FLORIDA POWER CORPORATION
INTERCESSION CITY FACILITY

TITLE V
AIR OPERATING
PERMIT APPLICATION

Submitted to:
Florida Department of Environmental Protection

Prepared by:

KBN Engineering and Applied Sciences, Inc.
Gainesville, Florida

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: **Intercession City Plant**	
3. Facility Identification Number: **0970014** [ ] Unknown	
4. Facility Location Information: Street Address or Other Locator: **6525 Osceola Polk Cnty Line Rd** City: **Intercession City** County: **Osceola** Zip Code: **33848**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	6/28/1996
2. Permit Number:	0970014-001-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 Environ. Services Dept.

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(CT) Peaking Unit Nos. 1-6	
2R	Combustion Turbine Nos. 7-10	
3R	Combustion Turbine No.11	
4	Facility-wide Fugitive/De minimis 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: $ _____ [ ] 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 [X] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

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

Signature

6/6/96
Date

(seal)

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 IC-AI-2

IC-AI-1

EMISSION UNIT ID/DESCRIPTION

ATTACHMENT IC-AI-1

EMISSION UNIT ID/DESCRIPTION

EMISSION UNIT	ARMS	DESCRIPTION
1	001	Combustion Turbine Peaking Unit No. 1
	002	Combustion Turbine Peaking Unit No. 2
	003	Combustion Turbine Peaking Unit No. 3
	004	Combustion Turbine Peaking Unit No. 4
	005	Combustion Turbine Peaking Unit No. 5
	006	Combustion Turbine Peaking Unit No. 6
2	007	Combustion Turbine No. 7
	008	Combustion Turbine No. 8
	009	Combustion Turbine No. 9
	010	Combustion Turbine No. 10
3	—	Combustion Turbine No. 11
4	—	Facility-wide Fugitive/*De Minimis* Emissions

IC-AI-2

APPLICATION COMMENT

ATTACHMENT IC-AI-2

This Title V application is for the Intercession City Plant. The application structure is as follows:

	Combustion Turbine Peaking Units Nos. 1 through 6	Combustion Turbine Peaking Units Nos. 7 through 10	Combustion Turbine Peaking Unit No. 11	Facility-wide Fugitive Emissions
General	6 Units	4 Units	1 Unit	General area
Emission Points	1 Stack per unit	1 Stack per unit	1 Stack per unit	Fugitive
Segments	No. 2 fuel oil	No. 2 fuel oil, natural gas	No. 2 fuel oil, natural gas	Various
Pollutants	SO_2	SO_2, PM/PM10, NO_x, CO, VOCs, H_2SO_4	SO_2, PM/PM10, NO_x, CO, VOCs, H_2SO_4	NA
Visible Emissions	Permit	Permit	Permit	NA
CEM	None	NO_x; water-to-fuel ratio (Part 75, App. E)	NO_x; water-to-fuel ratio (Part 75, App. E)	NA
PSD	Existing baseline sources	SO_2, PM10, NO_2	SO_2, PM10, NO_2	NA

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates:
   Zone: **17** East (km): **446.3** North (km): **3126**

2. Facility Latitude/Longitude:
   Latitude (DD/MM/SS): **28 / 15 / 38** Longitude: (DD/MM/SS): **81 / 32 / 51**

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):

Facility consists of 11 combustion turbine peaking units. Six CTs are fired with No. 2 distillate fuel with maximum sulfur content of 0.5%. Five CTs are fired with No. 2 distillate fuel with maximum sulfur content of 0.2% and natural gas. These 5 CTs are limited to average annual capacity factor of 33% based on weighted 12 month rolling average sulfur content of 0.2%. Average annual capacity factor may be increased up to 38.7% if average sulfur content is 0.16% or less.

Facility Contact

1. Name and Title of Facility Contact:
   J.J. Murphy, Plant Manager

2. Facility Contact Mailing Address:
   Organization/Firm: **Florida Power Corporation**
   Street Address: **6525 Osceola Polk Line Rd**
   City: **Intercession City** State: **FL** Zip Code: **33848**

3. Facility Contact Telephone Numbers:
   Telephone: **(407) 396-2111** Fax: **(407) 678-4453**

Facility Regulatory Classifications

1. Small Business Stationary Source?	[ ] Yes [x] No [ ] Unknown
2. Title V Source?	[x] Yes [ ] No
3. Synthetic Non-Title V Source?	[ ] Yes, [x] No
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	[x] Yes [ ] No
5. Synthetic Minor Source of Pollutants Other than HAPs?	[ ] Yes [x] No
6. Major Source of Hazardous Air Pollutants (HAPs)?	[ ] Yes [x] No
7. Synthetic Minor Source of HAPs?	[ ] Yes [x] No
8. One or More Emissions Units Subject to NSPS?	[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): **The combustion turbines No. 7,8,9,10 and 11 are subject to NSPS for stationary gas turbines (40 CFR Part 60, Subpart GG).**	

B. FACILITY REGULATIONS

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

Not Applicable

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

See Attachment IC-FE-B

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted		2. Pollutant Classification
VOC	Volatile Organic Compounds	A
SAM	Sulfuric Acid Mist	A
SO2	Sulfur Dioxide	A
PM	Particulate Matter - Total	A
PM10	Particulate Matter - PM10	A
NOX	Nitrogen Oxides	A
CO	Carbon Monoxide	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: IC-FE-1
   [ ] Not Applicable [ ] Waiver Requested

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

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

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

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

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

Additional Supplemental Requirements for Category I Applications Only

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

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

9. Alternative Methods of Operation:
   [X] Attached, Document ID: IC-FE-9
   [ ] 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: IC-FE-12
[ ] Not Applicable

13. Risk Management Plan Verification:

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

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

[X] Not Applicable

14. Compliance Report and Plan
[X] Attached, Document ID: IC-FE-14
[ ] Not Applicable

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

ATTACHMENT IC-FE-B

FACILITY REGULATIONS

ATTACHMENT IC-FE-B

FACILITY REGULATIONS

Applicable Requirements Listing - Power Plants

FACILITY: FPC Intercession City Plant

FDEP Rules:

General Permits:

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

Asbestos NESHAP:

62-204.800(8)(b)8.(State Only)	- Asbestos Removal
62-204.800(8)(d) (State Only)	- General Provisions (Asbestos)
62-204.800(19) (State Only)	- CFCs; Part 82

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

Title V Permits:

62-213.205(1)(a)	- Fees
62-213.205(1)(b)	
62-213.205(1)(c)	
62-213.205(1)(e)	
62-213.205(1)(f)	
62-213.205(1)(g)	
62-213.205(1)(I)	
62-213.205(1)(j)	
62-213.400	- Permits/Revisions
62-213.410	- Changes without permit revisions
62-213.420.(1)(b)2.	- Permits-allows continued operation
62-213.420.(1)(b)3.	- Permits-additional information
62-213.460	- Permit Shield
62-213.900(1)	- Fee Form

Open Burning:

62-256.300	- Prohibitions
62-256.700	- 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:

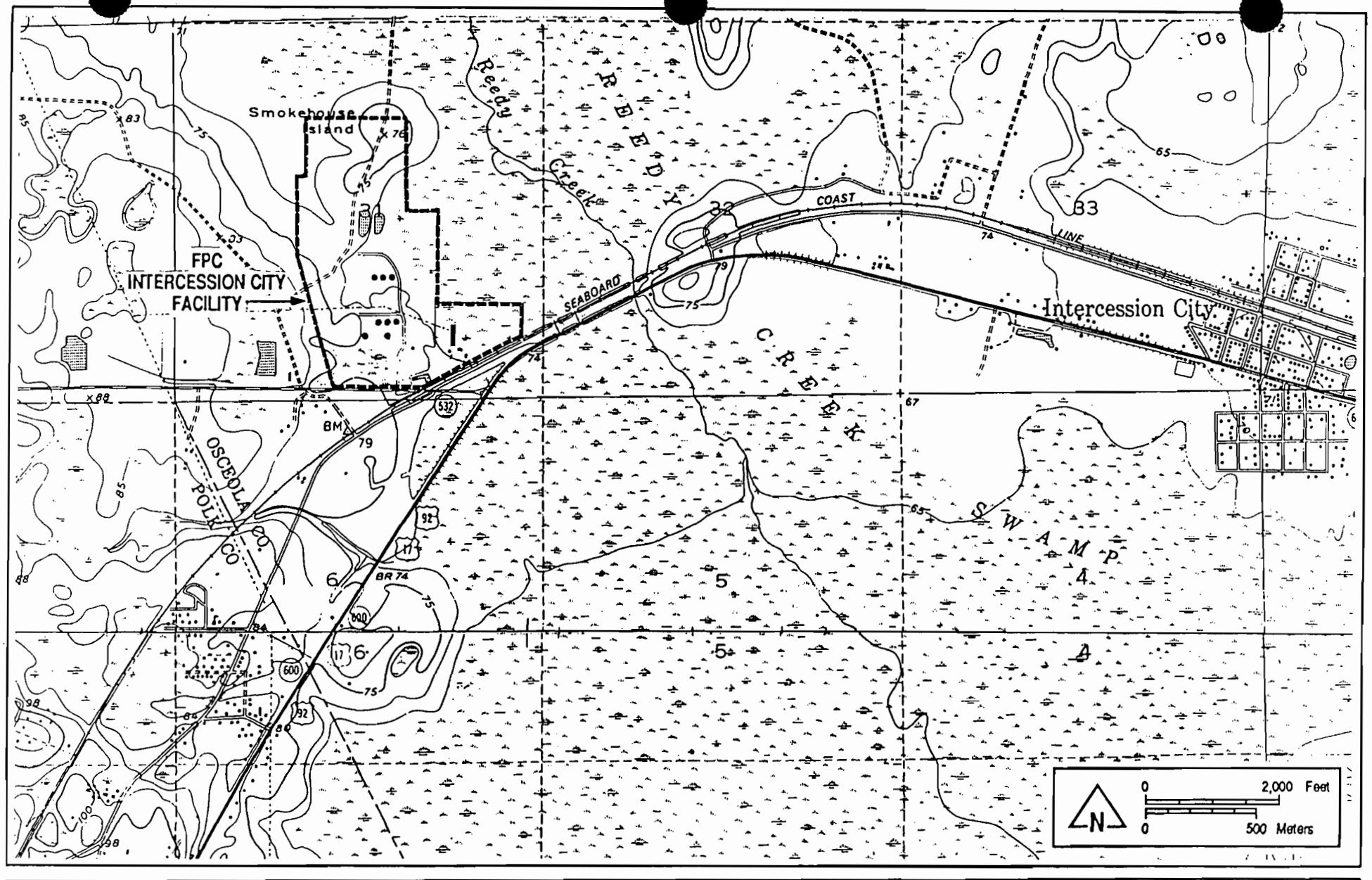
40 CFR 61.05	- Prohibited Activities
40 CFR 61.12(b)	- Compliance with work practice standard
40 CFR 61.14	- Monitoring Requirements (if required)
40 CFR 61.19	- Circumvention
40 CRF 61.145	- Demolition and Renovation
40 CFR 61.148	- Standard for Insulating Material

CFCs > 50 lb:

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

ATTACHMENT IC-FE-1

AREA MAP

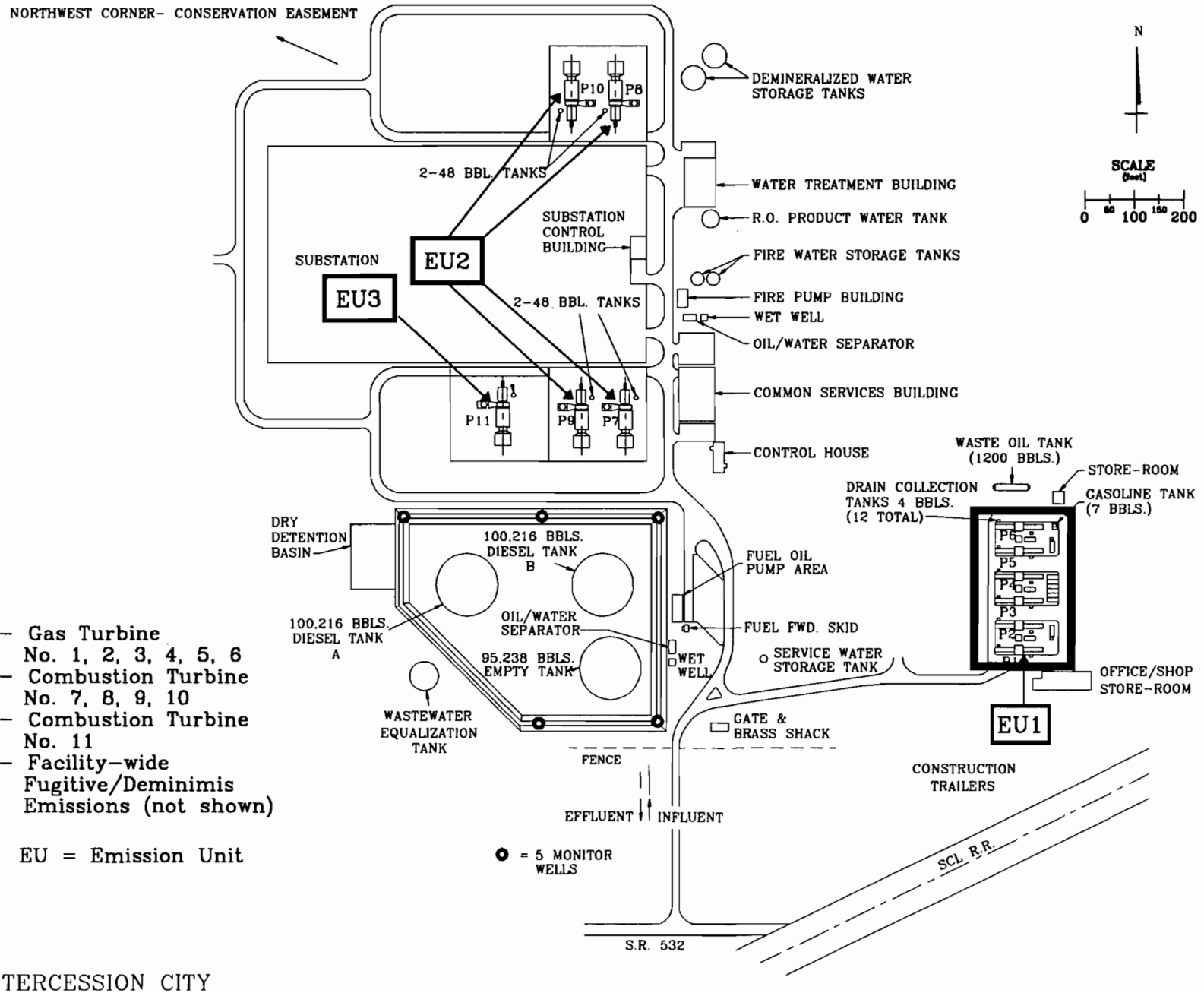


LOCATION OF THE FPC INTERCESSION CITY FACILITY

KBN

ATTACHMENT IC-FE-2

FACILITY PLOT PLAN



Key

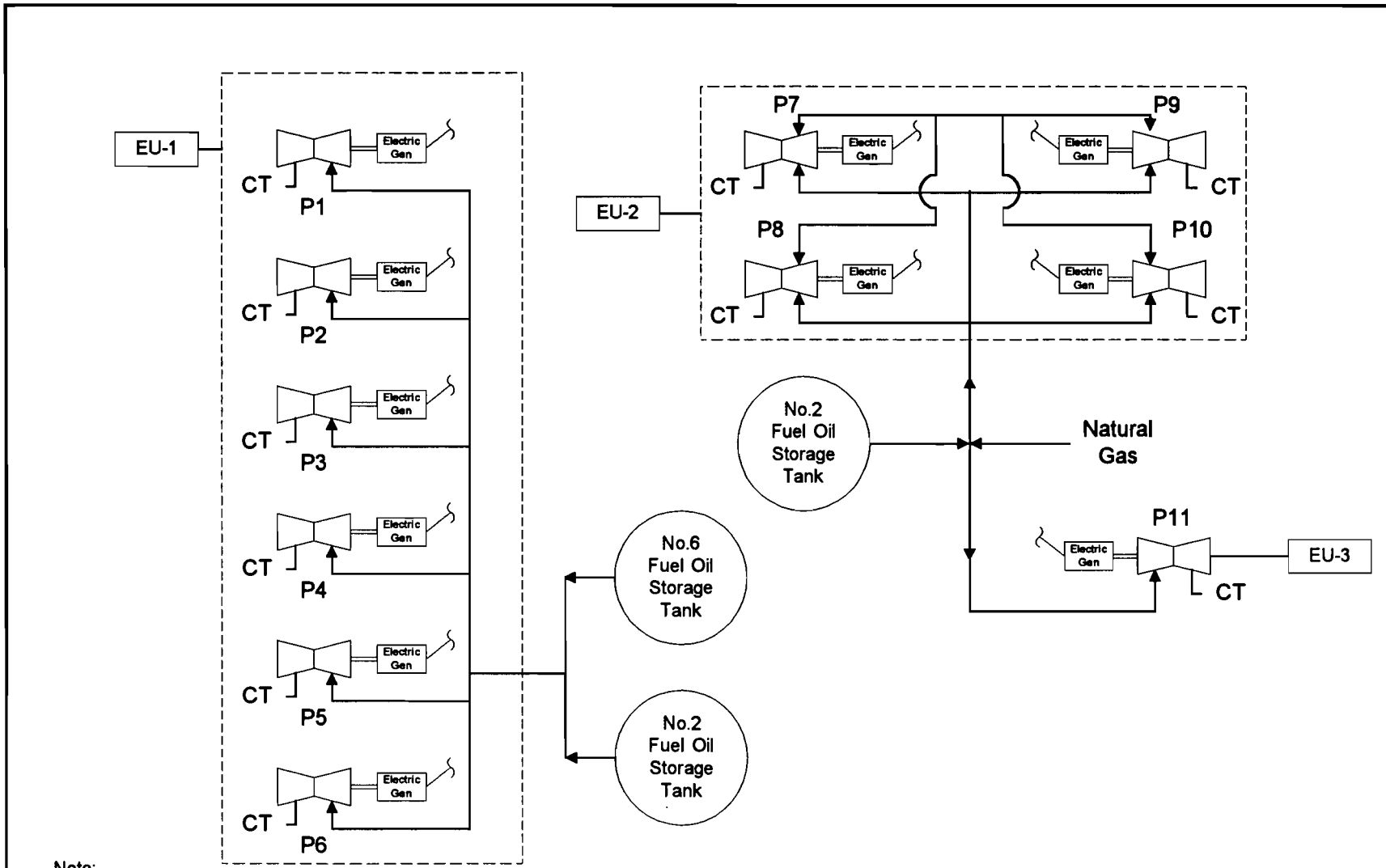
EU1 – Gas Turbine No. 1, 2, 3, 4, 5, 6
EU2 – Combustion Turbine No. 7, 8, 9, 10
EU3 – Combustion Turbine No. 11
EU4 – Facility–wide Fugitive/Deminimis Emissions (not shown)

Note: EU = Emission Unit

INTERCESSION CITY
ICPCOMP.DWG

ATTACHMENT IC-FE-3

PROCESS FLOW DIAGRAM



Note:
CT = Gas Turbine
EU = Emission Unit Number
See segment section for the operating rate of each emission unit
EU 4 - Facility-wide Fugitive/Deminimis Emissions not shown

Florida Power Corporation		*Emission Unit:* Significant Units
		Process Area: Overall Plant
Emission Units	Intercession City	*Filename:* FPCIC1.VSD
		Latest Revision Date: 6/3/96 03:45 PM

KBN Engineering and Applied Sciences, Inc.

