FLORIDA POWER CORPORATION
UF COGEN FACILITY

TITLE V
AIR OPERATING
PERMIT APPLICATION

Submitted to:

Florida Department of Environmental Protection

Prepared by:

KBN Engineering and Applied Sciences, Inc.
Gainesville, Florida

KBN
A GOLDER ASSOCIATES COMPANY

Letter of Transmittal

Date: 06/14/96

Project No.: 14420-1200

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

RECEIVED
JUN 14 1996
BUREAU OF
AIR REGULATION

Re: FLORIDA POWER CORPORATION
UF Cogen Facility

ID# 0010001

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

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

These are transmitted:

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

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

RECEIVED BY: _____

DATE: _____ *TIME:* _____

14422Y/F1/WP/ALL-LOT-11 (06/14/96)

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

KBN
A GOLDER ASSOCIATES COMPANY

Bulletin

Due to FDEP's recall of ELSA Version 1.3 dated prior to June 7, 1996, this permit application will be submitted as hard copy and electronically.

To proceed efficiently and meet the June 15, 1996 deadline, this permit application is being submitted as follows:

* Four hard copies of the complete application submittal (i.e., form and attachments) for FDEP are enclosed.

* After June 15th, KBN will submit four copies of the application to FDEP electronically, using the approved ELSA Version 1.3. (Signature pages and hard-copy attachments will not be resubmitted.)

In addition, KBN Engineering and Applied Sciences, Inc. has received prior FDEP verification from Patricia Comer, June 7, 1996, that FDEP receipt of the permit application by 5:00 pm, Monday, June 17, 1996 will meet the rule deadline of June 15, 1996.

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Gainesville, Florida 32653-1500
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-Markup-

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:	**Univ. of Florida Cogeneration Plant**
3. Facility Identification Number:	0010001 [x] Unknown
4. Facility Location Information: Street Address or Other Locator:	**Mowry Rd, Building 82, UF**
City: **Gainesvillle**	County: **Alachua** Zip Code: **32611-2295**
5. Relocatable Facility? [ ] Yes [x] No	6. Existing Permitted Facility? [x] Yes [ ] No

Application Processing Information (DEP Use)

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

Owner/Authorized Representative or Responsible Official

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

W. Jeffrey Pardue, C.E.P., Dir., Env. Services Dept

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

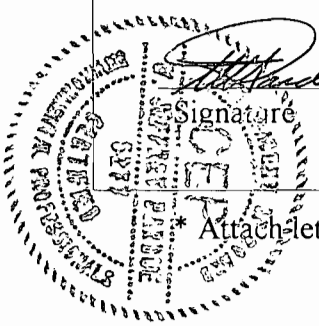
Organization/Firm: **Florida Power Corporation**
Street Address: **3201 34th St. S. PO Box 14042**
City: **St. Petersburg** State: **FL** Zip Code: **33711**

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

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

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*



Signature

6-13-96
Date

* Attach letter of authorization if not currently on file.

Mike Kennedy
866-4344

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 (LM6000)	
2R	Duct Burner System associated with HRSG	
3R	No.4 Steam Boiler	
4R	No.5 Steam Boiler	
5	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: $ _____ [X] Not Applicable.

Construction/Modification Information

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

Professional Engineer Certification

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

4. Professional Engineer's Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [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.

Howard F. Kelly — 6/4/96

Signature — 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: **PO Box 14042**
   City: **St. Petersburg** State: **FL** Zip Code: **33733**

3. Application Contact Telephone Numbers:

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

Mike Kennedy (813) 866-4344

Application Comment

See Attachment UF-AI-AC

ATTACHMENT UF-AI-AC

APPLICATION COMMENT

ATTACHMENT UF-AI-AC
APPLICATION COMMENT

This Title V application is for the University of Florida (UF) Cogeneration Facility. The application's structure is as follows:

Emissions Units

	Cogeneration Unit	Boilers	Facility-Wide Fugitive Emissions
General:	1 Combustion Turbine (CT) 1 Duct Burner (DB) associated with HRSG	2 boilers	General Area
Emissions Points:	1 single stack	1 stack per boiler	Fugitive
Segments*:	CT- Primary fuel--natural gas CT- Backup fuel--No. 2 fuel oil DB- Natural gas only	Natural gas No. 2 fuel oil	Various
Pollutants:	NO_x, CO, SO_2, PM/PM10, VOC, HAPs	SO_2, PM	NA
VE Emission:	VE Limits Applicable	VE Limits Applicable	NA
CEM	NO_x, steam-to-fuel ratio	None	NA
PSD	For CO only	Existing baseline source	NA

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

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates:
   Zone: **17** East (km): **369.4** North (km): **3279.3**

2. Facility Latitude/Longitude:
   Latitude (DD/MM/SS): **29 / 38 / 23** Longitude: (DD/MM/SS): **82 / 20 / 55**

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

7. Facility Comment (limit to 500 characters):

UF Cogeneration Plant consists of single combustion turbine (CT), heat recovery steam generator (HRSG), and single stack. CT is natural gas fired with distillate fuel oil as backup. Natural gas fired duct burners (DB) located between CT and HRSG. Two backup boilers (Boilers 4,5) are part of the plant previously part of UF heating plant. Four EU's have emission-limiting standards: CT, DB, Boilers 4 and 5.

