO_4	Max 0.5% Sulfur No. 2 fuel oil
PM/PM_{10}	Combustion Controls
CO	Combustion Controls

BACT Determination Procedure

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and

economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

(a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).

(b) All scientific, engineering, and technical material and other information available to the Department.

(c) The emission limiting standards or BACT determinations of any other state.

(d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The applicant has stated that BACT for nitrogen oxides will be met by using wet injection necessary to limit emissions to 42 ppmvd at 15% oxygen for No. 2 fuel oil firing.

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NOx emission limit established to date for a combustion turbine is 4.5 ppmvd at 15% percent oxygen. This level of control was accomplished through the use of water injection and a selective catalytic reduction (SCR) system.

Selective catalytic reduction is a post-combustion method for control of NOx emissions. The SCR process combines vaporized ammonia with NOx in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. The SCR process can achieve up to 90% reduction of NOx with a new catalyst. As the catalyst ages, the maximum NOx reduction will decrease to approximately 86 percent.

The applicant has rejected using SCR because of technical infeasibility. The applicant was unable to find similar combustion turbines firing fuel oil and equipped with SCR. The applicant states several supporting reasons for the decision in Table 4-3 of the application.

Although the Department agrees that there was a time when SCR was not feasible for oil firing, the latest information available now indicates that SCR can be used for oil firing provided that adjustments are made in the ammonia to NOx injection ratio. By lowering the injection ratio below 1 to 1, testing has indicated that NOx can be controlled with efficiencies ranging from 60 to 75 percent. When the injection ratio is lowered, there is not a problem with ammonium bisulfate formation since essentially all of the ammonia is able to react with the nitrogen oxides present in the combustion gases.

The Department recently reviewed an application for a similar combustion turbine, which included levelized cost for SCR of $2,190,000. Assuming that the lowered ammonia injection ratio strategy was used to control NOx emissions by 65%, the SCR would control 201 tons (65% x 309 tons/year) of NOx annually. The 309 tons/year assumes an operating rate of 3400 hours/year/unit. When this reduction of NOx is taken into consideration with the total annual cost of $2,190,000, the cost per ton of controlling NOx is $10,896. This calculated cost is higher than has previously been approved as BACT and if the capacity factor were limited to 33% (2,891 hrs), the cost per ton would be even higher.

The applicant has stated that sulfur dioxide (SO_2) and sulfuric acid mist (H_2SO_4) emissions when firing fuel oil will be controlled by lowering the operating hours to 3400/year per unit and the fuel oil sulfur content to a maximum of 0.5% by weight, and an average of 0.3%. This would result in a SO_2 reduction of 377 tons/year/unit (0.3/0.5 x 3400/8760 hrs x 14,581 TPY 6 units). Also, H_2SO_4 mist would be reduced by 46 tons/year/unit.

With regard to the operation of turbines on oil, several BACT determinations have established a 25% capacity factor as an operating limit. This is due to the increase in nitrogen oxides emissions that results from the burning of oil as compared to natural gas. In some cases, turbines have been allowed to operate above the 25% capacity factor limitation on oil (generally 33%), provided that they use low NOx combustors (42 ppm on oil firing) and limit the sulfur content of oil. Those facilities that have been permitted to operate above the 25% capacity factor limitation had a maximum sulfur content ranging from 0.20 to 0.25 percent. However, their primary fuel was natural gas. Since the DeBary facility is capable of limiting NOx emissions to 42 ppm and can only use oil, it is reasonable to allow the capacity factor to range from 33 to 38.7% provided that the <u>average</u> sulfur content is at or below 0.30%. The Department accepts the applicants proposal to control CO and PM/PM_{10} by combustion design and the use of clean fuels (No. 2 distillate). The Department also agrees with the

applicant that there are no feasible methods to control beryllium and aresenic except by limiting the inherent quality of the fuel.

Although the emissions of these toxic pollutants could be controlled by particulate control devices, such as a baghouse or scrubber, the amount of emission reductions would not warrant the added expense. As this is the case, the Department does not believe that the BACT determination would be affected by the emissions of these pollutants.

Potentially Sensitive Concerns

With regard to controlling NOx emissions with SCR, the applicant has identified the following technical limitations:

- Reduced power output, ammonia slip and disposal of hazardous waste generated (spent catalyst)

BACT Determination by DER

Based on the information presented by the applicant and the studies conducted, the Department believes that the use of SCR for NOx control is not justifiable as BACT. Since these units are intended for peaking service and have operating hours limited to 3,390 hrs/yr/unit, wet injection for NOx emission control is justifiable as BACT for this facility. Should the weighted rolling average sulfur content for the fuel oil be greater than 0.30% the operating hours will be reduced or prorated.