ATTACHMENT IC-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT IC-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

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

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

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

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

ATTACHMENT IC-FE-5

FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT IC-FE-5
FUGITIVE EMISSIONS IDENTIFICATION

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

Fugitive emissions that may result from the operation of activities that are not trivial at the facility are addressed in Emission Unit No. 4. 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 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 IC-FE-8

LIST OF EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

ATTACHMENT IC-FE-8
LIST OF EQUIPMENT / ACTIVITIES REGULATED — TITLE VI

The FPC Intercession City Plant currently has several refrigeration and air-conditioning units on the plant site. Of these, 2 air-conditioning units currently meet the 50-pound threshold established by the Department:

Model Name	Unit Number	Serial Number	General Area	Amount
TRA	A1	WCH240B400BA	New Administrative Office	60
TRA	A1	WCH240B400BA	New Administrative Office	60

ATTACHMENT IC-FE-9

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT IC-FE-9
ALTERNATIVE METHODS OF OPERATION

The facility consists of 11 combustion turbines. Six combustion turbines (P1 through P6; EU1) are rated at 56.4 MW and operate on distillate oil. Four combustion turbines (P7, P8, P9, and P10; EU2), are rated at 92.9 megawatts (MW) at 59 degrees Fahrenheit (°F) (GE PG7111EA) and one combustion turbine, rated at 171 MW at 59°F (Siemens V84.3) were limited in the air construction permit to an average maximum capacity factor of 38.7% (3,390 hours per year operating time). The total hours of operation for the six turbines were not to exceed 16,950 unit hours per year (5 units times 3,390 hours/yr/unit). In addition, the capacity factors for these turbines were limited to 33% based on a weighted 12 month rolling maximum sulfur content of 0.2%. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.2%, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	Percent Capacity Factor
0.2 - 0.195	33.0
0.19 - 0.185	34.4
0.18 - 0.175	35.8
0.17 - 0.165	37.2
0.16 - or less	38.7

The four combustion turbines (GE Frame 7EA) were also limited in fuel oil consumption on a per unit basis, per aggregate units, or prorated consumption based on the table as described above. Similar limits was placed on the other combustion turbine (Siemens V84.3).

Therefore, any combination of the five 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 IC-FE-12

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT IC-FE-12
COMPLIANCE ASSURANCE MONITORING PLAN

Compliance assurance monitoring plan will be submitted to the implementing agency by the required date.

ATTACHMENT IC-FE-14

COMPLIANCE REPORT AND PLAN

COMPLIANCE REPORT AND PLAN

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

ATTACHMENT IC-FE-15

COMPLIANCE STATEMENT

ATTACHMENT IC-FE-15

COMPLIANCE STATEMENT

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

Signature, Responsible Official

6-12-96

Date

W. Jeffrey Pardue, C.E.P., Director, Environmental Services 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(CT) Peaking Unit Nos. 1-6**		
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. Two turbines per generating unit. 2. ARMS Identification Numbers: 001, 002, 003, 004, 005, 006.**		

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters): **Not Applicable**
2. Control Device or Method Code:

B.

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

C.

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

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

Emissions Unit Details

1. Initial Startup Date:	**14 May 1974**
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer:	**Pratt & Whitney** Model Number: **FT 4C-1DLF**
4. Generator Nameplate Rating:	**57** MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	**708**	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 based on permit limit of 123 barrels/hour of No. 2 fuel oil. Gen. Nameplate Rating - 56.7 MW.

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 IC-EU1-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 Attach. IC-FE-2**	
2. Emission Point Type Code: [ ] 1 [ ] 2 [x] 3 [ ] 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **Combustion turbine's gases exhaust through two stacks.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**20** feet
7. Exit Diameter:	**14.6** feet
8. Exit Temperature:	**760** °F

9. Actual Volumetric Flow Rate:	**1,764,000** 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): **Data for a single generating unit. Exit Diameter: 14.63 ft.**	

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): **Distillate fuel oil firing**	
2. Source Classification Code (SCC): **2-01-001-01**	
3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **5.13**	5. Maximum Annual Rate: **44,843**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **138**	
10. Segment Comment (limit to 200 characters): **Heat content based on HHV. Data are for a single generating unit.**	

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			NS
NOx			NS
PM			NS
PM10			NS
CO			NS
VOC			NS

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 (> 400 hour operation/yr), EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **Rule 62-296.310(2)(a)**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

1.	Visible Emissions Subtype: **VE**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. Rule 62-210.700. 2. Maximum period of excess opacity allowed - 2 hours/24 hours.**

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: IC-EU1-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: IC-EU1-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[ ] Not Applicable
	[X] Previously Submitted, Date: 23 Dec 1994	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: IC-EU1-L6	[ ] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10.	Alternative Methods of Operation [ ] Attached, Document ID: _____ [x] Not Applicable
11.	Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID: _____ [x] Not Applicable
12.	Identification of Additional Applicable Requirements [x] Attached, Document ID: IC-EU1-L12 [ ] Not Applicable
13.	Compliance Assurance Monitoring Plan [ ] Attached, Document ID: _____ [x] Not Applicable
14.	Acid Rain Permit Application (Hard Copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [x] Not Applicable

ATTACHMENT IC-EU1-D

EMISSIONS UNIT REGULATIONS

ATTACHMENT IC-EU1-D

EMISSIONS UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

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

FDEP Rules:

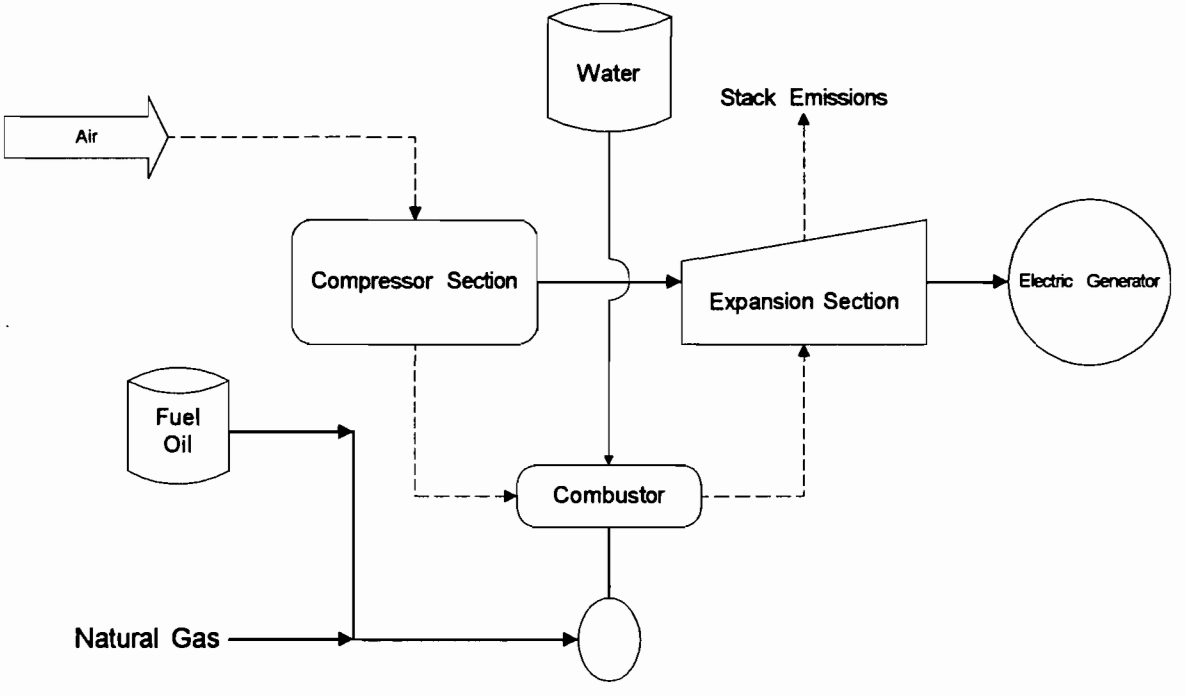
Stationary Sources-General:
62-210.700(1)
62-210.700(4) - Maintenance
62-210.700(6)

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

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

ATTACHMENT IC-EU1-L1

PROCESS FLOW DIAGRAM



Florida Power Corporation		*Emission Unit:* Combustion Turbines No. 7, 8, 9, 10	KBN Engineering and Applied Sciences, Inc.
Emission Units	Intercession City	*Process Area:* Overall Plant	
		Filename: FPCICB.VSD	
		Latest Revision Date: 6/2/96 01:50 PM	

ATTACHMENT IC-EU1-L2

FUEL ANALYSIS OR SPECIFICATION

Attachment IC-EU1-L2

Fuel Analysis

No. 2 Fuel Oil

Parameter	Typical Value	Max Value
API gravity @ 60 F	30[1]	-
Relative density	7.1 lb/gal [2]	
Heat content	19,500 Btu / lb (HHV)	
% sulfur		0.5
% nitrogen	0.025 - 0.03	
% ash	negligible	0.1

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

[1] Data taken from the FPC fuel procurement specification

[2] Data from laboratory analysis

ATTACHMENT IC-EU1-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT IC-EU1-L6
PROCEDURES FOR STARTUP/SHUTDOWN

Startup and shutdown for these units are fully automatic.

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

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 IC-EU1-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

STATE OF FLORIDA
DEPARTMENT OF POLLUTION CONTROL
2562 EXECUTIVE CENTER CIRCLE, EAST
MONTGOMERY BUILDING, TALLAHASSEE, FLORIDA 32301

PETER P. BALJET
EXECUTIVE DIRECTOR

DAVID H. LEVIN
CHAIRMAN

Central Region
Suite 232
3319 Maguire Boulevard
Orlando, Florida 32803

December 19, 1973

Osceola County-AP
Florida Power Corporation

Mr. J. T. Rodgers, Assistant Vice President
Florida Power Corporation
P. O. Box 14042
St. Petersburg, Florida 33733

Dear Mr. Rodgers:

Pursuant to your recent application, please find enclosed a permit No. AC49-2053-2058 dated 11-2-73 to construct/operate the subject pollution source.

This permit will expire on 10-1-74, and may be renewed after complying with the conditions, requirements and restrictions checked or indicated otherwise in the attached sheet "Operation Permit Conditions."

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

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

Your continued cooperation in this matter is appreciated and in future communication please refer to your permit number.

Very truly yours,

W. C. Wood, P.E.
Regional Engineer

WCW: RRG:krt
cc: DPC, Regional Office:

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Florida Power Corporation
Intercession City Peaking Units
P. O. Box 14042, St. Petersburg, Florida 33733

PERMIT NO. AC49-2053 DATE December 20, 1973

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403, FLORIDA STATUTES, AND CHAPTER 17-4, FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. J. T. Rodgers, Assistant Vice President

FOR THE CONSTRUCTION OF:
Unit #1 oil fired gas turbine electric generating units utilizing #2 distillate oil at 588×10^6 BTU/hr./unit

LOCATED AT: East of Intercession City, 3.5 miles on SR532 & 17-92, Osceola County UTM 7446388 E., 3126000 N.

IN ACCORDANCE WITH THE APPLICATION DATED July 3, 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 ITS ISSUANCE UNTIL _____ AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING EXECUTIVE DIRECTOR

W. C. Wood, P.E.
Regional Engineer

FORM 1-J

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Florida Power Corporation
Intercession City Peaking Units
P. O. Box 14042, St. Petersburg, Florida 33733

PERMIT NO. AC49-2054 DATE December 20, 1973

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403, FLORIDA STATUTES, AND CHAPTER 17-4, FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. J. T. Rodgers, Assistant Vice President

FOR THE CONSTRUCTION OF:
Unit #2 oil fired gas turbine electric generating units utilizing #2 distillate oil at $588X10^6$ BTU/hr./unit

LOCATED AT: East of Intercession City, 3.5 miles on SR532 & 19-72
Osceola County UTM 7446388 E., 3126000 N.

IN ACCORDANCE WITH THE APPLICATION DATED July 3, 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 ITS ISSUANCE UNTIL _____ AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING EXECUTIVE DIRECTOR

FORM 1-J

W. C. Wood, P.E.
Regional Engineer

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Florida Power Corporation
Intercession City Peaking Unit
P. O. Box 14042, St. Petersburg, Florida 33733

PERMIT NO. AC49-2055 DATE December 20, 1973

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403, FLORIDA STATUTES, AND CHAPTER 17-4, FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. J. T. Rodgers, Assistant Vice President

FOR THE CONSTRUCTION OF:
Unit #3 oil fired gas turbine electric generating units utilizing #2 distillate oil at 588×10^6 BTU/hr./unit

LOCATED AT: East of Intercession City, 3.5 miles on SR532 & 17-92
Osceola County UTM 7446388 E., 3126000 N.

IN ACCORDANCE WITH THE APPLICATION DATED July 3, 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 ITS ISSUANCE UNTIL _____
AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING EXECUTIVE DIRECTOR

W. C. Wood, P.E.
Regional Engineer

FORM 1-J

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Florida Power Corporation
Intercession City Peaking Units
P. O. Box 14042, St. Petersburg, Florisa 33733

PERMIT NO. AC49-2056 DATE December 20, 1973

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403, FLORIDA STATUTES, AND CHAPTER 17-4, FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. J. T. Rodgers, Assistant Vice President

FOR THE CONSTRUCTION OF:
Unit #4 oil fired gas turbine electric generating units utilizing #2 distillate oil at $588X10^6$ BTU/hr./unit

LOCATED AT: East of Intercession City, 3.5 miles on SR532 & 17-92
Osceola County UTM 7446388 E., 3126000 N.

IN ACCORDANCE WITH THE APPLICATION DATED July 3, 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 ITS ISSUANCE UNTIL _____
AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING EXECUTIVE DIRECTOR

W. C. Wood, P.E.
Regional Engineer

FORM 1-J

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Florida Power Corporation
Intercession City Peaking Units
P. O. Box 14042, St. Petersburg, Florida 33733

PERMIT NO. AC49-2057 DATE December 20, 1973

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403. FLORIDA STATUTES, AND CHAPTER 17-4, FLORIDA ADMINISTRATIVE CODE. THIS PERMIT IS ISSUED TO:
Mr. J. T. Rodgers, Assistant Vice President

FOR THE CONSTRUCTION OF:
Unit #5 oil fired gas turbine electric generating units utilizing #2 distillate oil at $588X10^6$ BTU/hr./unit

LOCATED AT: East of Intercession City, 3.5 miles on SR532 & 17-92
Osceola County UTM 7446388 E., 3126000 N.

IN ACCORDANCE WITH THE APPLICATION DATED July 3, 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 ITS ISSUANCE UNTIL _____ AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING EXECUTIVE DIRECTOR

W. C. Wood, P.E.
Regional Engineer

FORM 1-J

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT

FOR Florida Power Corporation
Intercession City Peaking Units
P. O. Box 14042, St. Petersburg, Florida 33733

PERMIT NO. AC49-2058 DATE December 20, 1973

PURSUANT TO THE PROVISION OF SECTION 403.061(16) OF CHAPTER 403, FLORIDA STATUTES, AND CHAPTER 17-4, FLORIDA ADMINISTRATIVE CODE, THIS PERMIT IS ISSUED TO:
Mr. J. T. Rodgers, Assistant Vice President

FOR THE CONSTRUCTION OF:
Unit #6 oil fired gas turbine electric generating units utilizing #2 distillate oil at $588X10^6$ BTU/hr./unit

LOCATED AT East of Intercession City 3.5 miles on SR532 & 17-92
Osceola County UTM 7446388 E., 3126000 N.