Facility Contact

1. Name and Title of Facility Contact:
   R.W. Anderson, Plant Manager

2. Facility Contact Mailing Address:
   Organization/Firm: **Florida Power Corporation**
   Street Address: **P.O. Box 112295**
   City: **Gainesville** State: **FL** Zip Code: **32611-2295**

3. Facility Contact Telephone Numbers:
   Telephone: **(352) 337-6900** Fax: **(352) 337-6920**

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): **CT-NSPS, stationary gas turbines (40 CFR Part 60, Subpart GG). DBs-NSPS, indust., instit., comm. stm generators with heat input greater than 100 MMBtu/hr (40 CFR 60, Subpart Db).**	

B. FACILITY REGULATIONS

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

Not applicable for this application

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

See Attachment UF-FE-B

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted		2. Pollutant Classification
NOx	Nitrogen Oxides	A
CO	Carbon Monoxide	A
SO2	Sulfur Dioxide	A
PM	Particulate Matter - Total	A

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Detail Information:

1. Pollutant Emitted:	**NOx**	**Nitrogen Oxides**	
2. Requested Emissions Cap:	(lb/hr)	**194.3**	(tons/yr)
3. Basis for Emissions Cap Code:	**ESCPSD**		
4. Facility Pollutant Comment (limit to 400 characters):			

Cogeneration unit (i.e., the CT and DB) permitted using facility-wide emissions reductions from existing UF heating plant which consisted of five boilers. Three of the boilers (Boilers 1,2 and 3) will be taken out of service when the operating permit is received and Boilers 4 and 5 will have reduced operation. There is a facility-wide annual NOx emissions limit of 194.3 tons per year (TPY).

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: UF-FE-1
   [ ] Not Applicable [ ] Waiver Requested

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

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

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

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

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

Additional Supplemental Requirements for Category I Applications Only

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

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

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

13. Risk Management Plan Verification:

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

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

[ ] Not Applicable

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

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

ATTACHMENT UF-FE-B

APPLICABLE REQUIREMENTS LISTING

ATTACHMENT UF-FE-B

Applicable Requirements Listing - Power Plants

FACILITY: FPC University of Florida Cogeneration Plant

FDEP Rules:

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

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

Stationary Sources-General:
- 62-210.300(2)

Exemptions - Plant Specific:
- 62-210.300(3)(a)4. - comfort heating < 1 mmBtu/hr
- 62-210.300(3)(a)5. - mobile sources
- 62-210.300(3)(a)7. - non-industrial vacuum cleaning
- 62-210.300(3)(a)8. - refrigeration equipment
- 62-210.300(3)(a)9. - vacuum pumps for labs
- 62-210.300(3)(a)10. - steam cleaning equipment
- 62-210.300(3)(a)11. - sanders < 5 ft2
- 62-210.300(3)(a)12. - space heating equip.; (non-boilers)
- 62-210.300(3)(a)14. - bakery ovens
- 62-210.300(3)(a)15. - lab equipment
- 62-210.300(3)(a)16. - brazing, soldering or welding
- 62-210.300(3)(a)17. - laundry dryers
- 62-210.300(3)(a)20. - emergency generators < 32,000 gal/yr
- 62-210.300(3)(a)21. - general purpose engines < 32,000 gal.yr
- 62-210.300(3)(a)22. - fire and safety equipment
- 62-210.300(3)(a)23. - surface coating >5% VOC; 6 gal/month
- 62-210.300(3)(a)24. - surface coating <5% VOC

- 62-210.300(3)(b) - Temporary Exemptions
- 62-210.370(3) - AORs
- 62-210.900(5) - AOR Form

Any?

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
62-296.320(4)(c) - Unconfined Emissions of Particulate Matter