As this is the case, the BACT emission limitations are established as follows:

Pollutant	Emission Limit	Method of Control
NOx	42 ppmvd @ 15% O_2	Wet Injection
SO_2	555 lbs/hr/unit	Avg. 0.30% and max. 5% sulfur content, by weight, No. 2 fuel oil
PM and PM_{10}	15 lbs/hr/unit	Combustion
CO	54 lbs/hr/unit	Combustion
VOC	5 lbs/hr/unit	Combustion
Arsenic	7.1×10^{-3} lbs/hr/unit	Fuel Quality
Beryllium	1.3×10^{-6} lbs/hr/unit	Fuel Quality
H_2SO_4	76 lbs/hr/unit	Avg. 0.30% and max. 0.5% sulfur content, by weight, No. 2 fuel oil

Details of the Analysis May be Obtained by Contacting:

Barry Andrews, P.E., BACT Coordinator
Department of Environmental Regulation
Bureau of Air Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

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

October 17, 1991
Date

Approved by:

Carol M. Browner, Secretary
Dept. of Environmental Regulation

October 18, 1991
Date

TABLE 1
ALLOWABLE EMISSION LIMITS
Simple Cycle Combustion Turbine

Pollutant	Standard Oil Firing	Each Unit lb/hr[a]	Total 6 Units T/yr	Basis
NOx	42 ppm at 15% oxygen-dry basis	182	1851[b]	BACT
SO_2	No. 2 fuel oil with 0.3% avg. and 0.5% max. sulfur	555	2888[c]	BACT
PM/PM_{10}	0.025 lb/MMBtu	15	153[b]	BACT
VOC	-	5	51[b]	BACT
CO	-	54	547[b]	BACT
Sulfuric Acid Mist	No. 2 fuel oil with 0.3% avg. and 0.5% max. sulfur	76	773[b]	BACT
Fluorides (FR)	-	1.67×10^{-5}	0.34	Application
Mercury (Hg)	3.0×10^{-6} lbs/MMBtu	1.54×10^{-6}	0.031[b]	Application
Lead (Pb)	2.8×10^{-5} lbs/MMBtu	4.6×10^{-6}	0.093[b]	Application
Inorganic Arsenic	-	2.1×10^{-6}	0.4[b]	BACT
Beryllium (be)	2.5×10^{-3} lbs/MMBtu	1.3×10^{-6}	0.026[b]	BACT

(a) Emission rates based on 59°F and 15% O_2.

(b) Equivalent to 3390 hours per year at peak load and 38.7% capacity factor. If less than 6 units are constructed annual emissions prorated for actual number units constructed (i.e., if 4 units constructed, the annual NOx emission limit is 1851 TPY * (4/6) = 1234 TPY).

(c) Total TPY CAP for SO_2 assumes 33% capacity factor and fuel sulfur content of 0.30% avg. If less than 6 units constructed annual emission limit prorated for actual number units (4/6) = 1925 TPY).

ATTACHMENT DB-E02-L13

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT DB-E02-L13

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

ATTACHMENT DB-E02-L14

ACID RAIN PERMIT APPLICATION

Phase II Permit Application

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

This submission is: ☒ New ☐ Revised

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

FPC DeBary Facility, FL, 6046

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

a	b	c	d	e
Boiler ID#	Compliance Plan: Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	Compliance Plan: Repowering Plan	New Units: Commence Operation Date	New Units: Monitor Certification Deadline
7	Yes	*No*	11/92	1/1/96 for NOx
8	Yes	*No*	11/92	1/1/96 for NOx
9	Yes	*No*	11/92	1/1/96 for NOx
10	Yes	*No*	11/92	1/1/96 for NOx
	Yes			
7,8,9,10	Yes	No	See Above	1/1/95 for SO2
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

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

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

Phase II Permit - Page 2

Plant Name (from Step 1)
FPC DeBary Facility

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

Standard Requirements

Permit Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from Step 1)
FPC DeBary Facility

Recordkeeping and Reporting Requirements (cont.)

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

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

Liability.

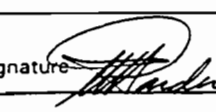
(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject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

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

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

Certification

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

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

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

AIRS
FINDS

BEST AVAILABLE COPY

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0225
Expires 6-30-95

EPA

Certificate of Representation

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

This submission is: [ ] New [X] Revised

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

Plant Name	State	ORIS Code
DeBary	FL	6046

STEP 2
Enter requested information for the designated representative

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

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

Name	
Address	
Phone Number	Fax Number

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

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

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

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

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

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

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

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

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

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

BEST AVAILABLE COPY

Plant Name (from Step 1) DeBary

Certification

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

Signature (designated representative)	Date 11/3/94
Signature (alternate)	Date

STEP 5
Provide the name of every owner and operator of the source and each affected unit at the source. Identify the units they own and/or operate by boiler ID# from NADB. For owners only, identify each state or local utility regulatory authority with jurisdiction over each owner