IN ACCORDANCE WITH THE APPLICATION DATED July 3, 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 ITS ISSUANCE UNTIL _____
AND SHALL BE SUBJECT TO ALL APPLICABLE LAWS OF THE STATE AND THE RULES AND REGULATIONS OF THE DEPARTMENT.

CHIEF, BUREAU OF PERMITTING EXECUTIVE DIRECTOR

W. C. Wood, P.E.
Regional Engineer

FORM 1-J

STATE OF FLORIDA

DEPARTMENT OF POLLUTION CONTROL

CONSTRUCTION PERMIT PROVISOS

AIR POLLUTION SOURCES

Permit No. AC49-2053-2058 Date: 11-2-73

[X] 1. Construction of this installation shall be completed by April 30, 1974

[X] 2. This construction permit expires on October 1, 1974 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 turbines shall be tested for particulates, SO_x and NO_x 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 Florida Regional Office 3319 Maguire Blvd., Suite 232, Orlando, Florida 32803

[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 (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 Florida Regional Office,

[ ] 7. Stack sampling for total particulate or other contaminant emissions shall be conducted if found by the DPC Florida Regional Office to be necessary as a basis for the issuance of an operation permit.

[x] 8. 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.

(PLEASE TURN)

[ ] 9. The following items are required prior to our issuance of an operation permit in addition to the engineer of record's report of inspection:

(a) An emission report for total particulates and sulfur oxides based upon actual operations.

(b) A tabular summary of actual records of frequencies and durations of soot blowing as well as boiler blowdown characteristics and disposal practices.

These items are required prior to our issuance of an operation permit and shall be submitted in duplicate to the DPC _____ Florida Regional Office, _____

_____

[x] 10. There shall be no discharges of liquid effluents or contaminated runoff from the plant site.

[x] 11. All fugitive dust generated at this site shall be adequately controlled.

A.1c

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

NOTICE OF PERMIT

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

Attention: Patsy Y. Baynard, Director
Environmental & Licensing

Osceola County - AP
Combustion Turbine Peaking Units
No. 1, 2, 3, 4, 5, and 6 - Intercession City

Dear Ms. Baynard:

Enclosed is Permit Number AO49-176549, dated 7-20-90, to operate the above referenced sources, issued pursuant to Section 403.087, Florida Statutes.

Persons whose substantial interests are affected by this permit have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing), unless the right to petition has been waived. The petition must conform to the requirements of Chapters 17-103 F.A.C., and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee 32399-2400, within fourteen (14) days of receipt of this notice. Failure to file a petition within that time constitutes a waiver of any right such person has to an administrative determination pursuant to 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.

This Order (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 paragraph. Upon the timely filing of a petition this Permit will not be effective until further Order of the Department.

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

cmc

A. Alexander
Deputy Assistant Secretary
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

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

Clerk 7/20/90
Clerk Date

AA/jtj

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 7-20-90 to the listed persons, by D. Jones.

Florida Department of Environmental Regulation

Central District • 3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767 • 407-894-7555

Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary
Alex Alexander, Deputy Assistant Secretary

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

Attention: Patsy Y. Baynard, Director
Environmental & Licensing

I. D. Number:
Permit/Certification
Number: AO49-176549
Date of Issue: 7/20/90
Expiration Date: **June 25, 1995**
County: Osceola
Latitude/Longitude:
28°15'38"N/81°32'48"W
UTM: 17-446.3 KmE; 3126.0 KmN
Project: Combustion Turbine Peaking Units No. 1, 2, 3, 4, 5, and 6 - Intercession City

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 Combustion Turbine Peaking Units No. 1, 2, 3, 4, 5, and 6. Each unit consists of two (2) gas turbines, which burn #2 fuel oil with a total maximum heat input rate of 708 MMBTU/hour and one (1) electric generator (Model No. FT4C-1DLF), rated at a maximum of 51,000 KW.

These sources are located 3.5 miles east of Intercession City on State Road 532 in Osceola County, Florida.

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

PERMITTEE:

I.D. Number:
Permit/Certification Number:
Date of Issue:
Expiration Date:

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727 or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agent, employees, servants or representatives.

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

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

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

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

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

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

   a. Having access to and copying any records that must be kept under the conditions of the permit.
   b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
   c. Sampling or monitoring any substances or parameters at any location reasonable necessary to assure compliance with this permit or department rules.

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

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

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Section 403.73 and 403.111, Florida Statutes.

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

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
( ) Compliance with New Source Performance Standards

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

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

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

c. Records of monitoring information shall include:
- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

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

PERMITTEE:
Florida Power Corporation

Attention: Patsy Y. Baynard, Director
Environmental & Licensing

I. D. Number:
Permit/Certification Number:
AO49-176549
Date of Issue:
Expiration Date: **June 25, 1995**

GENERAL CONDITIONS:

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

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

SPECIFIC CONDITIONS:

OPERATING LIMITS

1. Each of the six sources are permitted to operate under the following conditions:

   a) Each source will be fired with a maximum of 123 bbls. of #2 fuel oil.

   b) Each source will have a maximum heat input of 708 MMBTU/hour.

   c) The rated maximum electrical power of each source is 63,000 Kva at power factor = 0.9 and an ambient temperature of 59°F.

   d) Each source is permitted to operate 24 hours/day, 7 days/week, and 52 weeks/year.

EMISSION LIMITS

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

COMPLIANCE TESTING

3. Each source must be tested for visible emissions at yearly intervals from the date of January 20, 1990, in accordance with Rule 17-2.700(6)(b)9, (DER Method #9)F.A.C.

4. This office (Florida Department of Environmental Regulation, Air Permitting, Orlando) shall be notified 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.).

PERMITTEE:
Florida Power Corporation

Attention: Patsy Y. Baynard, Director
Environmental & Licensing

I. D. Number:
Permit/Certification Number:
AO49-176549
Date of Issue:
Expiration Date: **June 25, 1995**

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

6. 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).

REPORTS

7. Each calendar year on or before March 1, submit for each source, an Annual Operations Report DER Form 17-1.202(6) for the preceding calendar year in accordance with Rule 17-4.14, F.A.C.

EXPIRATION DATE

8. 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.).

ISSUED 7-20-80

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

cmc

A. Alexander
Deputy Assistant Secretary
3319 Maguire Boulevard
Suite 232
Orlando, Florida 32803

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 Nos. 7-10**		
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): **1. ARMS Identification Numbers: 007, 008, 009, 010. Startup dates for P7, 19-Aug-1993; P8, 13-Jul-1993; P9 2-Sep-1993; P10 19-Jul-1993. Nameplate rating - one unit at 59°F (ISO conditions), oil-firing. For natural gas-firing, 96.3 MW at 59°F.**		

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:	**19 Aug 1993**
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **General Electric**	Model Number: **PG 7111EA**
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): **See Attachment IC-EU2-C5**		

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:			
	24 hours/day	**7** days/week	
	52 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 IC-EU2-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 Attach. IC-FE-2**	
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 a single stack per turbine**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**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 a single CT at an ambient temperature of 59 °F (oil-firing). Exit Diameter: 13.75 ft.**	

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): **Distillate fuel oil**	
2. Source Classification Code (SCC): **2-01-001-01**	
3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **8.701**	5. Maximum Annual Rate: **26,523**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.2**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **132**	
10. Segment Comment (limit to 200 characters): **Million Btu per SCC Unit: 131.52.**	

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Natural Gas**	
2. Source Classification Code (SCC): **2-01-002-01**	
3. SCC Units: **Million cubic feet**	
4. Maximum Hourly Rate: **1.048**	5. Maximum Annual Rate: **3,553**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **1,000**	
10. Segment Comment (limit to 200 characters): **Maximum Percent Sulfur: 1 grain/100 cf. 1) Max. hourly and annual rates at 59°F for one CT. Annual rate based on 3,390 hours. 2) Heat content - LHV.**	

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: %
3. Potential Emissions: **222** lb/hour **321** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.2 % Max S content** Reference: **AC Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 1,283 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 33% capacity factor.**

Emissions Unit Information Section 2 **of** 4

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: **0.2 %maximum sulfur**	
4. Equivalent Allowable Emissions:	**222** lb/hour **321** 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): **AC Permit Limit - oil-firing at 59°F. No applicable 33% cap. factor (38.7% if sulfur content 0.16% or less) annual emission limit for a single turbine CT; four turbines have limit of 1,283 tons/year**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **1 grain S/100 cf**	
4. Equivalent Allowable Emissions:	**2.99** lb/hour **5.06** 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): **AC Permit limit - Natural gas-firing at 59°F. No annual emission applicable for a single turbine; four turbines have a limit of 20.2 tons/yr.**	

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 **308.5** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **42 ppmvd @ 15% O2** Reference: **Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 1,232 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 of 4

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 **308.5** 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): **AC Permit limit - oil firing. No applicable annual emission limit for a single turbine; four turbines have a limit of 1,232 tons/year. 38.7% cap. factor.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **25 ppmvd@15% O2**	
4. Equivalent Allowable Emissions:	**107** lb/hour **181.4** 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): **AC Permit limit - natural gas-firing at 59°F. No appicable annual emission for a single turbine; four turbines have a limit of 725 tons/yr. 38.7% cap. factor.**	

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: **15** lb/hour **25.4** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **15 lb/hr** Reference: **AC Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 102 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 **of** 4

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:	**15** lb/hour **25.4** tons/year
5. Method of Compliance (limit to 60 characters):	**Annual Compliance Test, EPA Method 5**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**AC Permit limit - oil-firing at 59°F. No applicable annual emission limit for a single turbine; four turbines have a limit of 102 tons/year. 38.7% cap. factor.**

B.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**7.5** **lb/hr**
4. Equivalent Allowable Emissions:	**7.5** lb/hour **12.71** tons/year
5. Method of Compliance (limit to 60 characters):	**VE; EPA Method 9**
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):	**If VE < 10%, stack test not required. Permit limit - nat. gas-firing at 59°F. No appl. annual emission for single turbine; 4 turbines: 50.8 tons/yr limit. 38.7% cap. factor.**

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: **15** lb/hour **25.4** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **15 lb/hr** Reference: **AC permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 102 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 **of** 4

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:	**15** lb/hour **25.4** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance Test, EPA Method 5**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - oil-firing at 59°F. No applicable annual emission limit for a single turbine; four turbines have a limit of 102 tons/year.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **7.5 lb/hr**	
4. Equivalent Allowable Emissions:	**7.5** lb/hour **12.71** tons/year
5. Method of Compliance (limit to 60 characters): **VE; EPA Method 9**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **If VE < 10% , stack test not required. AC Permit limit - natural gas-firing at 59°F. No applicable annual emission for a single turbine; four turbines have a limit of 50.8 tons/yr.**	

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 **91.5** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **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): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 366 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 of 4
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: **25 ppm**	
4. Equivalent Allowable Emissions: **54** lb/hour	**91.5** 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): **AC Permit limit - oil-firing at 59°F. No applicable annual emission limit for a single turbine; four turbines have a limit of 366 tons/year.**	

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **10 ppmvd**	
4. Equivalent Allowable Emissions: **21.3** lb/hour	**36.1** 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): **AC Permit limit - natural gas-firing at 59°F. No applicable annual emission for a single turbine; four turbines have a limit of 144.4 tons/yr.**	

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 **8.5** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **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): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 34 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 2 **of** 4

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	**8.5** 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): **AC Permit limit - oil-firing at 59°F. No applicable annual emission limit for a single turbine; four turbines have a limit of 34 tons/year. If CO limits met, VOC test not required.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions: **3** lb/hour	**5.08** 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): **AC Permit limit - natural gas-firing at 59°F. No applicable annual emission for a single turbine; four turbines have a limit of 20.3 tons/yr. If CO limit met, VOC test not required.**	

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: **18** lb/hour **26.5** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.2** Reference: **Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit. Equivalent TPY for single CT; four CTs have limit of 106 TPY.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max. hourly emissions based on ambient temp. at 59°F. Annual emissions based on 59°F and 33% capacity factor.**

Emissions Unit Information Section 2 **of** 4

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: **0.2**	
4. Equivalent Allowable Emissions: **18** lb/hour	**26.5** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test - EPA Method 8**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - oil-firing. No applicable ann. emiss. limit for 1 CT; 4 CTs have a limit of 106 tons/year. If S content, SAM test not requir. 33% cap. fact. 38.7% if S content 0.16% or less.**	

B.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions: **0.44** lb/hour	**0.75** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test - EPA Method 8.**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - natural gas-firing at 59°F. No applicable annual emission for a single turbine; four turbines have a limit of 3.0 tons/yr. If sulfur content met, SAM test not required.**	

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): **AC Permit Limit. Visible emission limit under normal conditions at full load; exceptional conditions are specified for other loads. Annual Compliance Test, EPA Method 9**

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: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. Rule 62-210.700. 2. Maximum period of excess opacity allowed - 2 hours/24 hours.**

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: 19 Aug 1993	
6. Performance Specification Test Date: 19 Aug 1993	
7. Continuous Monitor Comment (limit to 200 characters): **Water to fuel ratio is monitored on a continuous basis(40 CFR 60.334). Monitoring incorporated into CT control system and recorded on hourly basis. Dates - P7; 7/13/93 - P8; 9/2/93 - P9; 7/19/93 - P10**	

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: 19 Aug 1993	
6. Performance Specification Test Date: 19 Aug 1993	
7. Continuous Monitor Comment (limit to 200 characters): **40 CFR 75, Appendix E. Dates - P7; 7/13/93 - P8; 9/2/93 - P9; 7/19/93 - P10.**	

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: IC-EU2-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: IC-EU2-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[X] Attached, Document ID: IC-EU2-L3	
	[ ] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[X] Attached, Document ID: IC-EU2-L4	
	[ ] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[ ] Not Applicable
	[X] Previously Submitted, Date: 17 Mar 1996	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: IC-EU2-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: IC-EU2-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: IC-EU2-L12 [ ] Not Applicable

13. Compliance Assurance Monitoring Plan

[ ] Attached, Document ID: _____ [X] 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: IC-EU2-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 IC-EU2-C5

OPERATING CAPACITY COMMENT

ATTACHMENT IC-EU2-C5
OPERATING CAPACITY COMMENT

The maximum heat input rate is based on the permit limit at 20°F for one combustion turbine (CT). The four turbines are permitted to operate up to the equivalent of 3,390 hours/year per CT at peak or other lesser loads and 38.7 percent capacity factor. The capacity factor shall be limited to 33 percent based on weighted 12-month rolling average sulfur content not to exceed 0.2 percent. If sulfur content is less than 0.2 percent, the capacity factor can be adjusted up to 38.7 percent. A single turbine can operate at more than 3,390 hours/year. Fuel usage not limited for a single turbine; usage up to 106,120,560 gallons/yr (59°F) is authorized by construction permit. There is no annual emission limit for a single CT.