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

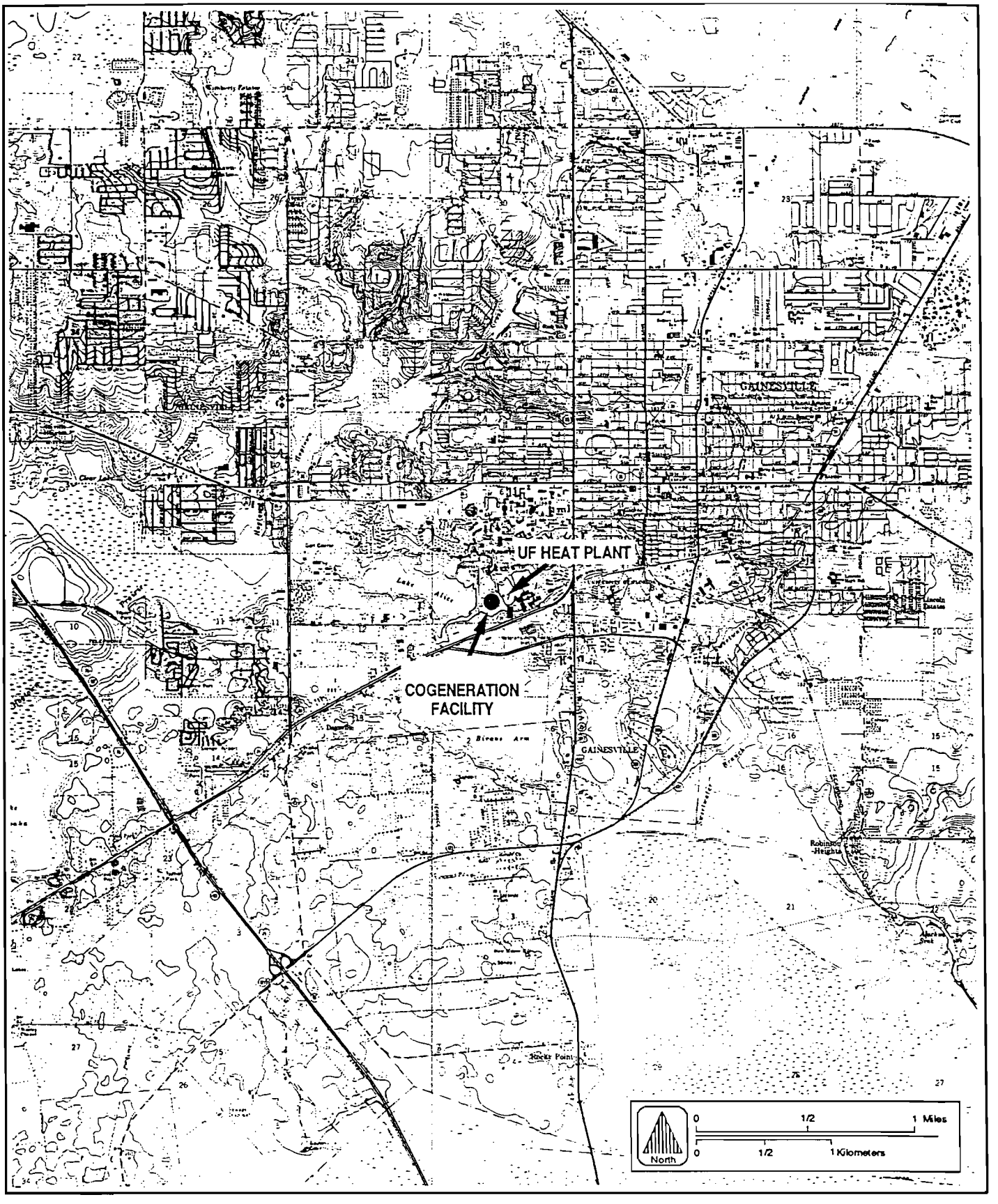
Federal Regulations:

Asbestos Removal:

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

ATTACHMENT UF-FE-1

AREA MAP

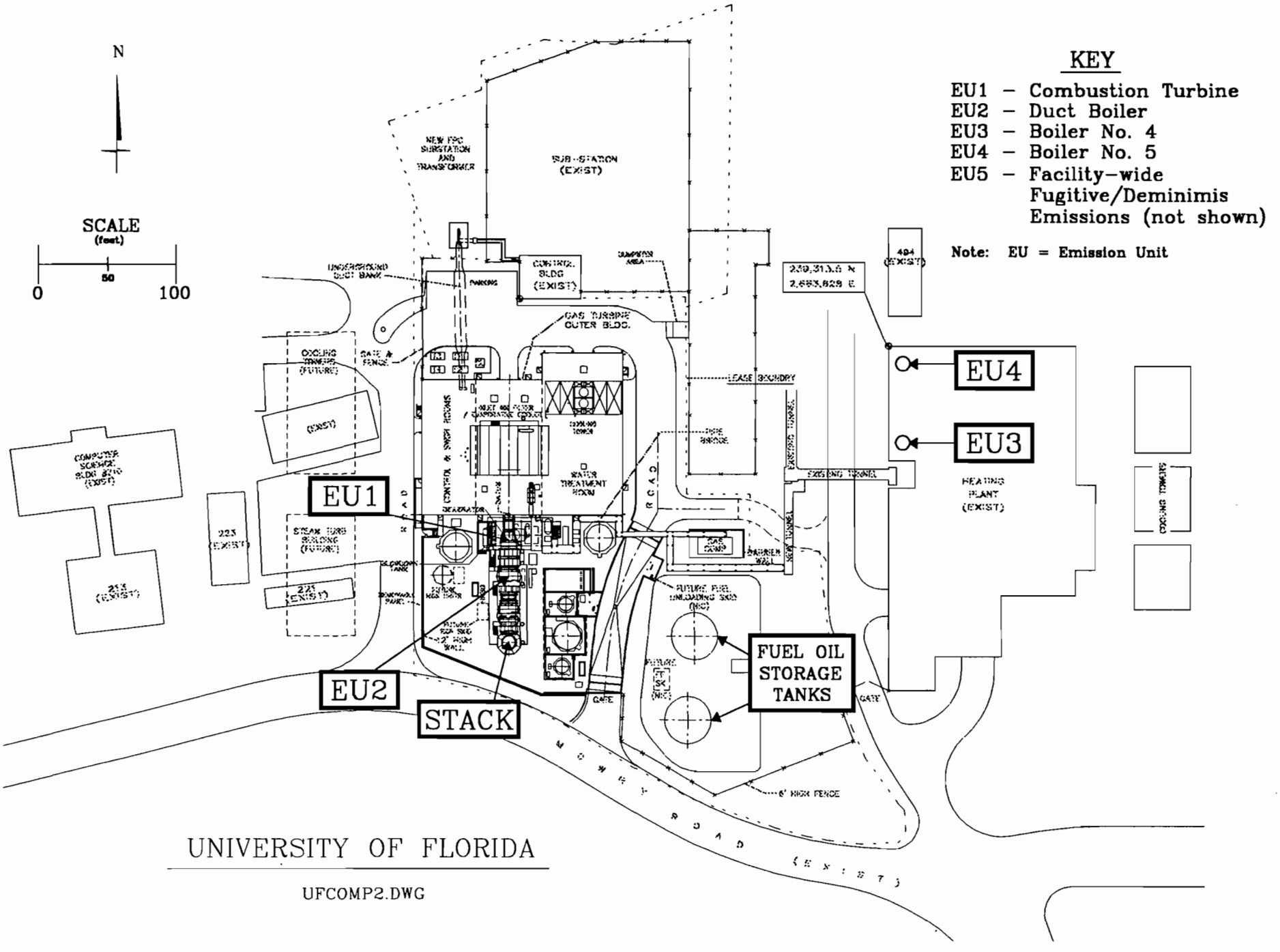


ATTACHMENT UF-FE-1
AREA MAP

KBN

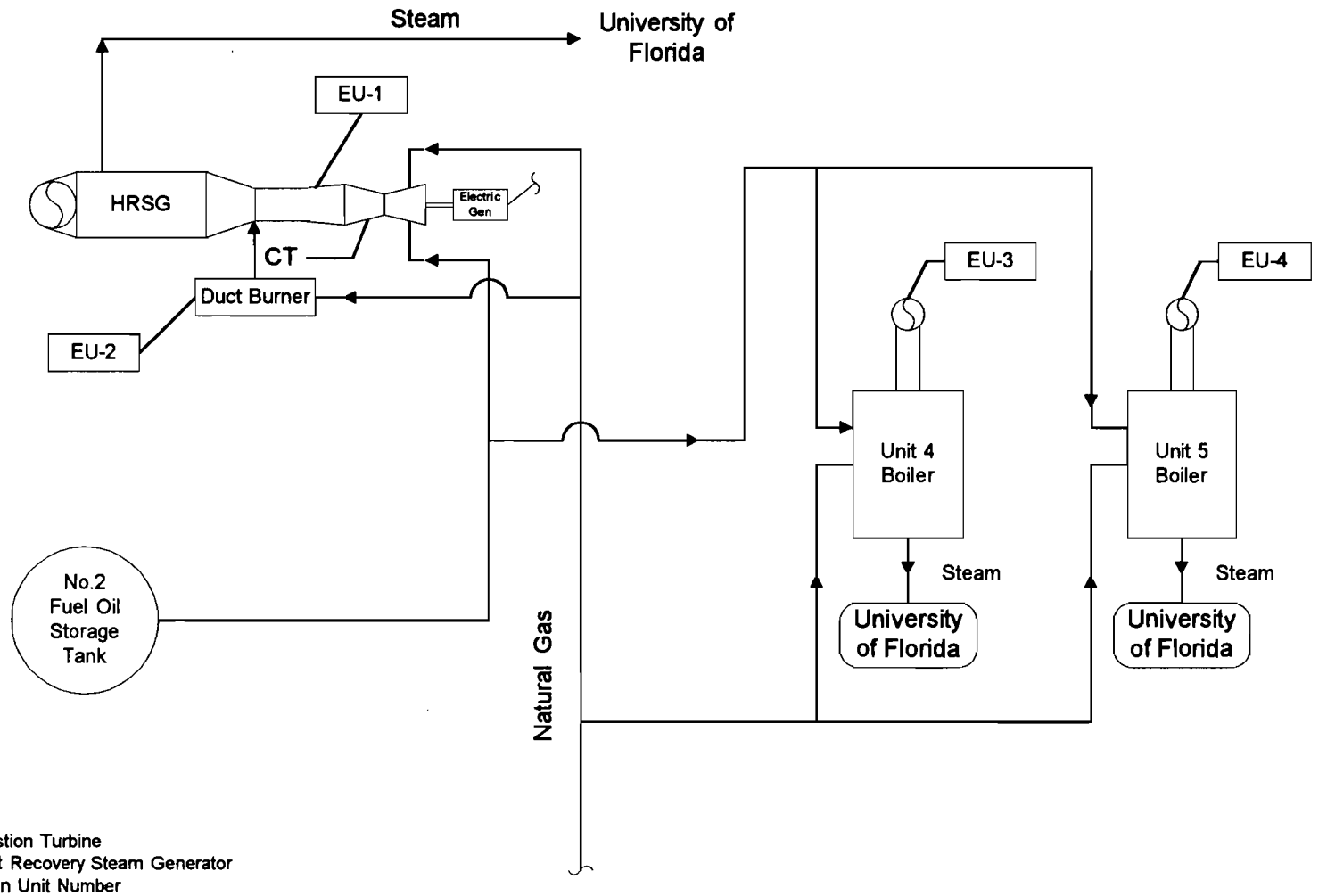
ATTACHMENT UF-FE-2

FACILITY PLOT PLAN


N
SCALE
(feet)
0
50
100
KEY
EU1 – Combustion Turbine
EU2 – Duct Boiler
EU3 – Boiler No. 4
EU4 – Boiler No. 5
EU5 – Facility–wide Fugitive/Deminimis Emissions (not shown)
Note: EU = Emission Unit
EU1
EU2
EU3
EU4
STACK
FUEL OIL STORAGE TANKS
HEATING PLANT (EXIST)
SUB-STATION (EXIST)
GAS TURBINE OUTER BLDG.
CONTROL BLDG (EXIST)
LEASE BOUNDRY
6' HIGH FENCE
GATE
N O W E L L R O A D (EXIST)
UNIVERSITY OF FLORIDA
UFCOMP2.DWG

ATTACHMENT UF-FE-3

PROCESS FLOW DIAGRAM



Note:
CT = Combustion Turbine
HRSG = Heat Recovery Steam Generator
EU = Emission Unit Number
See segment section for the operating rate of each emission unit.
EU 5 - Facility-wide Fugitive/Deminimis Emissions not shown.