Name Florida Power Corporation					[X] Owner	[X] Operator
ID# 7	ID# 8	ID# 9	ID# 10	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities Florida Public Service Commission						

Name					[ ] Owner	[ ] Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities						

Name					[ ] Owner	[ ] Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities						

Name					[ ] Owner	[ ] Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#
Regulatory Authorities						

III. EMISSIONS UNIT INFORMATION

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

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

[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/Deminimis 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 DB-E03-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:

15,500

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 DB-E03-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: **282,230**	
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 DB-E03-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	[ ] Unknown
	SO_2	[ ] C	[ ] E	[ ] Unknown
	NO_2	[ ] 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):			

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 DB-E03-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, DeBary Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
Offices	Office equipment operation	TR
	Routine repairs	TR
	Heating & cooling systems	TR (except Part 82)
Parking Lot	Vehicles	TR/ER
Maintenance shop	Sand blaster, welding, hand--held tools, etc.	TR/ER
	Cabinets with solvents, oils, flammables, etc.	TR
	Routine maintenance	TR
	Parts washer- Safety Kleen	TR
	Air compressors	TR
	Cylinders (acetylene, N2, O2, argon, CO2, etc.)	TR
	Golf carts (6)/ transportation	TR/ER
	Parts washer (citrus based)- outside maint. bldg	TR
Storage shed (west of maint.)	Oil/ paint cans- 55 gal. drums	TR
Storage bldg. (west of maint.)	Gas welding equipment	ER/TR
	Hot water washer	TR
	55 gal. drums - storage various	TR
Storage tanks (w. of storage shed)	gasoline tank (250 gal.) diesel oil tank (250 gal.)	UR UR
Equipment storage bldg	Cherry picker, tractor, forklifts	ER/TR
Fire pump building (n. of mainten. shop)	Diesel generator Detroit Diesel Allison- PTA-1SD-50	ER/UR
	Chlorine drums (2) - 55 gal.	TR

Attachment DB-E03-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, DeBary Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	Electric motors (5)	TR
	Air compressor	TR
Boiler house	No existing operations performed	TR
	Boilers (2)- not hooked up	UR
Combustion turbine peaking units (6)- P1 to P6	Lube oil vent w/ demister	UR
	Lube oil storage tank- 2700 gal	UR
	Surge tank - 500 gal (+small tank)	UR
	Overboard tank	UR
	Electric pumps	TR
	Air compressor	TR
	Hydrogen venting & purge	TR
	CO2 tank (liquid)/ purge	TR
	Fire System	ER/TR
Substation	Transformers and associated equipment	TR
Oil Storage Area	Fuel oil tank- 316,000 bbl	UR
	Truck delivery	UR
Water storage tanks	Water tanks (3) (formerly oil storage) (25,000; 50,000; 300,000 bbl)	TR
Black start diesel	Diesel/ Caterpillar 3500/ 2520 hp/ 1879 kw	UR/ER
	Fuel tank - 500 gal	UR
Water treatment building	sulfuric acid, caustic, sodium sulfide storage	TR

Attachment DB-E03-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, DeBary Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	Water heater tank	TR
	anti-scalant - 55 gal drum	TR
	electric motors	TR
Combustion turbines (4) - P10, P8; P9, P7	Lube oil vent w/ demister	UR
	Diesel Tank	UR
	Hydrogen venting & purge	TR
	CO2 tank (liquid)/ purge	TR
	Fire System	ER/TR
General Site	Surface coating < 6.0 gal/day	ER/UR
	Brazing, soldering or welding	ER/TR
	Plant grounds maintenance	TR
	Routine maintneance	TR
	Oil water separators	TR
	CEM equipment & calibration gas venting	TR
	Compressed air system & miscellaneous compressors	TR
	Non-halogenerated solvent	UR/ER
	Fire water tank	TR
	Plant vehicles	ER/TR

Status Key:
TR = Trivial
UR = Unregulated
ER = Exempt by Rule 62-210.300(3)(a)

Attachment DB-E03-B6
General Emissions Unit Information

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

FPC Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons)
9 (No. 2)	No. 2 fuel oil	13,309,800	282,106,000 (a)
11 (No. 4)	No. 2 fuel oil	2,185,218	(b)
20	Diesel (equipment)	180	900
21	Unleaded gas	300	3,000
23	Diesel (vehicle)	300	3,000
P-1	Waste oil	546	2,184
P-2 to P-8	Waste oil (same as P-1)		
24 (P-7)	Waste oil	546	2,184
25, 26, 27 (P-8 to P-10)	Waste oil (same as 24)		
P-1 to P-6 Area	Lube Oil	2700	110,700
Black Start Diesel	Diesel	500	2,000
	TOTAL	15,500,090	282,229,968

(a) Based on fuel consumption from all gas turbines operating at maximum permitted rates.
(b) All fuel oil throughput for facility was assumed for Tank No. 9.