ATTACHMENT IC-EU2-D

EMISSIONS UNIT REGULATIONS

ATTACHMENT IC-EU2-D

EMISSIONS UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: FPC Intercession City Plant - Combustion Turbines 7-10 (Also CT 11)

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 (Compliance 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:

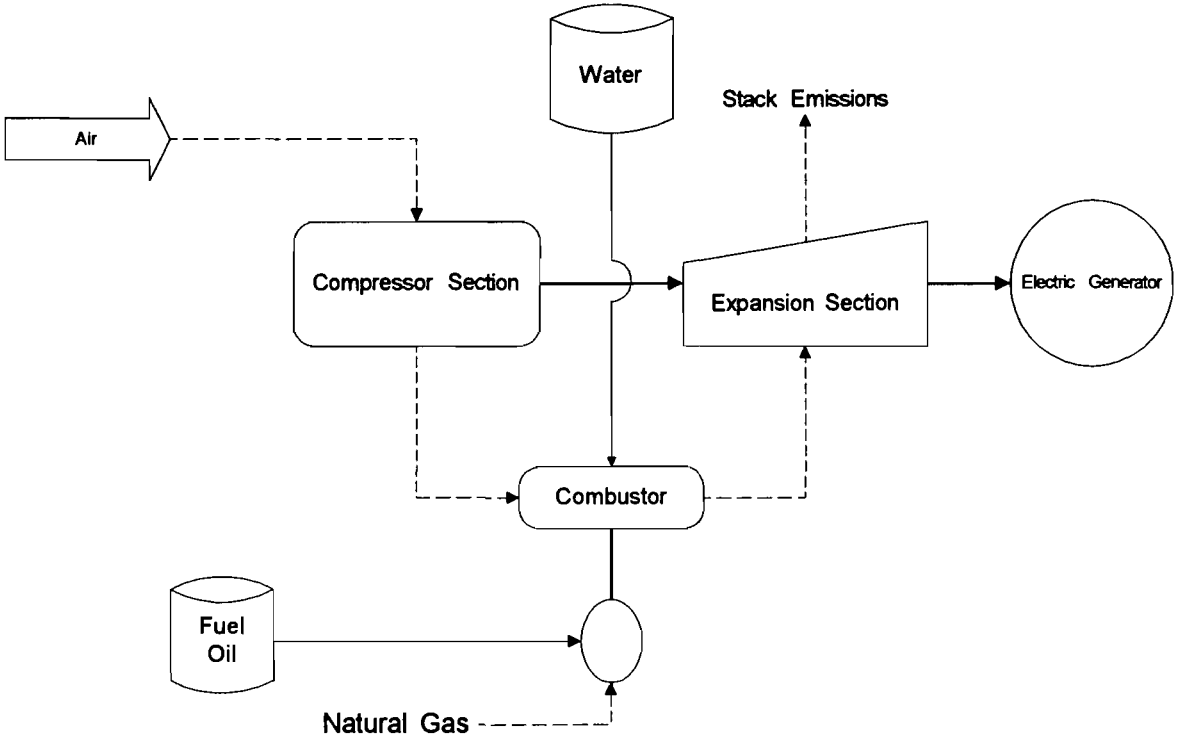
40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO2 Allowances-violation
40 CFR 72.9(c)(1)(iv)	- SO2 Allowances- other utility units
40 CFR 72.9(c)(4)	- SO2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)	- 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; Appendix 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 Procedures
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 IC-EU2-L1

PROCESS FLOW DIAGRAM



Florida Power Corporation		*Emission Unit:* Combustion Turbines No. 7, 8, 9, 10, 11	KBN Engineering and Applied Sciences, Inc.
Emission Units	Intercession City	*Process Area:* Overall Plant	
		Filename: FPCICB.VSD	
		Latest Revision Date: 6/8/96 03:15 PM	

ATTACHMENT IC-EU2-L2

FUEL ANALYSIS OR SPECIFICATION

Attachment IC-EU2-L2

Fuel Analysis

No. 2 Fuel Oil

Parameter	Typical Value	Max Value
API gravity @ 60 F	30[1]	-
Relative density	7.02 lb/gal [2]	
Heat content	18,400 Btu / lb (LHV)	
% sulfur	0.2 [2]	0.2 [3]
% nitrogen	0.025 - 0.03	
% ash	negligible	0.01 [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 IC-EU2-L2

FUEL ANALYSIS
NATURAL GAS ANALYSIS

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

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

[1] Data from laboratory analysis

ATTACHMENT IC-EU2-L3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

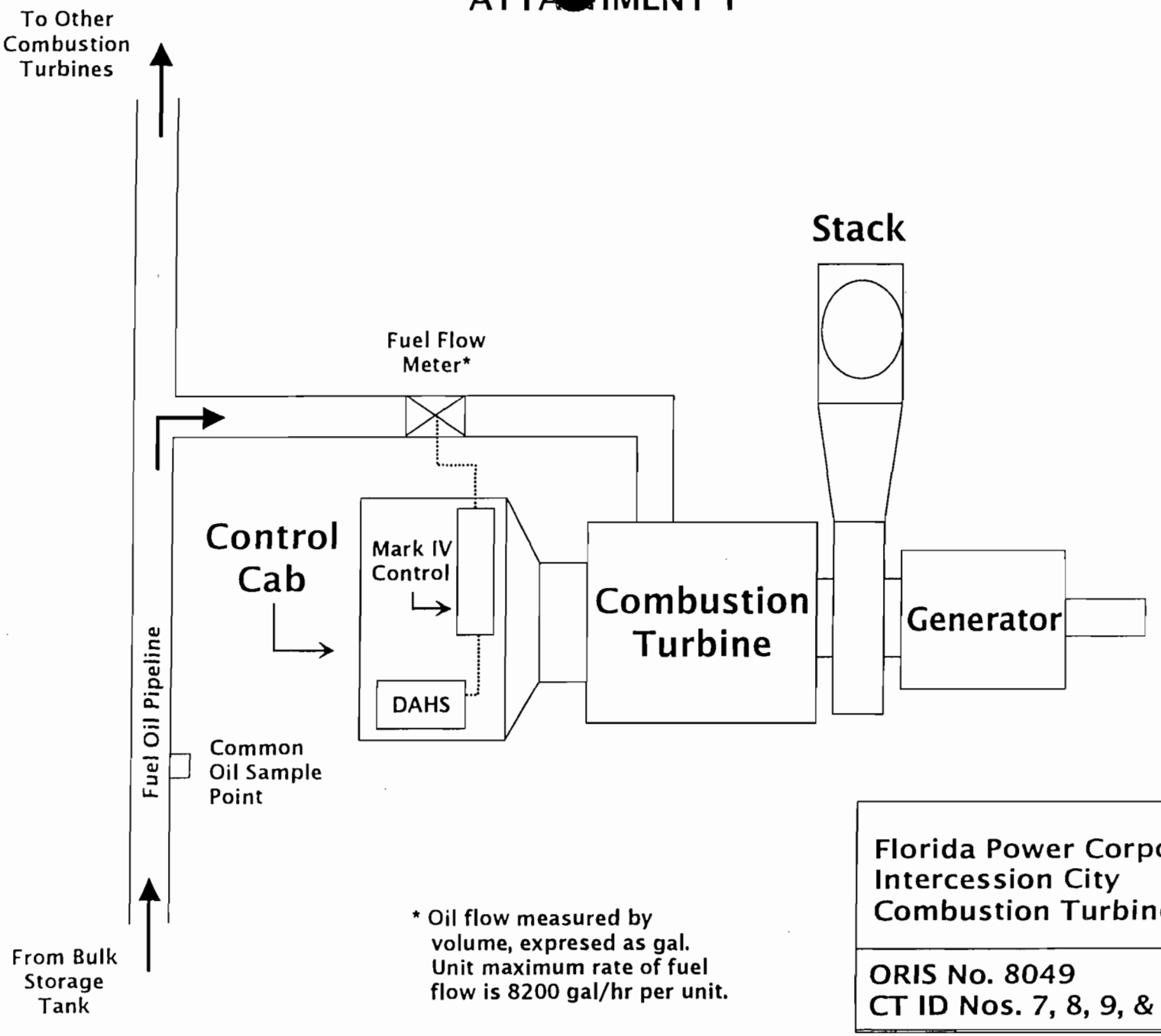
GE Mark IV Nox Control Algorithm Description

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 IC-EU2-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT 1



* Oil flow measured by volume, expresed as gal. Unit maximum rate of fuel flow is 8200 gal/hr per unit.

Florida Power Corpoation
Intercession City
Combustion Turbines

ORIS No. 8049
CT ID Nos. 7, 8, 9, & 10

ATTACHMENT IC-EU2-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT IC-EU2-L6
PROCEDURES FOR STARTUP/SHUTDOWN

Startup and shutdown for these units are fully automatic.

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

Corrective actions may include switching the unit from automatic (remote) to local control, or changing fuel. 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 IC-EU2-L10

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT IC-EU2-L10
Alternative Methods of Operation

The four combustion turbines making up Emission Unit 2 (P7, P8, P9, and P10) rated at 92.9 megawatts (MW) at 59 degrees Fahrenheit (°F) (GE PG7111EA) and one combustion turbine rated at 171 MW at 59°F (Siemens V84.3) were limited in the air construction permit to an average maximum capacity factor of 38.7 percent (3,390 hours per year operating time). The total hours of operation for the turbines were not to exceed 16,950 unit hours per year (5 units times 3,390 hours/yr/unit). In addition, the capacity factors for these turbines were limited to 33 percent based on a weighted 12 month rolling maximum sulfur content of 0.2 percent. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.2 percent, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	Percent Capacity Factor
0.2 - 0.195	33.0
0.19 - 0.185	34.4
0.18 - 0.175	35.8
0.17 - 0.165	37.2
0.16 - or less	38.7

The four combustion turbines (GE Frame 7EA) were limited in fuel oil consumption on a per unit basis, per aggregate units, or prorated consumption based on the table as described above. The maximum No. 2 fuel oil consumption shall not exceed 7,826 gal/hr/unit or 106,120,560 gal/yr based on 59°F or prorated consumption based on the table as described above.

The other combustion turbine (Siemens V84.3) was limited in fuel oil consumption on a per unit basis, per aggregate units, or prorated consumption based on the table as described above. The maximum No. 2 fuel oil consumption shall not exceed 13,171 gal/hr/unit or 44,649,000 gal/yr based on 59°F or prorated consumption based on the table as described above.

Therefore, any combination of the five 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 IC-EU2-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

ATTACHMENT IC-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 (AC49-203114; PSD-FL-180; 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 limits (i.e., gal/hr/CT and gal/yr) are redundant to the heat input limits based on ambient temperature and the tons/year limits for the CTs. The duel limits causes confusion in terms of compliance and are therefore, outdated. The reference to fuel use limits 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).

Final Determination

Florida Power Corporation
Intercession City
AC 49-203114
PSD-FL-180A

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

August 10, 1995

Final Determination
Florida Power Corporation
Intercession City Facility
PSD-FL-180A
AC49-203114

The Permit Amendment for the Florida Power Corporation (FPC) Intercession City facility was distributed on July 17, 1995. The amendment will allow the use of natural gas as a supplemental fuel for electrical peaking units P7 through P11. When using natural gas, actual and allowable emissions will be lower than when burning fuel oil. This permit amendment does not change the intent of the previously issued PSD permit nor does it result in an emissions increase.

The Notice of Intent to Issue was published in the Orlando Sentinel on July 21, 1995. Copies of the permit amendment evaluation were available for inspection at the Department of Environmental Protection's offices in Orlando and Tallahassee.

No comments were submitted during the public notice period.

The final action of the Department is to issue the permit amendment as noted during the public notice period.

Final Determination

Florida Power Corporation
Intercession City Facility
Intercession City, Osceola County, Florida

Six Simple Cycle Combustion Turbines
(Four 92.9 MW & Two 185.5 MW)

Permit Number: AC 49-203114
PSD-FL-180

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

August 17, 1992

FINAL DETERMINATION

The Technical Evaluation and Preliminary Determination for the permit to construct six simple cycle combustion peaking units at Florida Power Corporation's (FPC) Intercession City Electric Generating Station in Intercession City, Osceola County, Florida, was distributed on May 22, 1992. The Notice of Intent to Issue was published in the Orlando Sentinel on June 17, 1992. Copies of the evaluation were available for public inspection at the Department's offices in Orlando and Tallahassee.

FPC's applications for permits to construct six simple cycle combustion peaking units (with a combined capacity of 371 MW) at their Intercession City Electric Generating Station have been reviewed by the Bureau of Air Regulation in Tallahassee.

No adverse comments were submitted by the U.S. Environmental Protection Agency (EPA) in their letter dated June 16, 1992.

Comments were received from Mr. Scott H. Osbourn , Senior Environmental Engineer for FPC, and Mr. John R. Eadie, Acting Regional Director of the U. S. Fish and Wildlife Service.

The Bureau has considered Mr. Osbourn's and Mr. Eadie's comments and has addressed them as follows:

Florida Power Corporation 's letter dated July 16, 1992.

COMMENT:

Mr. Osbourn's concerns are regarding the economics (cost differentials per gallon for various grades) of using No. 2 fuel oil with a maximum of 0.2% sulfur by weight vs No. 2 fuel oil with a 0.3% sulfur average and a maximum of 0.5% sulfur on an annual basis. Initially, Mr. Osbourn requested that Specific Condition No.5 be deleted, the expiration date of the permit changed, and Specific Condition No. 16 be modified. However, on July 24, 1992, Mr. Osbourn withdrew his requests for changes to Specific Conditions Nos. 5 and 16, via a telephone conversation with Mr. Preston Lewis, Permitting Supervisor.

RESPONSE:

The Department has evaluated Mr. Osbourn's comments and concluded that the BACT determination for this project is justifiable and should not be changed. The limitations for sulfur content and SO_2 emissions will remain as specified in the permit: Distillate fuel oil with a maximum of 0.2% sulfur by weight and 2459 TPY SO_2. However, as requested, the economics (cost differentials per gallon for various grades) of this project will be revisited before startup, and if warranted, the BACT determination and permit conditions will be revised.

As requested, the expiration date of this permit will be changed to December 31, 1994.

U.S. Fish and Wildlife Service's letter dated July 16, 1992.

COMMENTS:

Mr. Eadie's comments are regarding the sulfur content in the oil and the air quality analyses. He recommended to lower the sulfur content of the No. 2 fuel oil to 0.05% S (by weight) maximum.

RESPONSE:

Mr. Eadie's concerns regarding the sulfur content in the oil are valid. We also believe that new sources should minimize SO2 emissions when feasible. It is true that recent permit applications (Kissimmee Utilities Authority, Auburndale Power Partners, and Central Florida Power) have proposed to fire oil with a maximum sulfur content of 0.05%, but it should be pointed out that they are using fuel oil as a supplementary fuel. However, in this case, it is not economically feasible to require fuel oil with a 0.05 % maximum sulfur content since fuel oil is the primary and only fuel at the site. Section 211(i)(1) of the Clean Air Act, Sulfur Content Requirements For Diesel Fuel, states: "Effective October 1, 1993, no person shall manufacture, sell, supply, offer for sale or supply, dispense, transport, or introduce into commerce motor vehicle diesel fuel which contains a concentration of sulfur in excess of 0.05% (by weight) or which fails to meet a cetane index minimum of 40..". Although this regulation is not applicable to stationary sources, and we will continue evaluating sources in a BACT case-by-case basis, it will have an impact on the availability and economics of requiring fuel oil with a lower sulfur content for future projects.

COMMENT:

Mr. Eadie's comments on the potential impacts to the Chassahowitxka Wilderness Area.

RESPONSE:

When the Department released its Intent to Issue this permit, we believed the applicant had sufficiently addressed all of the potential impacts to the air quality related values (AQRVs) (such as vegetation, soils, terrestrial wildlife and visibility) in the Chassahowitzka Wilderness Area. The Fish and Wildlife Service (FWS) identified potential effects on fresh water creeks and

related wildlife in the wilderness area as an AQVR after the Intent wsa released. However, the Department agrees with the FWS that, based on modeling results, we do not anticipate that these resources will be adversely affected by emissions from the proposed project. In addition, the Department will require future applicants to address impacts to these aquatic resources.

The final action of the Department will be to issue construction permit, No. AC 49-203114 (PSD-FL-180), as proposed in the Technical Evaluation and Preliminary Determination, with the above changes incorporated.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

Mr. R. W. Neiser
Florida Power Corporation
3201-34th Street North
St. Petersburg, FL 33733

DER File No. AC 49-203114
PSD-FL-181
Osceola County

180

/

Enclosed is Permit Number AC 49-203114 to construct six simple cycle combustion turbines at Florida Power Corporation's Intercession City Electric Generating Station in Osceola County, Florida. This permit is 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 August 17, 1992 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.

Charlotte J. Hayes (Clerk) 8/17/92 (Date)

Copies furnished to:

Kennard Kosky, P.E.
Charles Collins, Central District
Jewell Harper, EPA
Chris Shaver, NPS

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
Intercession City Facility
3201 34th Street South
St. Petersburg, Florida 33733

Permit Number: AC 49-203114
PSD-FL-180
Expiration Date: Dec. 31, 1994
County: Osceola
Latitude/Longitude: 28°15'37"N
81°32'47.6"W
Project: Four 92.9 MW and Two 185.5 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 four 92.9 MW and two 185.5 MW simple cycle combustion turbines (CTs) with maximum heat input of 1,029 MMBtu/hr/unit and 1,886.3 MMBtu/hr/unit, respectively, at 59°F (oil) to be located at the Intercession facility in Intercession City, Florida. The turbines are to be GE PG7111FA and GE PG7111EA equipped with wet injection. The UTM coordinates are Zone 17, 446.3 km East and 3126 km North.

The sources 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 Corporation (FPC) application received October 3, 1992.
2. Department's letter dated October 31, 1991.
3. FPC's letter received December 16, 1991.
4. FPC's letter received January 23, 1992.
5. FPC's letter received February 10, 1992.
6. Department's letter dated February 21, 1992.
7. FPC's letter dated March 5, 1992.
8. Department's letter dated March 9, 1992.
9. FPC's letter dated March 25, 1992.

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.

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.

GENERAL CONDITIONS:

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.

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.

GENERAL CONDITIONS:

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.

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;

GENERAL CONDITIONS:

- 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 (92.9 MW combustion turbines) and Table 2 (185.5 MW combustion turbines).

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 0.2% sulfur content maximum, by weight.

4. The permitted materials and utilization rates for the simple cycle gas turbines shall not exceed:

(A) The average maximum capacity factor shall be limited to 38.7% (3,390 hours per year operating time).

(B) Total hours of operation for the six turbines shall not exceed 20,340 unit hours per year. Unit hour per year shall be determined by adding the hrs/yr operation of each of the six units.

(C) GE FRAME 7FA
a) The maximum heat input of 2,032 MMBtu/hr/unit at 20°F (peak load).

SPECIFIC CONDITIONS:

b) The maximum heat input of 1,886 MMBtu/hr/unit at 59°F (peak load).
c) The maximum heat input of 1,708 MMBtu/hr/unit at 90°F (peak load).
d) Maximum No. 2 fuel oil consumption shall not exceed 14,342 gal/hr/unit (at 59°F) or 97,238,760 gal/yr based on 59°F or the prorated consumption based on the tables in the application to construct these units.