Florida Power Corporation		*Emission Unit:* Overall Plant	KBN Engineering and Applied Sciences, Inc.
		Process Area: Overall Plant	
Emission Units	University of Florida	*Filename:* FPCUF.VSD	
		Latest Revision Date: 6/2/96 01:43 PM	

ATTACHMENT UF-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

ATTACHMENT UF-FE-4

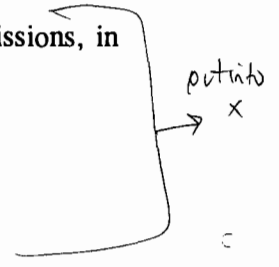
PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

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 UF-FE-5

FUGITIVE EMISSIONS IDENTIFICATION

ATTACHMENT UF-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. 5. This emission unit contains information on fugitive and deminimis emissions that occur on a facility-wide basis. A summary of potential fugitive and deminimis 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
- hydrazine
- sulfuric acid
- mercury compounds
- methyl ethyl ketone
- toluene
- xylene
- morphelene

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.

Chlorine - Used for water treatment at the facility.

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

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

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

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

Regulated Toxic or Flammable Substances

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

- ammonia (aqueous, concentration 20% or greater)
- chlorine
- hydrazine
- hydrochloric acid
- nitric acid
- acetylene
- methane (natural gas)

Ammonia - Used for boiler water treatment.

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

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

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

Methane - Is a primary component of natural gas. The facility has a natural gas pipeline which delivers fuel to the generating units. This fuel delivery system is normally airtight, but does have safety valves which occasionally relieve (open) when an overpressure condition develops in the gas line.

ATTACHMENT UF-FE-9

ALTERNATIVE METHODS OF OPERATION

Attachment UF-FE-9

Alternative Methods of Operation

Facility

The University of Florida Cogeneration Facility was permitted based on phasing out the use of several existing steam boilers (i.e., Boilers 1, 2 and 3) and reducing the usage of several other boilers (i.e., Boilers 4 and 5) when the cogeneration facility is operating. This resulted in a "netting out" of Prevention of Significant Deterioration (PSD) for a majority of the pollutants, including nitrogen oxides (NO_x). To insure that facility-wide NO_x emissions did not exceed the PSD significant emissions rates, a facility-wide emission cap for NO_x was placed in the construction permit for the cogeneration facility. The emission cap is 194.3 tons per year which would effectively allow the cogeneration unit to operate at full capacity with some operation of Boilers 4 and 5. In the event the cogeneration unit is inoperable, Boilers 4 and 5 would have to operate continuously in order to supply steam to the University of Florida and Shands Hospital. There are no individual operating limits on Boilers 4 and 5 other than the requirement that total NO_x emissions from the entire facility must not exceed 194.3 tons/year.

ATTACHMENT UF-FE-12

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT UF-FE-12

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

ATTACHMENT UF-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.

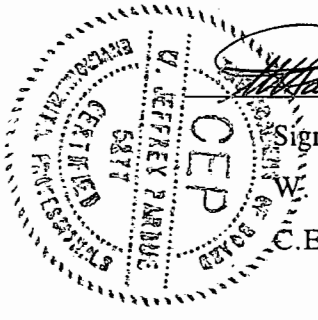
ATTACHMENT UF-FE-15

COMPLIANCE STATEMENT

ATTACHMENT UF-FE-15

COMPLIANCE STATEMENT

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



Signature, Responsible Official — Date: 6-13-96

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:

[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 (LM6000)**		
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): **The CT exhausts through a heat recovery steam generator (HRSG) and a single stack. Duct burners are located between the CT and HRSG and are addressed as a separate emissions unit.**		

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters): **Steam 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: **General Electric**	Model Number: **LM6000**
4. Generator Nameplate Rating: **43** MW	
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	**399**	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 natural gas-firing, 950 Btu/cf (LHV). For oil-firing, maximum heat input 384 MMBtu/hr (LHV).**		

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 UF-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 Att. UF-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 exhaust through a heat recovery steam generator (HRSG) and a single stack.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **Emission Unit 2, Duct Burner**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**93** feet
7. Exit Diameter:	**9.8** feet
8. Exit Temperature:	**257** °F

9. Actual Volumetric Flow Rate:	**365,700** 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): **Information for natural gas firing and based on a fuel flow of 420.3 mcf/hr.**	

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):

   Natural Gas Firing

2. Source Classification Code (SCC):

   2-01-002-01

3. SCC Units:

   Million Cubic Feet Burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
0.42	**2,997**

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:

9. Million Btu per SCC Unit:

   950

10. Segment Comment (limit to 200 characters):

    Field #7-1 gr/100 cf. Max ann. rate-8,146.8 hr/yr at max hr fuel use rate; incr. if less oil fired. Add. 153,083 MMcf/yr allowed if no oil fired-420.3 x 10^3 cf/hr x 219 hr/yr x 1.9 (gas/oil factor).

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): **Distillate oil firing in CT**	
2. Source Classification Code (SCC): **2-01-001-01**	
3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **2.9**	5. Maximum Annual Rate: **635**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	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 = 132.48 (rounded to 132). Heat content based on 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
			emissions limited
NOx	028		EL
SO2			EL
CO			EL
PM			NS no standard
PM10			NS
VOC			NS

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: **66.3** lb/hour **150** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **42 ppmvd** Reference: **permit limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Permit limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max lb/hr - oil firing. Annual emissions - natural gas and oil firing. Emissions limited by hours of operation at maximum fuel use rates. Emission factor for gas - 25 ppmvd @ 15% O2.**

Emissions Unit Information Section 1 of 5

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **ESCPSD**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **39.6 lbs/hr**	
4. Equivalent Allowable Emissions:	**39.6** lb/hour **142.7** 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): **Permit limit. Based on Natural Gas Firing. Additional 7.3 tons/year allowed if lower amounts of oil are fired than are authorized. CMS of steam-to-fuel ratio used as monitoring method.**	

B.

1. Basis for Allowable Emissions Code: **ESCPSD**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **66.3 lbs/hr**	
4. Equivalent Allowable Emissions:	**66.3** lb/hour **7.3** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Comp. Test (> 400 hr/yr of operation), EPA Method 20**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Permit limit. Based on Oil Firing (42 ppm ppmvd corrected to 15% O2).**	

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: **208** lb/hour **27.8** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.49 lb/MMBtu** Reference: **Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Permit limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Annual emissions include SO2 from natural gas (4.9 tons/yr). Maximum hourly emissions based on oil firing with maximum sulfur content of 0.5%.**

Emissions Unit Information Section 1 of 5

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **Other**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.5 % sulfur fuel**	
4. Equivalent Allowable Emissions:	**208.8** lb/hour **22.9** tons/year
5. Method of Compliance (limit to 60 characters): **Fuel Analysis**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on oil firing limit established in permit.**	

B.

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

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **70.5** lb/hour **165.7** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **75 ppmvd** Reference: **Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Emission Factor corrected to 15% O2 oil firing. Permit limit.**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Max lb/hr - oil firing. Annual emissions - natural gas and oil firing. Emissions limited by hours of operation at maximum fuel use rates. Emission factor for natural gas - 42 ppmvd @ 15% O2.**

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

A.

1. Basis for Allowable Emissions Code: **Rule**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **38.8 lbs/hr**	
4. Equivalent Allowable Emissions:	**38.8** lb/hour **158** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance Test, EPA Method 10**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on natural gas firing (42 ppmvd corrected to 15% O2). More tons per year allowed if oil firing reduced from authorized level. Limit established as BACT under 62-212.410 and 62-296.330.**	

B.

1. Basis for Allowable Emissions Code: **Rule**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **70.5 lbs/hr**	
4. Equivalent Allowable Emissions:	**70.5** lb/hour **7.7** tons/year
5. Method of Compliance (limit to 60 characters): **Annual Compliance Test, EPA Method 10**	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): **Based on oil firing (75 ppmvd corrected to 15% O2). Limit established as BACT under 62-212.410 and 62-296.330.**	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 3

1.	Visible Emissions Subtype: **VE10**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **10** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **Annual Compliance Test; EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standard established as part of construction permit. 2. Gas-firing. Only required during initial compliance test and thereafter on oil, if fuel oil usage > 400 hr/yr.**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 3

1.	Visible Emissions Subtype: **VE20**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **Annual Compliance Test > 400 hours/yr; EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standard established as part of construction permit. 2. Oil firing.**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 3

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

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

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

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 1 of 3

1. Parameter Code: EM	2. Pollutant(s): NOX
3. CMS Requirement: [X] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Teco/Enviroplan Model Number: 42 Serial Number: 42-45320-273	
5. Installation Date: 01 Dec 1995	
6. Performance Specification Test Date: 01 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): **Steam-to-fuel ratio is monitored on a continuous basis and a predictive equation, incorporating these parameters, is used to calculate hourly emissions.**	

Continuous Monitoring System Continuous Monitor 2 of 3

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: [ ] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 2342B005-1992*	
5. Installation Date: 01 Dec 1995	
6. Performance Specification Test Date: 01 Dec 1995	
7. Continuous Monitor Comment (limit to 200 characters): *and 93221879. Fuel flow monitoring.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 3 of 3

1. Parameter Code: CO2	2. Pollutant(s):
3. CMS Requirement: [ ] Rule [ ] Other	
4. Monitor Information: Monitor Manufacturer: Model Number: Serial Number: 41H-44967-273	
5. Installation Date: 01 Dec 1995	
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):			
	Emission unit escaped PSD review by netting out based facility-wide emissions before and after the modification. Facility has an annual emissions limit of 194.3 tons/year for NOx.			