(D) GE FRAME 7EA
a) The maximum heat input of 1,144 MMBtu/hr/unit at 20°F (peak load).
b) The maximum heat input of 1,029 MMBtu/hr/unit at 59°F (peak load).
c) The maximum heat input of 932 MMBtu/hr/unit at 90°F (peak load).
d) Maximum No. 2 fuel oil consumption shall not exceed 7,826 gal/hr/unit or 106,120,560 gal/yr based on 59°F or the prorated consumption based on the tables in the application to construct these units.

7569.5
7.1%
1950144

5. The capacity factor for these turbines shall be limited to 33% based on a weighted 12 month rolling maximum sulfur content of 0.2%. However, if the weighted rolling average sulfur content of the fuel oil is less than 0.2%, the capacity factor may be adjusted using the following table:

Percent Average Sulfur Content	% Capacity Factor
0.2 - 0.195	33.0
0.19 - 0.185	34.4
0.18 - 0.175	35.8
0.17 - 0.165	37.2
0.16 - 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 may be included in the operating permit.

SPECIFIC CONDITIONS:

Compliance Determination

8. Compliance with the NO_x, SO_2, CO, PM, PM_{10}, and VOC standards shall be determined (on each unit while operating within 10% of the permitted 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, 1991 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 Stationary Sources
- Method 8. Determination of the Sulfuric Acid of the Emissions from Stationary Sources
- 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 (each type) to determine the initial compliance status of the 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.

SPECIFIC CONDITIONS:

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 30 days in writing in advance of the compliance test(s) pursuant to 40 CFR 60.8. 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 pursuant to F.A.C. Rule 17-2.700(8).

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 operation permit and shall be continuously monitored. The system shall meet the requirements of 40 CFR Part 60, Subpart GG.

SPECIFIC CONDITIONS:

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. For sulfur dioxide, periods of excess emissions shall be reported if the fuel being fired in the gas turbine exceeds 0.2 percent.

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.

21. If construction does not commence within 18 months of issuance of this 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, 1991 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.

SPECIFIC CONDITIONS:

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 and 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).

Issued this 17th day
of August, 1992

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Carol M. Browner
Secretary

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **PERMIT AMENDMENT** and all copies were mailed by certified mail before the close of business on 8-11-95 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.

Kuri Jober 8-11-95
Clerk Date

Copies to be furnished to:

cc: Charles Collins, CD
Mike Kennedy, FPC

TABLE 1
ALLOWABLE EMISSION LIMITS
92.9 MW Simple Cycle GE Frame EA Combustion Turbine

Pollutant	Standard Oil Firing	Each Unit lb/hr[a]	Total 4 Units T/yr	Basis
NO_x	42 ppmv at 15% oxygen-dry basis	182	1232[a]	BACT
SO_2	No. 2 fuel oil with 0.2% max. sulfur	222	1283[c]	BACT
PM/PM_{10}	0.01 lb/MMBtu	15	102[b]	BACT
VOC	-	5	34[b]	BACT
CO	25 ppm	54	366[b]	BACT
Sulfuric Acid Mist	No. 2 fuel oil with 0.2% max. sulfur	18	106[c]	BACT
Fluorines (FR)	-	3.34×10^{-2}	0.23[b]	Application
Mercury (Hg)	3.0×10^{-6} lbs/MMBtu	3.09×10^{-3}	0.02[b]	Application
Lead (Pb)	8.9×10^{-6} lbs/MMBtu	9.16×10^{-3}	0.06[b]	Application
Inorganic Arsenic	4.2×10^{-6} lbs/MMBtu	4.32×10^{-3}	0.03[b]	BACT
Beryllium (Be)	2.5×10^{-6} lbs/MMBtu	2.57×10^{-3}	0.02[b]	BACT

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

(b) Equivalent to 3,390 hours per year at peak load (38.7% capacity factor) and 59°F.

(c) Total TPY for SO_2 assumes 33% capacity factor and fuel with a maximum sulfur content of 0.2%. Refer to Specific Condition No. 5 for listed capacity factors vs. sulfur content in oil.

TABLE 2
ALLOWABLE EMISSION LIMITS
185.5 MW Simple Cycle GE Frame FA Combustion Turbine

Pollutant	Standard Oil Firing	Each Unit lb/hr[a]	Total 2 Units T/yr	Basis
NO_x	42 ppmv at 15% oxygen-dry basis	334	1132[a]	BACT
SO_2	No. 2 fuel oil with 0.2% max. sulfur	407	1176[c]	BACT
PM/PM_{10}	0.01 lb/MMBtu	17	58[b]	BACT
VOC	-	9	31[b]	BACT
CO	25 ppm	79	268[b]	BACT
Sulfuric Acid Mist	No. 2 fuel oil with 0.2% max. sulfur	28	81[c]	BACT
Fluorines (FR)	-	6.13×10^{-2}	0.20[b]	Application
Mercury (Hg)	3.0×10^{-6} lbs/MMBtu	5.66×10^{-3}	0.02[b]	Application
Lead (Pb)	8.9×10^{-6} lbs/MMBtu	1.68×10^{-2}	0.06[b]	Application
Inorganic Arsenic	4.20×10^{-6} lbs/MMBtu	7.9×10^{-3}	0.02[b]	BACT
Beryllium (Be)	2.5×10^{-6} lbs/MMBtu	4.72×10^{-3}	0.02[b]	BACT

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

(b) Equivalent to 3,390 hours per year at peak load (38.7% capacity factor) and 59°F.

(c) Total TPY for SO_2 assumes 33% capacity factor and fuel with a maximum sulfur content of 0.2%. Refer to Specific Condition No. 5 for listed capacity factors vs. sulfur content in oil.

Best Available Control Technology (BACT) Determination
Florida Power Corporation
Intercession City Facility
Osceola County

The applicant proposes to operate six No. 2 fuel oil fired simple cycle combustion turbines with an output power of 92.9 MW (4 turbines) and 185.5 MW (2 turbines) to be used for peaking power at their facility in Osceola County, Florida.

The applicant states that the maximum heat input will be 1,029 MMBtu/hr and 1,886 MMBtu/hr for each turbine type (Frame EA and Frame FA, respectively). The applicant has indicated the maximum annual tonnage of regulated pollutants based on sea level conditions at 59°F and 38.7% capacity (3,390 hours/year) to be as follows:

Pollutant	Potential Emissions (tons/yr)	PSD Significant Emission Rate (tons/yr)
NO_x	2369	40
SO_2	4326	40
H_2SO_4 Mist	626	7
PM	159	25
PM_{10}	159	15
CO	633	100
VOC	65	40
Be	0.034	0.0004
Hg	0.04	0.1
Pb	0.12	0.6
As	0.054	0

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

October 3, 1991

BACT Determination Requested by the Applicant

Pollutant	Determination
NO_x	42 ppmvd @ 15% O_2
SO_2 and H_2SO_4	Max 0.5% Sulfur No. 2 fuel oil
PM/PM_{10}	Combustion Controls
CO	Combustion Controls
VOC	Combustion Controls
As, Be	Fuel Quality

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.

BACT Pollutants Analysis

Nitrogen Oxides (NO_X)

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

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NO_X 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 NO_X emissions. The SCR process combines vaporized ammonia with NO_X 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 NO_X with a new catalyst. As the catalyst ages, the maximum NO_X reduction will decrease to approximately 86 percent.

The effect of exhaust gas temperature on NO_X reduction depends on the specific catalyst formulation and reactor design. Generally, SCR units can be designed to achieve effective NO_X control over a 100-300°F operating window within the bounds of 450-800°F, although recently developed zeolite-based catalysts are claimed to be capable of operating at temperatures as high as 950°.

Most commercial SCR systems operate over a temperature range of about 600-750°F. At levels above and below this window, the specific catalyst formulation will not be effective and NO_X reduction will decrease. Operating at high temperatures can permanently damage the catalyst through sintering of surfaces.

Increased water vapor content in the exhaust gas (as would result from water or steam injection in the gas turbine combustor) can shift the operating temperature window of the SCR reactor to slightly higher levels.

The exhaust temperatures of the proposed CTs for the Intercession City site are expected to be in excess of 1,000°F. At temperatures of 1,000°F and above, the zeolite catalyst (reported to operate within ~~600~~°F to 950°F) will be irreparably damaged. Therefore, application of an SCR system using a zeolite catalyst on a simple-cycle operation is technically infeasible without exhaust gas cooling. Attemperation systems are neither commercially available nor have they been applied, even at a pilot stage, to SCR systems associated with simple-cycle CTs.

Consequently, the applicant has rejected using SCR because of technical infeasibility, economic and environmental impact. In addition, controlling NO_X emissions with SCR, the applicant has identified the following limitations: (a) reduced power output, (b) ammonia slip, and (c) disposal of hazardous waste generated (spent catalyst). The applicant was unable to find similar combustion turbines firing fuel oil and equipped with SCR, and states several supporting reasons for their decision in Table 4-3 of the application.

Economic analysis review of an application for a similar combustion turbine, included levelized cost for SCR of $2,190,000. Assuming that the lowered ammonia injection ratio strategy was used to control NO_X emissions by 65%, the SCR would control 201 tons (.65 x 308 tons/year) for the 92.9 MW turbine and 367 tons (.65 x 566 tons/year). This reduction (201 and 367 tons/year) assumes an operating rate of 3,390 hours/year/unit. When this

reduction of NO_x is taken into consideration with the total annual cost of $2,190,000, the cost per ton of controlling NO_x is $10,890 and $5,967 for the 92.9 MW and 185.5 MW units, respectively.

Several BACT determinations have established a 25% capacity factor as an operating limit due to the increase in nitrogen oxides emissions that results from the burning of oil as compared to natural gas. In some cases, turbines (using natural gas as a primary fuel) have been allowed to operate above the 25% capacity factor limitation on oil (generally 33%) provided that they use low NO_x combustors (42 ppmv on oil firing). Since the Intercession City facility is capable of limiting NO_x emissions to 42ppmv using wet injection and can only use oil, it is reasonable to allow the capacity factor to range from 33 to 38.7%. Hence, the technology proposed, wet injection, with a maximum capacity factor of 38.7% is accepted by the Department as BACT for NO_x.

Sulfur Dioxide(SO_2) and Sulfuric Acid Mist (H_2SO_4)

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 time to 3390 hour/year per unit and the fuel oil sulfur content to a maximum of 0.5 % by weight, and an average of 0.3%. This will result in an annual emission rate of 4,326 tons SO_2/year and 626 tons H_2SO_4 mist per year.

In accordance with the "top down" BACT review approach, only two alternatives exist that would result in more stringent SO_2 emissions. These include the use of a lower sulfur content fuel oil or the use of wet lime or limestone-based scrubbers, otherwise known as flue gas desulfurization (FGD).

In developing the NSPS for stationary gas turbines, EPA recognized that FGD technology was inappropriate to apply to these combustion units. EPA acknowledged in the preamble of the proposed NSPS that "Due to the high volumes of exhaust gases, the cost of flue gas desulfurization (FGD) to control SO_2 emissions from stationary gas turbines is considered unreasonable."(23). EPA reinforced this point when, later on in the preamble, they stated that "FGD... would cost about two to three times as much as the gas turbine."(23). The economic impact of applying FGD today would be no different.

Furthermore, the application of FGD would have negative environmental and energy impacts. Sludge would be generated that would have to be disposed of properly, and there would be increased utility (electricity and water) costs associated with the operation of a FGD system. The capital cost alone of a system designed for 90% removal would require debt services cost of $30,000+/tons SO_2 removed. Finally, there is no information in the open literature to indicate that FGD has ever been applied to stationary gas turbines burning distillate oil.

The elimination of flue gas controls as a BACT option then leaves the use of low sulfur fuel oils as the next option to be investigated. Area available distillate fuel oil has a sulfur content in the range of 0.1% - 0.5% by weight. As already mentioned, several BACT determinations nationwide have established a 25% capacity factor as an operating time limit for turbines using gas as a primary fuel and oil as a supplemental fuel. 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.

The Intercession City facility's proposed simple cycle turbines will be allowed to operate from 33 to 37.8% capacity factor provided that the maximum sulfur content will not exceed 0.2%. This would result in a SO_2 and H_2SO_4 mist reduction of 1867 tons/year [4326 (proposed) - 2459 (allowable)] and 439 tons/yr [626 (proposed) - 187 (allowable)] while operating at a 33% capacity factor.

The applicant's cost analysis presented showed that the cost effectiveness of using 0.2% sulfur maximum in the oil instead of 0.5% sulfur maximum is $1,995/ton SO_2 removed. The Department believes that this cost of $1,995/ton removed is reasonable as BACT for this proposed project.

Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

Combustion design is proposed as BACT as a result of the technical infeasibility and economic impact of using catalytic oxidation on fuel-oil-fired CTs. Catalytic oxidation has not been demonstrated on a continuous basis when using fuel oil and a cost effectiveness of $7,099/ton removed will have an economic impact on this facility. The Department is in agreement with the applicant's proposal, therefore, BACT for this facility's gas turbines is combustion design as proposed.

Particulate Matter (PM/PM_{10})

The design of the CTs ensures that particulate emissions will be minimized by combustion control and the use of clean fuels. The maximum particulate emissions from the CTs when burning fuel oil will be lower concentration than that normally specified for fabric filter designs (0.01 grains/scf). The Department accepts the applicant's proposed control for particulate matter.

Toxic Pollutants (As, Be)

The Department agrees with the applicant's rationale that there are no feasible methods to control beryllium and arsenic 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.

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 NO_x 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 NO_x emission control is justifiable as BACT for this facility. BACT for SO_2 and sulfuric acid mist is the burning of fuel oil with a maximum sulfur content of 0.2%. The economics of the 0.2% maximum sulfur limit will be revised at the time of startup (or actual fuel oil contract negotiation) and if warranted, a BACT determination revision.

As this is the case, the BACT emission limitations are established as follows for the **92.9 MW combustion turbines.**

Pollutant	Emission Limit	Method of Control
NO_x	42 ppmvd @ 15% O_2	Wet Injection
SO_2	222 lbs/hr/unit	Max. 0.2% 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	4.32×10^{-3} lbs/hr/unit	Fuel Quality
Beryllium	2.57×10^{-3} lbs/hr/unit	Fuel Quality
H_2SO_4	18 lbs/hr/unit	Max. 0.2% sulfur content, by weight, No. 2 fuel oil

and as follows for the **185.5 MW combustion turbines:**

Pollutant	Emission Limit	Method of Control
NO_x	42 ppmvd @ 15% O_2	Wet Injection
SO_2	407 lbs/hr/unit	Max. 0.2% sulfur content, by weight, No. 2 fuel oil

PM and PM_{10}	17 lbs/hr/unit	Combustion
CO	79 lbs/hr/unit	Combustion
VOC	9 lbs/hr/unit	Combustion
Arsenic	7.9×10^{-3} lbs/hr/unit	Fuel Quality
Beryllium	4.7×10^{-3} lbs/hr/unit	Fuel Quality
H_2SO_4	28 lbs/hr/unit	Max 0.2% sulfur content, by weight, No. 2 fuel oil

Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E., Permit Supervisor
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

August 17 1992
Date

Approved by:

Carol M. Browner, Secretary
Dept. of Environmental Regulation

August 17 1992
Date

Florida Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 15, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey Pardue
C.E.P., Manager
Florida Power Corporation
Post Office Box 14042
St. Petersburg, FL 33733

Dear Mr. Pardue:

RE: Florida Power Corporation
Amendment to Construction Permit
AC 49-203114 (PSD-FL-180)
Intercession 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 control strategy for Fluorides, Mercury, Lead, Inorganic Arsenic and Beryllium. Because of the inherent nature of the combustion process, these constituents in the fuel oil will be emitted after firing. Consequently, specifying the type of fuel oil (i.e., No. 2 fuel oil) 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
92.9 MW Simply Cycle Combustion Turbines

Pollutant	Standard Oil Firing	Each Unit lb/hr	Total T/yr	Bases
Fluorides	-	3.34×10^{-2}	0.23(b)	Application
Mercury (Hg)	3.0×10^{-6} lbs/MMBtu	3.09×10^{-3}	0.02(b)	Application
Lead (Pb)	8.9×10^{-6} lbs/MMBtu	9.16×10^{-3}	0.06(b)	Application
Inorganic Arsenic	4.2×10^{-6} lbs/MMBtu	4.32×10^{-3}	0.03(b)	BACT
Beryllium (Be)	2.5×10^{-6} lbs/MMBtu	2.57×10^{-3}	0.02(b)	BACT

TO:

Table 1-A
Emission Control
92.9 MW Simply Cycle Combustion Turbines

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 a maximum sulfur content of 0.2%.

(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.

and

FROM:

Table 2
Allowable Emission Limits
185.5 MW Simply Cycle Combustion Turbines

Pollutant	Standard Oil Firing	Each Unit lb/hr	Total 2 Units T/yr	Bases
Fluorides	-	6.13	0.20(b)	Application
Mercury (Hg)	3.0×10^{-6} lbs/MMBtu	5.66×10^{-3}	0.02(b)	Application
Lead (Pb)	8.9×10^{-6} lbs/MMBtu	1.68×10^{-3}	0.06(b)	Application
Inorganic Arsenic	4.2×10^{-6} lbs/MMBtu	7.9×10^{-3}	0.02(b)	BACT
Beryllium (Be)	2.5×10^{-6} lbs/MMBtu	4.72×10^{-3}	0.02(b)	BACT

TO:

Table 2-A
Emission Control
185.5 MW Simply Cycle Combustion Turbines

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 a maximum sulfur content of 0.2%.

(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:

° Mr. Jeffrey Pardue's letter dated October 7, 1993.

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 49-203114 (PSD-FL-180), and shall become part of the permit.

Sincerely,

Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/TH/bjb

Attachment

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

Florida Power
CORPORATION

April 8, 1994

Mr. John Brown, P.E.
Administrator, Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Brown:

Re: Request for Construction Permit Amendment
DEP Permit Number AC49-203114 ; PSD-FL-180

As provided by the construction permit referenced above, Florida Power Corporation (FPC) is permitted to construct four GE Frame 7EA and two GE Frame 7FA combustion turbines at its Intercession City electric generating station. Initial compliance testing was recently completed on the Frame 7EA units. Construction of the two Frame 7FA combustion turbines has not yet commenced.

FPC requests an amendment to the Intercession City construction permit. FPC has negotiated with a different manufacturer to provide the additional capacity needed at the Intercession City site. FPC proposes to remove the two GE Frame 7FA units (rated at 185.5 MW each at 59°F) from the construction permit and replace them with a single Siemens V84.3 combustion turbine (rated at 171 MW at 59°F). The Siemens unit is quite similar to the GE units in that it is a simple-cycle combustion turbine which uses water injection to control NOx emissions. Based on load rating, it is slightly smaller than each of the GE units, however, and emits lesser amounts of air pollutants.

Attachment 1 contains air pollutant emissions and related data which were provided by the manufacturer for the proposed Siemens unit. Emissions data are given for 25%, 50%, 75%, and 100% of full load at 20, 59, and 90 degrees F. SO_2 emissions are based on the current permitted fuel sulfur limit of 0.2%. Attachments 2 and 3 contain the discussion and results of an air quality modeling analysis which was performed to demonstrate that a substantial net air quality benefit will result from the change from two GE Frame 7FA units to the Siemens combustion turbine.

FPC also requests a twelve month extension to the permit expiration date of December 31, 1994. Construction of the Siemens unit is proposed to commence on August 15, 1994. A twelve month extension will allow sufficient time to complete construction and initial compliance testing prior to the expiration date. It is FPC's position that the BACT determination will be valid for an additional twelve months for this combustion turbine technology.

Since the amendment will result in the permitting and construction of five combustion turbines instead of six, FPC requests a change in the allowed average annual hours of operation per unit contained in Specific Condition 4(A). The total of 20,340 hours of operation results in a new average of 4,068 hours per unit per year for five units. The Siemens unit will comply with all other provisions of the construction permit and its amendments, such as the NOx limit of 42 ppm corrected to 15% O_2 and submittal of heat input vs. ambient temperature and water vs. fuel curves.

Thank you for your consideration of this request. Please contact Mr. Mike Kennedy at (813) 866-4344 if you have any questions or if you need additional information.

Sincerely,

W. Jeffrey Pardue, C.E.P., Manager
Environmental Programs

Attachments

cc: Mr. Alexander Alexander, DEP Central District

Attachment 1

Air Pollutant Emissions

Siemens Model V84.3 Combustion Turbine

Maximum Air Pollutant Emissions (Lbs./Hour)

100% Load, 20 Degrees F, 0.2% S No. 2 Fuel Oil

Pollutant	Emission Rate
Nitrogen Oxides	305.0
Sulfur Dioxide	382.8
Particulate Matter	17.0
VOC	7.6
Carbon Monoxide	22.1

Additional Data Contained on Following Pages

Manufacturer: Siemens

Model No./Combustor: V84.3

Combustion system type: Dual Fuel Low NOx

TABLE: B.2- 6

AMBIENT TEMPERATURE/
RELATIVE HUMIDITY: 20 F/ 60%

BAROMETRIC PRESSURE: ~~14.61 psia~~

FUEL: Natural Gas LHV = ~~20,700 Btu/lb~~, Temperature = 60 F
No. 2 Fuel Oil LHV = ~~19,550 Btu/lb~~, Temperature = 60 F

NO_x CONTROL LEVEL: 42ppm

POWER FACTOR: 0.85 pf

	Full Speed No Load	Minimum Load	25% of Base Load	50% of Base Load	75% of Base Load	Base Load Rating	Peak Load Rating
Gross output, kW			43,996	87,998	132,003	176,001	
Auxiliary power, kW			2,495	2,495	2,495	2,495	
Gross heat rate, Btu/kWh (LHV)			14,196	11,147	10,509	9,976	
Exhaust flow, lb/h			2,781,648	2,830,356	2,906,496	3,562,560	
Exhaust temp, F			623	835	1,038	1,022	
Inlet guide vane position, ~~degrees~~			75%	75%	75%	92.1%	
Fuel flow, lb/h			33,998	53,399	75,510	95,583	
Nitrogen oxides, ppmdv @ 15% O_2			42	42	42	42	
Nitrogen oxides, lb/h as NO_2			110	171	241	305	
Carbon monoxide, ppmdv			254	5.0	5.0	5.0	
Carbon monoxide, lb/h			403.6	12.4	17.5	22.1	
Sulfur dioxide, ppmv			21.9	22.0	22.1	22.1	

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FOR INFORMATION ONLY

Manufacturer: Siemens

Model No./Combustor: V84.3

TABLE: B.2- 6

Combustion system type: ~~Dry NO$_x$~~ Dual Fuel Low NOx

AMBIENT TEMPERATURE/
RELATIVE HUMIDITY: 20 F/60 %

BAROMETRIC PRESSURE: ~~14.61 psia~~

FUEL: Natural Gas LHV = ~~21,740 Btu/lb~~, Temperature = 60 F
No. 2 Fuel Oil LHV = ~~18,550 Btu/lb~~, Temperature = 60 F

NO$_x$ CONTROL LEVEL: 42ppm

POWER FACTOR: 0.85 pf

	Full Speed No Load	Minimum Load	25% of Base Load	50% of Base Load	75% of Base Load	Base Load Rating	Peak Load Rating
Sulfur dioxide, lb/h			136.1	213.8	302.3	382.8	
TSP, lb/h + PM10, lb/h			17.0	17.0	17.0	17.0	
~~PM10, lb/h~~							
Unburned hydrocarbon, ppmv			6.0	5.0	5.0	5.0	
Unburned hydrocarbon, lb/h			5.5	7.1	10.0	12.7	
Volatile organic compounds, ppmv			3.2	3.0	3.0	3.0	
Volatile organic compounds, lb/h			2.9	4.3	6.0	7.6	
Oxygen, ~~lb/h~~			18.5	15.8	12.8	12.3	
Nitrogen, ~~lb/h~~ %Wt.			73.7	72.4	70.5	70.2	
Carbon dioxide, ~~lb/h~~			3.9	6.0	8.2	8.5	
Argon, ~~lb/h~~			1.2	1.2	1.1	1.1	
Water, ~~lb/h~~			2.6	4.4	7.1	7.6	
Opacity, %			2.0	0.6	0	0	

FOR INFORMATION ONLY

Manufacturer: Siemens

Model No./Combustor: V84.3

Combustion system type: Dual Fuel Low NOx

TABLE: B.2-8

AMBIENT TEMPERATURE/
RELATIVE HUMIDITY: 59 F/ 60%

~~BAROMETRIC PRESSURE: 14.61 psia~~

FUEL: Natural Gas LHV = ~~20,700 Btu/lb~~, Temperature = 60 F
No. 2 Fuel Oil LHV = ~~18,650 Btu/lb~~, Temperature = 60 F

NO_x CONTROL LEVEL: 42ppm

POWER FACTOR: 0.85 pf

	Full Speed No Load	Minimum Load	25% of Base Load	50% of Base Load	75% of Base Load	Base Load Rating	Peak Load Rating
Gross output, kW			42,760	85,522	128,287	171,049	
Auxiliary power, kW			2,495	2,495	2,495	2,495	
Gross heat rate, Btu/kWh (LHV)			14,579	11,514	10,606	10,127	
Exhaust flow, lb/h			2,578,716	2,627,892	2,945,736	3,583,224	
Exhaust temp, F			702	934	1,034	1,034	
Inlet guide vane position, ~~degrees~~			75%	75%	82.4%	100%	
Fuel flow, lb/h			33,934	53,604	74,063	94,298	
Nitrogen oxides, ppmdv @ 15% O_2			42	42	42	42	
Nitrogen oxides, lb/h as NO_2			109.2	171.5	236.5	301	
Carbon monoxide, ppmdv			254	5.0	5.0	5.0	
Carbon monoxide, lb/h			402	12.4	17.1	21.8	
Sulfur dioxide, ppmwv			21.9	22.1	22.1	22.1	

FPC 17506 COMB TURB GEN 62.1003
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FOR INFORMATION ONLY

Manufacturer: Siemens

Model No./Combustor: V84.3

Combustion system type: ~~Dry NO$_x$~~ Dual Fuel Low NOx

TABLE: 8.2-8

AMBIENT TEMPERATURE/
RELATIVE HUMIDITY: 59F/60%

BAROMETRIC PRESSURE: ~~14.81 psia~~

FUEL: Natural Gas LHV = ~~22,340 Btu/lb~~, Temperature = 60 F
No. 2 Fuel Oil LHV = ~~18,550 Btu/lb~~, Temperature = 60 F

NO$_x$ CONTROL LEVEL: 42ppm

POWER FACTOR: 0.85 pf

	Full Speed No Load	Minimum Load	25% of Base Load	50% of Base Load	75% of Base Load	Base Load Rating	Peak Load Rating
Sulfur dioxide, lb/h			135.7	214.2	296.6	376.8	
TSP, lb/h + PM10, lb/h			17.0	17.0	17.0	17.0	
~~PM10, lb/h~~							
Unburned hydrocarbon, ppmwv			6.0	5.0	5.0	5.0	
Unburned hydrocarbon, lb/h			5.4	7.1	9.8	12.5	
Volatile organic compounds, ppmwv			3.2	3.0	3.0	3.0	
Volatile organic compounds, lb/h			2.9	4.3	5.9	7.5	
Oxygen, ~~lb/h~~			18.0	15.1	13.1	12.5	
Nitrogen, ~~lb/h~~ %Wt.			73.2	71.9	70.4	69.9	
Carbon dioxide, ~~lb/h~~			4.2	6.5	8.0	8.4	
Argon, ~~lb/h~~			1.2	1.2	1.2	1.2	
Water, ~~lb/h~~			3.3	5.3	7.4	7.9	
Opacity, %			2.0	0.6	0	0	

FOR INFORMATION ONLY

Manufacturer: Siemens

Model No./Combustor: V84.3

Combustion system type: Dual Fuel Low NOx

TABLE: B.2- 10

AMBIENT TEMPERATURE/
RELATIVE HUMIDITY: 90° F/ 60%

BAROMETRIC PRESSURE: ~~14.81 psia~~

FUEL: Natural Gas LHV = ~~20,700 Btu/lb~~, Temperature = 60 F
No. 2 Fuel Oil LHV = ~~18,560 Btu/lb~~, Temperature = 60 F

NO$_x$ CONTROL LEVEL: 42ppm

POWER FACTOR: 0.85 pf

	Full Speed No Load	Minimum Load	25% of Base Load	50% of Base Load	75% of Base Load	Base Load Rating	Peak Load Rating
Gross output, kW			37,729	75,460	113,195	153,861	
Auxiliary power, kW			2,495	2,495	2,496	2,495	
Gross heat rate, Btu/kWh (LHV)			15,749	12,184	11,077	10,445	
Exhaust flow, lb/h			2,414,844	2,459,412	2,756,052	3,368,556	
Exhaust temp, F			745	968	1,055	1,051	
Inlet guide vane position, degrees			75%	75%	82.36%	100%	
Fuel flow, lb/h			32,346	50,051	68,256	87,487	
Nitrogen oxides, ppmdv @ 15% O$_2$			42	42	42	42	
Nitrogen oxides, lb/h as NO$_2$			104.0	160.1	218.0	279.2	
Carbon monoxide, ppmdv			254.0	5.0	5.0	5.0	
Carbon monoxide, lb/h			383.0	11.6	15.8	20.2	
Sulfur dioxide, ppmdv			21.9	22.1	22.1	22.1	

FPC 17506 COMB TURB GEN 62.1003
061193
ED-54

FOR INFORMATION ONLY

Manufacturer: Siemens

Model No./Combustor: V84.3

TABLE: B.2-10

Combustion system type: ~~Dry NO$_x$~~ Dual Fuel Low NOx

AMBIENT TEMPERATURE/
RELATIVE HUMIDITY: 90°/60

BAROMETRIC PRESSURE: ~~14.61 psia~~

FUEL: Natural Gas LHV = ~~21,340 Btu/lb~~, Temperature = 60 F
No. 2 Fuel Oil LHV = ~~18,556 Btu/lb~~, Temperature = 60 F

NO$_x$ CONTROL LEVEL: 42ppm

POWER FACTOR: 0.85 pf

	Full Speed No Load	Minimum Load	25% of Base Load	50% of Base Load	75% of Base Load	Base Load Rating	Peak Load Rating
Sulfur dioxide, lb/h			129.6	200.4	273.4	350.4	
TSP, lb/h + PM10, lb/h			17.0	17.0	17.0	17.0	
~~PM10, lb/h~~							
Unburned hydrocarbon, ppmvw			6.0	5.0	5.0	5.0	
Unburned hydrocarbon, lb/h			5.2	6.7	9.1	11.6	
Volatile organic compounds, ppmvw			3.2	3.0	3.0	3.0	
Volatile organic compounds, lb/h			2.8	4.0	5.4	7.0	
Oxygen, ~~lb/h~~			17.6	14.9	13.0	17.6	
Nitrogen, ~~lb/h~~			72.3	71.0	69.6	72.3	
Carbon dioxide, ~~lb/h~~			4.3	6.5	7.9	4.3	
Argon, ~~lb/h~~			1.2	1.2	1.2	1.2	
Water, ~~lb/h~~			4.5	6.4	8.4	4.6	
Opacity, %			2.0	0.6	0	0	

FOR INFORMATION ONLY

Attachment 2

Air Quality Modeling Analysis

Air Quality Modeling Comparison

Two GE Frame 7FA Units vs. Proposed Siemens Unit

1.0 Introduction

Florida Power Corporation (FPC) is proposing to construct a single Siemens V84.3 combustion turbine in place of two GE Frame 7FA units at its Intercession City site. In order to assess the impact that the proposed change will have on air quality, a modeling analysis which compared the maximum ambient concentrations resulting from each of the two scenarios was performed.

2.0 Summary

The two GE Frame 7FA units would have emitted more than twice the amount of air pollutants than the proposed Siemens combustion turbine will emit. In addition, the Siemens unit will have a somewhat taller and narrower stack, so it is intuitive that the proposed unit will have a lesser impact on air quality. A modeling analysis using the latest version of EPA's SCREEN model was performed in order to confirm this conclusion.

SO_2 is the pollutant which is emitted in the greatest quantities from the Siemens unit as well as the two GE units. Worst-case SO_2 emissions reflecting maximum load conditions at 20 deg. F were input to the SCREEN2 model. Building dimensions were also input in order to assess the potential for building downwash of the plume.

The resulting maximum predicted concentrations were a total of approximately 23 ug/m^3 from the two GE units and 12 ug/m^3 from the Siemens unit. Therefore, the installation of the Siemens combustion turbine will result in a net air quality benefit when compared to the installation of the two GE units.

3.0 Methodology

In order to compare the maximum ambient air impacts from the proposed Siemens unit with those from the two GE units, the most recent version of EPA's SCREEN model was used. The SCREEN2 model was run using the full range of worst-case meteorology contained in the model. In addition, the following options were input:

- Flat terrain
- Ground-level concentrations (receptor height = 0)
- Rural dispersion coefficients
- Building wake effects

The total emissions from the two GE units were input as a single source in order to more easily determine their aggregate impact. The proposed Siemens unit was run separately, and the resulting predicted concentrations compared.

If the predicted maximum impacts from the Siemens combustion turbine are less than those from the two GE units which it is replacing, then a net benefit will result from the installation of the Siemens unit and no further analysis is necessary.

4.0 Air Pollutant Emissions, Stack Parameters, and Building Dimensions

Because both the GE units and the Siemens combustion turbine will use only No. 2 oil as fuel, SO_2 is the pollutant which will be emitted in the greatest quantities. Although this analysis is a relative impact comparison which would be valid using emissions of any stable air pollutant as input, SO_2 was chosen because those emissions will have the highest impact.

Worst-case SO_2 emissions occur at a temperature of 20 degrees F. Emissions from the GE units were obtained from the Intercession City construction permit application documentation which was submitted to the DEP on October 1, 1991. SO_2 emissions from the proposed Siemens unit are given in Attachment 1 and were obtained from the manufacturer. These emissions represent a maximum fuel sulfur content of 0.2% as required in the current construction permit. Emissions data input to the model are given in Table 1.

Stack and effluent data (stack dimensions, exit temperature, exit velocity) for the GE units were obtained from the construction permit application and were provided by the manufacturer for the Siemens combustion turbine. The stack parameters used in the modeling analysis are shown in Table 1.

To assess the potential for aerodynamic plume downwash due to building wake effects, the building downwash option contained in the model was used. The building dimensions input represent the building containing the combustion turbine and are given in Table 1.

Table 1
SCREEN2 Model Input

	GE Frame 7FA	Siemens
SO_2 Emissions (g/s)	110.6*	48.3
Stack Height (m)	15.2	22.9
Stack Diameter (m)	7.0	5.8
Exit Velocity (m/s)	32.1	41.0
Exit Temp. (K)	881	823
Building Height (m)	11.8	11.8
Building Width (m)	7.1	7.1
Building Length (m)	18.0	18.0

* Represents maximum SO_2 emissions from two GE units.