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: UF-EU1-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: UF-EU1-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[X] Attached, Document ID: UF-EU1-L3	
	[ ] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[X] Attached, Document ID: UF-EU1-L4	
	[ ] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[ ] Not Applicable
	[X] Previously Submitted, Date: 7 Aug 1995	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: UF-EU1-L6	[ ] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[X] Not Applicable

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation

[X] Attached, Document ID: UF-EU1-L10 [ ] Not Applicable

11. Alternative Modes of Operation (Emissions Trading)

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

12. Identification of Additional Applicable Requirements

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

13. Compliance Assurance Monitoring Plan

[X] Attached, Document ID: UF-EU1-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: UF-EU1-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 UF-EU1-D

APPLICABLE REQUIREMENTS LISTING

ATTACHMENT UF-EU1-D

Applicable Requirements Listing - Power Plants

EMISSION UNIT: FPC University of Florida Cogeneration Facility - Combustion Turbine

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)	

Excess emissions

doesn't need to be a permit

Acid Rain:

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

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

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume
62-297.310(4)(c)	- Required Flow Rate Range-PM/H2SO4/F
62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Method 5-only
62-297.310(5)	- Determination of Process Variables
62-297.310(6)(a)	- Permanent Test Facilities-general
62-297.310(6)(c)	- Sampling Ports
62-297.310(6)(d)	- Work Platforms
62-297.310(6)(e)	- Access
62-297.310(6)(f)	- Electrical Power
62-297.310(6)(g)	- Equipment Support
62-297.310(7)(a)2.	- FFSG excess emissions
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)5.	- PM exemption if <400 hrs/yr
62-297.310(7)(a)6.	- PM exemption if < 200 hrs/6 month

use Appendix SS-1

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/custom plan)
40 CFR 60.335	- Test Methods

Acid Rain-Permits:

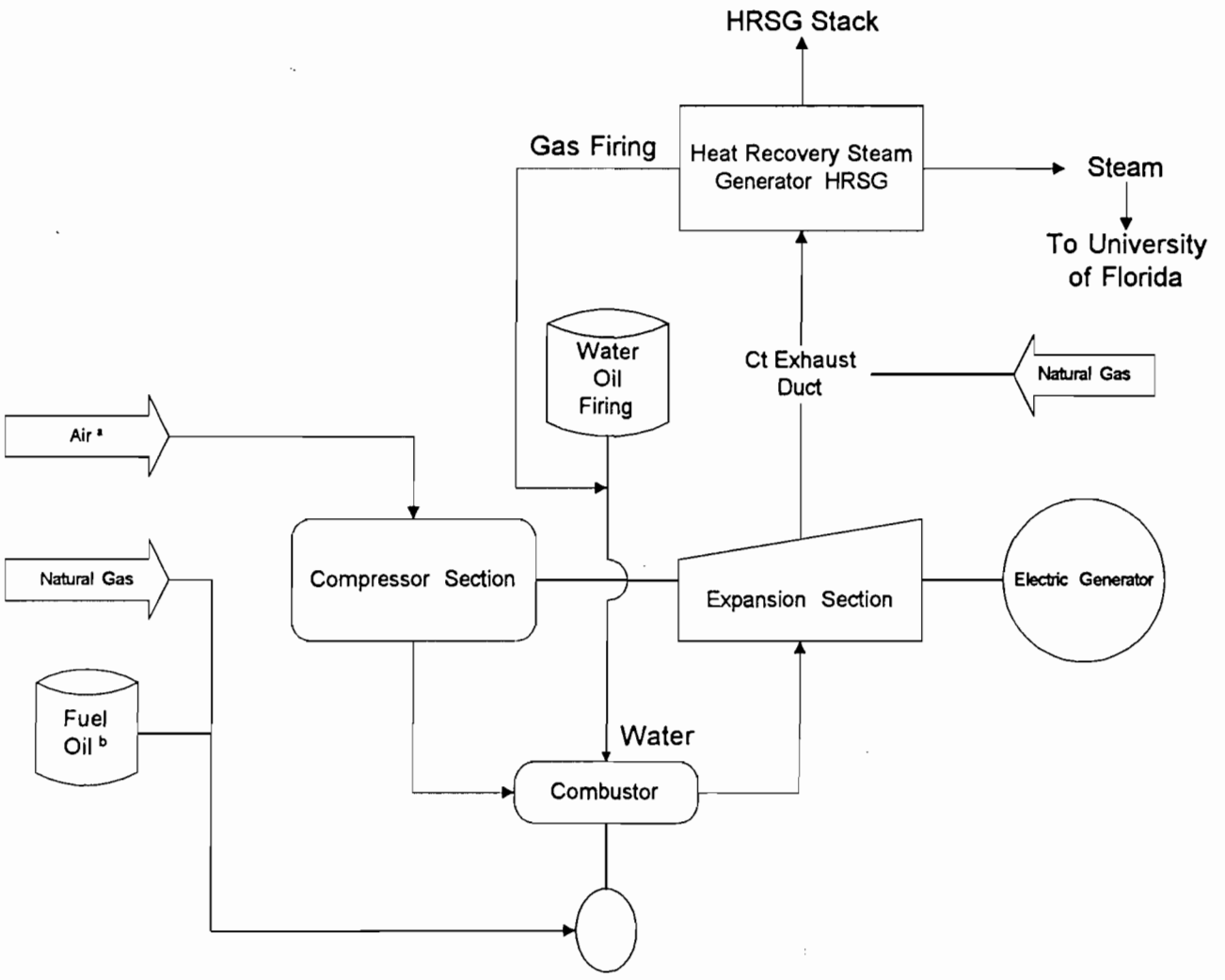
40 CFR 72.9(a)	- Permit Requirements
40 CFR 72.9(b)	- Monitoring Requirements
40 CFR 72.9(c)(1)	- SO2 Allowances-hold allowances
40 CFR 72.9(c)(2)	- SO2 Allowances-violation
40 CFR 72.9(c)(1)(iiv)	- SO2 Allowances- other utility units
40 CFR 72.9(c)(4)	- SO2 Allowances-allowances held in ATS
40 CFR 72.9(c)(5)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