5.0 Modeling Results

The SCREEN2 model output for each of the two analyses is provided in Attachment 3. The maximum predicted concentrations and their distances downwind are as follows:

Siemens Modeling Analysis
Page Three

GE Units	Max. = 23.18 ug/m^3	Distance = 1.577 km
Siemens Unit	Max. = 12.04 ug/m^3	Distance = 1.488 km

In addition, no building downwash effects were predicted to occur. As expected, the construction of the Siemens combustion turbine in place of the two GE Frame 7FA units will result in a lower impact on the surrounding air quality.

Attachment 3

SCREEN2 Model Output

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

Frame 7FA Units With Building Dimensions - 20 deg. F Emissions

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	110.600
STACK HEIGHT (M)	=	15.2000
STK INSIDE DIAM (M)	=	7.0000
STK EXIT VELOCITY (M/S)	=	32.1000
STK GAS EXIT TEMP (K)	=	881.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	11.8000
MIN HORIZ BLDG DIM (M)	=	7.1000
MAX HORIZ BLDG DIM (M)	=	18.0000

MOMENTUM FLUX = 2573.603 M**4/S**3; MOM. FLUX = 4197.956 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	4198.5	4197.54	12.76	12.76	NO
100.	4.171	6	1.0	1.3	10000.0	328.23	89.53	89.47	NO
200.	4.197	6	1.0	1.3	10000.0	328.23	89.77	89.53	NO
300.	4.228	6	1.0	1.3	10000.0	328.23	90.14	89.61	NO
400.	4.265	6	1.0	1.3	10000.0	328.23	90.63	89.71	NO
500.	4.305	6	1.0	1.3	10000.0	328.23	91.22	89.83	NO
600.	4.349	6	1.0	1.3	10000.0	328.23	91.92	89.96	NO
700.	4.396	6	1.0	1.3	10000.0	328.23	92.72	90.10	NO
800.	4.434	6	1.0	1.3	10000.0	328.23	93.61	90.23	NO
900.	4.471	6	1.0	1.3	10000.0	328.23	94.58	90.37	NO
1000.	4.509	6	1.0	1.3	10000.0	328.23	95.64	90.52	NO
1100.	7.415	1	3.0	3.1	1410.3	1409.31	313.40	595.86	NO
1200.	13.08	1	3.0	3.1	1410.3	1409.31	335.40	705.77	NO
1300.	18.03	1	3.0	3.1	1410.3	1409.31	357.05	826.90	NO
1400.	21.31	1	3.0	3.1	1410.3	1409.31	378.36	959.32	NO
1500.	22.88	1	3.0	3.1	1410.3	1409.31	399.38	1103.08	NO
1600.	23.16	1	3.0	3.1	1410.3	1409.31	420.13	1258.27	NO
1700.	22.69	1	3.0	3.1	1410.3	1409.31	440.63	1424.93	NO
1800.	21.90	1	3.0	3.1	1410.3	1409.31	460.89	1603.12	NO
1900.	21.04	1	3.0	3.1	1410.3	1409.31	480.94	1792.92	NO
2000.	20.22	1	3.0	3.1	1410.3	1409.31	500.79	1994.37	NO
2100.	19.46	1	3.0	3.1	1410.3	1409.31	520.44	2207.53	NO
2200.	18.76	1	3.0	3.1	1410.3	1409.31	539.91	2432.46	NO
2300.	18.11	1	3.0	3.1	1410.3	1409.31	559.22	2669.22	NO

400.	17.51	1	3.0	3.1	1410.3	1409.31	578.36	2917.86	NO
500.	16.95	1	3.0	3.1	1410.3	1409.31	597.35	3178.43	NO
600.	16.44	1	3.0	3.1	1410.3	1409.31	616.20	3450.98	NO
[redacted]	15.95	1	3.0	3.1	1410.3	1409.31	634.90	3735.56	NO
[redacted]	15.56	1	3.0	3.1	1410.3	1409.31	650.69	4031.78	NO
900.	15.27	1	3.0	3.1	1410.3	1409.31	663.38	4339.71	NO
000.	14.98	1	3.0	3.1	1410.3	1409.31	676.15	4659.93	NO
500.	13.67	1	3.0	3.1	1410.3	1409.31	740.85	5000.00	NO
000.	12.56	1	3.0	3.1	1410.3	1409.31	806.55	5000.00	NO
500.	11.60	1	3.0	3.1	1410.3	1409.31	872.77	5000.00	NO
000.	10.78	1	3.0	3.1	1410.3	1409.31	939.20	5000.00	NO
500.	10.07	1	3.0	3.1	1410.3	1409.31	1005.65	5000.00	NO
000.	10.10	2	3.5	3.6	1211.2	1210.15	826.33	851.84	NO
500.	10.18	2	3.5	3.6	1211.2	1210.15	876.26	917.91	NO
000.	10.08	2	3.5	3.6	1211.2	1210.15	926.16	985.27	NO
500.	9.863	2	3.5	3.6	1211.2	1210.15	975.97	1053.74	NO
000.	9.572	2	3.5	3.6	1211.2	1210.15	1025.65	1123.19	NO
500.	9.245	2	3.5	3.6	1211.2	1210.15	1075.17	1193.51	NO
000.	8.906	2	3.5	3.6	1211.2	1210.15	1124.52	1264.60	NO
500.	8.570	2	3.5	3.6	1211.2	1210.15	1173.68	1336.40	NO
000.	8.758	5	5.0	5.8	10000.0	242.04	412.05	102.24	NO

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

1577.	23.18	1	3.0	3.1	1410.3	1409.31	415.18	1219.98	NO

WASH= MEANS NO CALC MADE (CONC = 0.0)
WASH=NO MEANS NO BUILDING DOWNWASH USED
WASH=HS MEANS HUBER-SNYDER DOWNWASH USED
WASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
[redacted]ASH=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)	=	20.44	CAVITY HT (M)	=	14.40
CAVITY LENGTH (M)	=	32.44	CAVITY LENGTH (M)	=	8.06
ALONGWIND DIM (M)	=	7.10	ALONGWIND DIM (M)	=	18.00

AVITY 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)
IMPLE TERRAIN	23.18	1577.	0.

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

03/21/94
09:34:15

** SCREEN2 MODEL RUN ***
ERSION DATED 92245 ***

emens Unit With Building Dimensions - 20 deg. F Emissions

MPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	48.3000
STACK HEIGHT (M)	=	22.9000
STK INSIDE DIAM (M)	=	5.8000
STK EXIT VELOCITY (M/S)	=	41.0000
STK GAS EXIT TEMP (K)	=	823.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	11.8000
MIN HORIZ BLDG DIM (M)	=	7.1000
MAX HORIZ BLDG DIM (M)	=	18.0000

JOY. FLUX = 2177.484 M**4/S**3; MOM. FLUX = 5033.053 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	1.1	3700.2	3699.17	13.45	13.45	NO
100.	1.200	6	1.0	1.6	10000.0	297.53	78.57	78.50	NO
200.	1.211	6	1.0	1.6	10000.0	297.53	78.85	78.57	NO
300.	1.224	6	1.0	1.6	10000.0	297.53	79.27	78.67	NO
400.	1.239	6	1.0	1.6	10000.0	297.53	79.82	78.78	NO
500.	1.256	6	1.0	1.6	10000.0	297.53	80.50	78.91	NO
600.	1.275	6	1.0	1.6	10000.0	297.53	81.29	79.06	NO
700.	1.296	6	1.0	1.6	10000.0	297.53	82.19	79.22	NO
800.	1.312	6	1.0	1.6	10000.0	297.53	83.19	79.38	NO
900.	1.329	6	1.0	1.6	10000.0	297.53	84.29	79.53	NO
1000.	2.754	1	3.0	3.2	1249.3	1248.32	279.81	490.63	NO
1100.	5.767	1	3.0	3.2	1249.3	1248.32	301.61	589.74	NO
1200.	8.699	1	3.0	3.2	1249.3	1248.32	323.03	699.98	NO
1300.	10.76	1	3.0	3.2	1249.3	1248.32	344.12	821.40	NO
1400.	11.80	1	3.0	3.2	1249.3	1248.32	364.90	954.09	NO
1500.	12.03	1	3.0	3.2	1249.3	1248.32	385.41	1098.10	NO
1600.	11.79	1	3.0	3.2	1249.3	1248.32	405.66	1253.51	NO
1700.	11.36	1	3.0	3.2	1249.3	1248.32	425.67	1420.37	NO
1800.	10.88	1	3.0	3.2	1249.3	1248.32	445.46	1598.75	NO
1900.	10.43	1	3.0	3.2	1249.3	1248.32	465.05	1788.72	NO
2000.	10.01	1	3.0	3.2	1249.3	1248.32	484.45	1990.33	NO
2100.	9.632	1	3.0	3.2	1249.3	1248.32	503.67	2203.64	NO
2200.	9.281	1	3.0	3.2	1249.3	1248.32	522.71	2428.70	NO
2300.	8.958	1	3.0	3.2	1249.3	1248.32	541.60	2665.59	NO

400.	8.658	1	3.0	3.2	1249.3	1248.32	560.34	2914.34	NO
500.	8.380	1	3.0	3.2	1249.3	1248.32	578.93	3175.02	NO
600.	8.140	1	3.0	3.2	1249.3	1248.32	596.04	3447.44	NO
[redacted]	7.964	1	3.0	3.2	1249.3	1248.32	609.16	3731.28	NO
	7.795	1	3.0	3.2	1249.3	1248.32	622.36	4027.31	NO
900.	7.633	1	3.0	3.2	1249.3	1248.32	635.61	4335.56	NO
000.	7.476	1	3.0	3.2	1249.3	1248.32	648.92	4656.06	NO
500.	6.775	1	3.0	3.2	1249.3	1248.32	716.09	5000.00	NO
000.	6.189	1	3.0	3.2	1249.3	1248.32	783.87	5000.00	NO
500.	5.695	1	3.0	3.2	1249.3	1248.32	851.85	5000.00	NO
000.	5.274	1	3.0	3.2	1249.3	1248.32	919.80	5000.00	NO
500.	4.937	2	3.5	3.7	1120.0	1073.26	759.17	770.24	NO
000.	5.000	2	3.5	3.7	1120.0	1073.26	810.13	836.14	NO
500.	4.956	2	3.5	3.7	1120.0	1073.26	861.01	903.36	NO
000.	4.842	2	3.5	3.7	1120.0	1073.26	911.74	971.73	NO
500.	4.686	2	3.5	3.7	1120.0	1073.26	962.29	1041.09	NO
000.	4.545	2	3.0	3.2	1249.3	1248.32	1028.58	1125.86	NO
500.	4.403	2	3.0	3.2	1249.3	1248.32	1077.97	1196.02	NO
000.	4.250	2	3.0	3.2	1249.3	1248.32	1127.19	1266.98	NO
500.	4.096	2	3.0	3.2	1249.3	1248.32	1176.24	1338.65	NO
000.	3.945	2	3.0	3.2	1249.3	1248.32	1225.11	1410.98	NO

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

1488.	12.04	1	3.0	3.2	1249.3	1248.32	382.76	1078.74	NO

WASH= MEANS NO CALC MADE (CONC = 0.0)
WASH=NO MEANS NO BUILDING DOWNWASH USED
WASH=HS MEANS HUBER-SNYDER DOWNWASH USED
WASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
[redacted]=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)	=	20.44	CAVITY HT (M)	=	14.40
CAVITY LENGTH (M)	=	32.44	CAVITY LENGTH (M)	=	8.06
ALONGWIND DIM (M)	=	7.10	ALONGWIND DIM (M)	=	18.00

AVITY 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)
IMPLE TERRAIN	12.04	1488.	0.

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

Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 15, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue
C.E.P. Manager
Florida Power Corporation
P.O. Box 14042
St. Petersburg, Florida 33733

RE: Intercession City - DEP Permit No. AC49-203114
PSD-FL-180

Dear Mr. Pardue:

The Department is in receipt of your June 21, 1994, letter requesting the following:

1) The substitution of one (1) 171 MW Siemmens V84.3 combustion turbine for two permitted 185.5 MW (each) GE Frame 7FA combustion turbines.

2) The extension of the expiration date to December 31, 1995.

3) The increase in hours of operation from 3390 to 4068 hours per year (this request was later dropped by Mr. Mike Kennedy of your staff via a telephone conversation with Ms. Teresa Heron).

The Bureau evaluated your request and approves the following:

1) The change in turbine's manufacturer and model.

2) The change in the expiration date of this permit:

FROM: December 31, 1994
TO: December 31, 1995

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.

A copy of this letter shall be filed with the referenced permits and will become a part of those permits.

Sincerely,

for Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/TH/bjb

Attachment to be incorporated:
Mr. W. Jeffrey Pardue's letter of April 8, 1994

cc: Chuck Collins, CD

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 7/15/94 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.

Charlotte E. Hayes — Clerk
7/15/94 — Date

Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

September 21, 1994

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 49-203114 [PSD-FL-180(A)]
Intercession City 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 Intercession City 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(D)a,b, and c is amended as follows;**

From

a) The maximum heat input of 1,144 MMBtu/hr/unit at 20°F (peak load).

b) The maximum heat input of 1,029 MMBtu/hr/unit at 59°F (peak load).

c) The maximum heat input of 932 MMBtu/hr/unit at 90°F (peak load).

To

a) The maximum heat input of 1,144 MMBtu/hr/unit at 20°F (peak load). **The heat input will be corrected in accordance with Specific Condition No. 14 and the heat input vs. ambient temperature curve in Figure 1L.**

b) **Replaced by the heat input vs. ambient temperature curve in Figure 1L, which was developed using actual site specific performance data.**

c) **Replaced by the heat input vs. ambient temperature curve in Figure 1L, which was developed using actual site specific performance data.**

- 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 30 days in writing in advance of the compliance test(s) pursuant to 40 CFR 60.8. 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 pursuant to F.A.C. Rule 17-2.700(8).

To

Test results will be the average of 3 valid runs. The Department's Central District office will be notified at least 30 days in writing in advance of the compliance test(s) pursuant to 40 CFR 60(8). 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 completion pursuant to Rule 62-297.570, F.A.C.

D. Attachments to be Incorporated;

- FPC letter dated June 23, 1994.
- FDEP letter dated 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 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 49-203114, and the federal permit, No. PSD-FL-180(A), and shall become part of the permits.

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

Florida Power Corporation

GE Frame 7EA Combustion Turbines

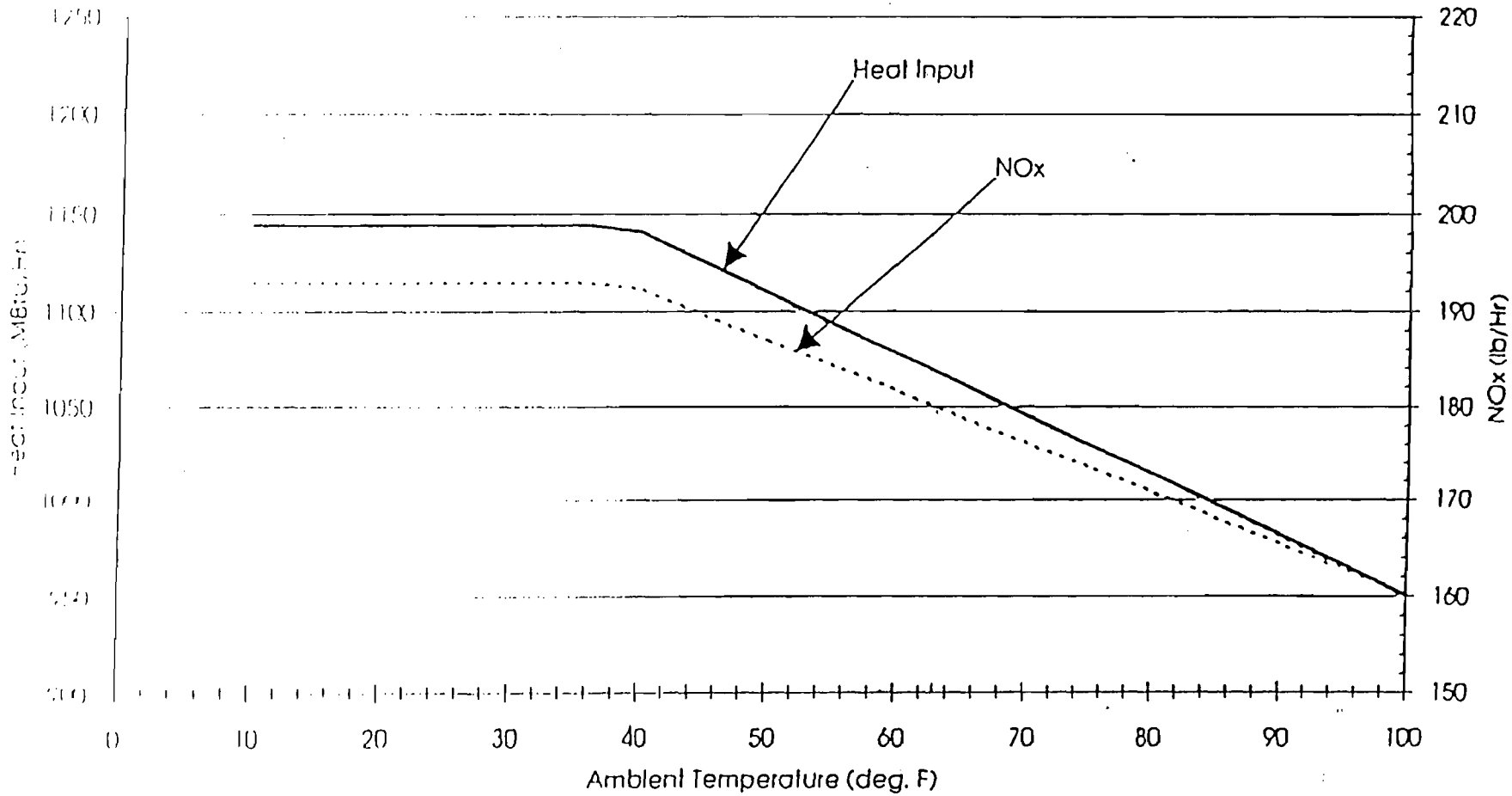

Figure IL
Florida Power Corporation
Intercession City Facility
Heat Input vs. Ambient Temperature Curve

Department of
Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 10, 1995

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director
Environmental Services Department H2G
Florida Power Corporation
Post Office Box 14042
St. Petersburg, Florida 33733

Dear Mr. Pardue:

RE: Intercession City-DEP Permit No. AC 49-203114 and PSD-Fl-180
Request to Burn Natural Gas in Units P7 through P11

The Department is in receipt of your April 28, May 31, and July 7, 1995, letters requesting a permit modification to burn natural gas as a supplemental fuel in combustion turbines P7 through P11. The Bureau of Air Regulation has evaluated your request and approves the burning of natural gas for these turbines since there will not be an increase in either lb/hr/unit or tons/yr/unit of the permitted emission rates. Consequently, the following new condition will be added:

SPECIFIC CONDITION No. 1

These emission units are allowed to burn natural gas. Emissions of each pollutant while burning natural gas shall not exceed the following limits:

GE PG7111(EA), 4 units

	lb/hr/unit	tons/yr/unit	
PM	7.50	12.71	
SO2	2.99	5.06	
CO	21.30	36.10	
NOx	107.00	181.37	and 25 ppmvd at 15% oxygen
VOC	3.00	5.08	
H_2SO_4	0.44	0.75	

SIEMENS V84.3, 1 unit

	lb/hr	ton/yr	
PM	7.5	12.71	
SO2	4.22	7.15	
CO	30.9	52.37	
NOx	149	252.56	and 25 ppmvd at 15% oxygen
VOC	5.3	8.98	
H2SO4	0.64	1.08	

GE Frame 7EA Units (P7-P10)	Temp.(F)	Heat Input (MMBtu/hr)
	20	1,159
	59	1,048
	90	955
Siemens Unit (P11)	20	1,609
	59	1,477
	95	1,355

Allowable emissions are calculated at 59°F. Annual emissions rates are based on 3390 hours per year.

BACT Determination

The **BACT** determination is hereby revised to include the burning of natural gas at a NOx emission standard of 25 ppmvd at 15%O_2.

It is the Department's understanding that natural gas is available on an interruptible basis at this time. In the future, if natural gas becomes available on a non-interruptible basis, the Department may reassess the BACT and may require stricter NOx control over a reasonable period of time.

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit AC49-203114, PSD-FL-180.

Sincerely,

Howard L. Rhodes

Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/th/t

ATTACHMENT IC-EU2-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

Intercession City, FL, 8049

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*	*8/93*	01/01/96 for NOX
8	Yes	*No*	*7/93*	01/01/96 for NOX
9	Yes	*No*	*9/93*	01/01/96 for NOX
10	Yes	*No*	*7/93*	01/01/96 for NOX
	Yes			
	Yes			
7,8,9,10	Yes	*No*	*See above*	01/01/95 for SO2
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

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

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

Plant Name (from Step 1)
Intercession City

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)
Intercession City

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

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0221
Expires 6-30-95

Certificate of Representation

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

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
Intercession City	FL	8049

STEP 2
Enter requested information for the designated representative

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

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

Name	
Address	
Phone Number	Fax Number

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

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

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

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

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

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

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

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

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

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

Plant Name (from Step 1)	Intercession City

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) [signature]	Date 11/8/94
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:

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

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

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

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

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

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

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

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): **Combustion Turbine No.11**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [X] 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): **Nameplate rating for oil-firing at 59°F. For natural gas-firing, 154.3 MW at 59°F.**		

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:	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: Siemens	Model Number: V84.3
4. Generator Nameplate Rating: 171 MW	
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	2,032	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): At 59°F and LHV fuel oil. See Attachment IC-EU3-C5.		

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:			
	24 hours/day		7 days/week
	52 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 IC-EU3-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 Attach. IC-FE-2**	
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 a single stack per turbine.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**75** feet
7. Exit Diameter:	**19** feet
8. Exit Temperature:	**1,034** °F

9. Actual Volumetric Flow Rate:	**2,370,627** 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 (oil-firing).**	

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): **Distillate fuel oil**	
2. Source Classification Code (SCC): **2-01-001-01**	
3. SCC Units: **thousand gallons burned**	
4. Maximum Hourly Rate: **13.171**	5. Maximum Annual Rate: **44,649**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.2**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **132**	
10. Segment Comment (limit to 200 characters): **Million Btu per SCC Unit: 131.52.**	

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Natural gas**	
2. Source Classification Code (SCC): **2-01-002-01**	
3. SCC Units: **Million cubic feet**	
4. Maximum Hourly Rate: **1.477**	5. Maximum Annual Rate: **5,007**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **1,000**	
10. Segment Comment (limit to 200 characters): **Maximum Percent Sulfur: 1 grain/100 cf 1) Max. hourly and annual rates at 50°F. Annual rate based on 3,390 hours. Heat content - LHV.**	

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: %
3. Potential Emissions: **407** lb/hour **588** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.2 % S content** Reference: **AC Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Maximum hourly emissions based on ambient temperature at 59°F. Annual emissions based on 59°F and 33% capacity factor.**

Emissions Unit Information Section 3 of 4

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:	**0.2**
4. Equivalent Allowable Emissions:	**407** lb/hour **588** 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):	**AC Permit limit - oil-firing at 59°F. TPY - 33% capacity factor (0.2% sulfur content - max.). Cap. factor 38.7% if sulfur content 0.16% or less.**

B.

1. Basis for Allowable Emissions Code:	**OTHER**
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	**1 grain S/100 cf**
4. Equivalent Allowable Emissions:	**4.22** lb/hour **7.15** 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):	**AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor.**

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: **334** lb/hour **566** 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@15% O2** Reference: **AC Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Maximum hourly emissions based on ambient temperature of 59 °F. Annual emissions based on 59 °F and 38.7% capacity factor**

Emissions Unit Information Section 3 of 4

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:	**334** lb/hour **566** 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): **AC Permit limit - oil-firing at 59°F. TPY - 38.7% capacity factor.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **25 ppmvd@15% O2**	
4. Equivalent Allowable Emissions:	**149** lb/hour **252.6** 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): **AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor.**	

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** lb/hour **29** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **17 lb/hr** Reference: **AC Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Maximum hourly emissions based on ambient temperature at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 3 of 4

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: **0.01 lb/mmBtu**	
4. Equivalent Allowable Emissions:	**17** lb/hour **29** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - oil-firing at 59°F. TPY - 38.7% capacity factor. If VE limits met, PM test not required.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	**7.5** lb/hour **12.71** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test - EPA Method 9**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor.**	

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** lb/hour **29** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **17 lb/hr** Reference: **AC Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Maximum hourly emissions based on ambient temperature at 59°F. Annual emissions based on 59°F and 38.7% capacity factor.**

Emissions Unit Information Section 3 of 4

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: **0.01 lb/mmBtu**	
4. Equivalent Allowable Emissions:	**17** lb/hour **29** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 5**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - oil-firing at 59°F. TPY - 38.7% capacity factor. If VE limits met, PM10 test not required.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	**7.5** lb/hour **12.71** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test - EPA Method 9**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor.**	

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: **79** lb/hour **134** 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):

   Oil-firing at 59°F. AC permit limit.

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

   Maximum hourly emissions based on ambient temperature of 59 °F. Annual emissions based on 59 °F and 38.7% capacity factor.

Emissions Unit Information Section 3 of 4
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: **25 ppm**
4. Equivalent Allowable Emissions: **79** lb/hour **134** 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): **AC Permit limit - oil-firing at 59°F. TPY - 38.7% capacity factor.**

B.

1. Basis for Allowable Emissions Code: **OTHER**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **10 ppmvd**
4. Equivalent Allowable Emissions: **30.9** lb/hour **52.37** 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): **AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor.**

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: **9** lb/hour **15.3** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **9 lb/hr** Reference: **AC Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Maximum hourly emissions based on ambient temperature at 59 °F. Annual emissions based on 59 °F and 38.7% capacity factor.**

Emissions Unit Information Section 3 of 4

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:		
4. Equivalent Allowable Emissions:	**9** lb/hour	**15.3** 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): **AC Permit limit - oil-firing at 59°F. TPY - 38.7% capacity factor. If CO limits met, VOC test not required.**		

B.

1. Basis for Allowable Emissions Code: **OTHER**		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: **3 ppmvd**		
4. Equivalent Allowable Emissions:	**5.3** lb/hour	**8.98** 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): **AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor. If CO limits met, VOC test not required.**		

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: **0** %
3. Potential Emissions: **28** lb/hour **41** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: Reference: **AC Permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Oil-firing at 59°F. AC permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Maximum hourly emissions based on ambient temperature at 59°F. Annual emissions based on 59°F and 33% capacity factor.**

Emissions Unit Information Section 3 of 4

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: **0.2 % Max S content**	
4. Equivalent Allowable Emissions:	**28** lb/hour **41** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test, EPA Method 8**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - oil-firing at 59°F. TPY - 33% capacity factor (0.2% sulfur content - max.). Cap. factor 38.7% if sulfur content 0.16% or less.**	

B.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions:	**0.64** lb/hour **1.08** tons/year
5. Method of Compliance (limit to 60 characters): **Annual compliance test - EPA Method 8**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **AC Permit limit - natural gas-firing at 59°F. TPY - 38.7% capacity factor.**	

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): **Permit Limit. 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: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. Rule 62-210.700. 2. Maximum period of excess opacity allowed - 2 hours/24 hours.**

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:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): **Water to fuel ratio will be monitored on a continuous basis (40 CFR 60.334). Monitoring incorporated into CT control system and recorded on hourly basis.**	

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:	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment (limit to 200 characters): **Requirements of 40 CFR 75, Appendix E will be followed.**	

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: IC-EU2-L1 [ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: IC-EU2-L2 [ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[X] Attached, Document ID: IC-EU2-L3 [ ] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[X] Attached, Document ID: IC-EU2-L4 [ ] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____ [ ] Previously Submitted, Date: _____	[X] Not Applicable
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: IC-EU2-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: IC-EU2-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: IC-EU2-L12 [ ] Not Applicable

13. Compliance Assurance Monitoring Plan

[x] Attached, Document ID: IC-EU3-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: IC-EU2-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 IC-EU3-C5

OPERATING CAPACITY COMMENT

ATTACHMENT IC-EU3-C5
OPERATING CAPACITY COMMENT

The maximum heat input rate for oil-firing is based on the permit limit at 20°F and low heating value (LHV) for one combustion turbine (CT). The turbine is permitted to operate up to the equivalent of 3,390 hours/year per CT at peak or other lesser loads and 38.7 percent capacity factor. The capacity factor shall be limited to 33 percent based on weighted 12-month rolling average sulfur content not to exceed 0.2 percent. If sulfur content is less than 0.2 percent, the capacity factor can be adjusted up to 38.7 percent. A single turbine can operate at more than 3,390 hours/year. Fuel usage not limited for a single turbine; usage up to 13,171 gal/hr/unit or 44,649,000 gallons/year (59°F) is authorized by construction permit. Maximum heat input for natural gas-firing is 1,609 MMBtu/hr at 20°F and LHV.

ATTACHMENT IC-EU3-D

EMISSIONS UNIT REGULATIONS

ATTACHMENT IC-EU3-D

EMISSIONS UNIT REGULATIONS

Applicable Requirements Listing - Power Plants

EMISSION UNIT: FPC Intercession City Plant - Combustion Turbines 7-10 (Also CT 11)

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 (Compliance 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; Appendix 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 Procedures
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 IC-EU3-L13

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT IC-EU3-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:

[ ] 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/De minimis Emissions**		
2. Emissions Unit Identification Number: [X] 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): **See Attachment IC-EU4-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: **12,480**	
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 IC-EU4-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: **422,470**	
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 IC-EU4-B6 for list.**	

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code

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

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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

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

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

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

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

2. Increment Consuming for Nitrogen Dioxide?

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

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

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

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

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

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

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

ATTACHMENT IC-EU4-B6

EMISSIONS UNIT COMMENT

TRIVIAL ACTIVITIES

The trivial activities identified in this application are provided for information only and are identified as examples of, but not limited to, the trivial activities identified by the Division of Air Resources Management's (DARM's) guidance. It is understood that such activities do not have to be included in with the Title V Application. The trivial activities identified herein are consistent, in terms of amounts of emissions and types, with those activities listed in DARM's guidance.

NOTIFICATION OF TEMPORARY EXEMPTIONS

Pursuant to Rule 62-210.300(3)(b)1., notice is herein provide that the emissions units listed below are not subject to a permit issued by the Department of Environmental Protection and are exempt from permitting until a final determination is made under the Title V permitting requirements (Rule 62-213 F.A.C.). These units would not have triggered review under Rules 62-212.400 or 62-212.500 or any new source performance standard listed in Rule 62-204.800 F.A.C.

Attachment IC-EU4-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Intercession City 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, lathes, hand-held tools, etc.	ER/TR
	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	TR
Oil/ water separator area	Oil/water separator (2)	TR
Fire pump building (north maintenance shop)	Diesel generator - 182 hp; 1,760 hp	ER/UR
	Diesel oil tank (inside vent at bunker top)	UR
Water storage tanks	Fire water tanks (2)	ER
Gas turbine cleaner building	On-line cleaner for gas turbine (clean for compressor efficiency); degreaser added; stored in 55 gal. drums (2)	TR
	Electric motor (115v/230)	TR
Water treatment building - Ecolochem (leased from FPC)		
	Sno-glow bleach- 55 gal. drums (3)- sealed diluted sulfuric acid- 55 gal. drums (2)- sealed diluted sulfuric acid- tank (1)- sealed	TR
	Work bench area	TR
	Electric motors (2)	TR
	Welding equipment	ER/TR

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General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Intercession City Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	Fire equipment	ER/TR
Combustion turbines- P10, P8 (north); - P9, P7 (south)	Lube oil vent with demister	UR
	False Start Drain Tank	TR
	Hydrogen venting & purge	TR
	CO2 tank (liquid)/ purge	TR
	Fire System	ER/TR
	Cyclone coolers (2 electric motors)	TR
	Vacuum condenser	TR
Oil storage tanks (3)- south of CTs	No. 2 oil/ 100,000 bbl capacity each	UR
Combustion turbine peaking units- P1, P2, P3, P4, P5, P6	Lube oil vent with demister	UR
	Overhead drain tank vent (same as false start) Underground drain tank (2 per unit)- 550 gal.	UR
	Hydrogen venting & purge	TR
	CO2 tank (liquid)/ purge	TR
	Fire System	TR
	Air compressors	TR
	Oil/water collection- mostly water	TR
	Waste oil tank (50,000 gal; 1200 bbl)	UR
	55 gal. drums, sealed (near waste oil tank)- oily rags/ water, dirt	TR
Old Adm. bldg/ store room	Office equipment operation	TR
	Routine repairs	TR
	Heating & cooling systems	TR (except Part 82)
Substation	Transformers and associated equipment	TR
General Site	Surface coating < 6.0 gal/day	ER

Attachment IC-EU4-B6
General Emissions Unit Information for Unregulated Emissions Unit

Table 1. FPC, Intercession City Plant, Unregulated Emissions Unit

Area	Emission Unit Description	Status
	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 compresors	TR
	Non-halogenerated solvents	TR/UR
	Fire water tank	ER/TR
	Plant vehicles/ Fugitive PM	UR

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

Attachment IC-EU4-B6
General Emissions Unit Information

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

FPC Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons)	
No. 1	No. 2 fuel oil	4,209,072	211,183,000	(a)
No. 2	No. 2 fuel oil	4,209,072	211,183,000	(a)
No. 3	No. 2 fuel oil	3,999,996	(b)	
P1A	Waste oil	150	3,000	
P1B	Waste oil	150	3,000	
P2A/P2B to P6A/P6B	Waste oil (same as P1A/P1B)	1,500	30,000	
Waste Oil Tank	Waste oil	50,000	50,000	
P7	Waste oil	2,016	3,000	
P8, P9, P10 (P-8 to P-10)	Waste oil (same as P7)	6,048	9,000	
Gasoline Tank	Unleaded gas	250	1,000	
	TOTAL	12,478,254	422,465,000	

(a) Based on total fuel consumption from all gas turbines operating at maximum pemitted rates; fuel amount equally divided between Tank Nos. 1 and 2.
(b) Not estimated since all fuel oil throughput for plant was assumed for Tank Nos. 1, 2 for estimating facility fuel oil usage.