40 CFR 72.40(d)	- General; termination of compliance options
40 CFR 72.51	- Permit Shield
40 CFR 72.90	- Annual Compliance Certification
Monitoring Part 75:	
40 CFR 75.5	- Prohibitions
40 CFR 75.10(a)(2)	- Primary Measurement; NOx; except 75.12&.17; Subpart E
40 CFR 75.10(b)	- Primary Measurement; Performance Requirements
40 CFR 75.10(c)	- Primary Measurement; Heat Input; Appendix F
40 CFR 75.10(f)	- Primary Measurement; Minimum Measurement
40 CFR 75.10(g)	- Primary Measurement; Minimum Recording
40 CFR 75.11(d)	- SO2 Monitoring; Gas- and Oil-fired units
40 CFR 75.11(e)	- SO2 Monitoring; Gaseous fuel firing
40 CFR 75.12(b)	- NOx Monitoring; Determination of NOx emission rate; Appendix F
40 CFR 75.20(a)(5)	- Initial Certification Approval Process; Loss of Certification
40 CFR 75.20(b)	- Recertification Procedures
40 CFR 75.20(c)	- Certification Procedures
40 CFR 75.20(g)	- Exceptions to CEMS; oil/gas/diesel; Addendix D & E
40 CFR 75.21(a)	- QA/QC; CEMS;
40 CFR 75.21(b)	- QA/QC; Opacity;
40 CFR 75.21(c)	- QA/QC; Calibration Gases
40 CFR 75.21(d)	- QA/QC; Notification of RATA
40 CFR 75.21(e)	- QA/QC; Audits
40 CFR 75.21(f)	- QA/QC; CEMS
40 CFR 75.22	- Reference Methods
40 CFR 75.24	- Out-of-Control Periods; CEMS
40 CFR 75.30(a)(3)	- General Missing Data Procedures; NOx
40 CFR 75.32	- Monitoring Data Availability for Missing Data
40 CFR 75.33	- Standard Missing Data Porcedures
40 CFR 75.36	- Missing Data Procedures for Heat Input
40 CFR 75.53	- Monitoring Plan (revisions)
40 CFR 75.54(a)	- Recordkeeping-general
40 CFR 75.54(b)	- Recordkeeping-operating parameter
40 CFR 75.54(d)	- Recordkeeping-NOx
40 CFR 75.55(c);(e)	- Recordkeeping; Special Situations (gas & oil firing)
40 CFR 75.56	- Certification; QA/QC Provisions
40 CFR 75.60	- Reporting Requirements-General
40 CFR 75.61	- Reporting Requirements-Notification cert/recertification
40 CFR 75.63	- Reporting Requirements-Certification/Recertification
40 CFR 75.64(a)	- Reporting Requirements-Quarterly reports; submission
40 CFR 75.64(b)	- Reporting Requirements-Quarterly reports; DR statement
40 CFR 75.64(c)	- Rep. Req.; Quarterly reports; Compliance Certification
40 CFR 75.64(d)	- Rep. Req.; Quarterly reports; Electronic format
Appendix A-3.	- Performance Specifications
Appendix A-4.	- Data Handling and Acquisition Systems
Appendix A-5.	- Calibration Gases
Appendix A-6.	- Certification Tests and Procedures

Appendix B	- QA/QC Procedures
Appendix C-1.	- Missing Data; SO2/NOx for controlled sources
Appendix C-2.	- Missing Data; Load-Based Procedure; NOx & flow
Appendix F	- Conversion Procedures
Appendix G-2.	- Determination of CO2; from combustion sources
Appendix H	- Traceability Protocol
40 CFR Part 77.3	- Offset Plans (future)
40 CFR Part 77.5(b)	- Deductions of Allowances (future)
40 CFR Part 77.6	- Excess Emissions Penalties SO2 and NOx

ATTACHMENT UF-EU1-L1

PROCESS FLOW DIAGRAM



Notes:
(a) cooled from ambient
(b) emergency backup only-10 days/year

Flow Diagram of Emission Unit

Florida Power Corporation		*Emission Unit:* CombustionTurbine / Duct Burner	KBN Engineering and Applied Sciences, Inc.
		Process Area: Overall Plant	
Emission Units	University of Florida	*Filename:* FPCUF2.VSD	
		Latest Revision Date: 6/7/95 01:26 PM	

ATTACHMENT UF-EU1-L2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT UF-EU1-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 UF-EU1-L2
FUEL ANALYSIS

No. 2 Fuel Oil

Parameter	Typical Value	Max Value
API gravity @ 60 F	30[1]	-
Relative density	6.92 lb/gal [2]	
Heat content	18,400 Btu / lb (LHV)	
% sulfur	0.04 [2]	0.5 [3]
% nitrogen	0.025 - 0.03	
% ash	negligible	0.1 [1]

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

[1] Data taken from the FPC fuel procurement specification

[2] Data from laboratory analysis

[3] Data from current air permit.

ATTACHMENT UF-EU1-L3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT UF-EU1-L3

Detailed Description of Control Equipment

The combustion turbine (CT) is equipped with a steam injection system for the control of nitrogen oxide (NO_x) emissions. The intermediate section of the heat recovery steam generator (HRSG) is the predominant supplier of the NO_x injection steam. However, during operation of the CT on distillate oil, additional steam from the main section of the HRSG is required to control NO_x emissions.

The steam flow to the CT is measured by a pitot tube which has an accuracy of +/- 1 percent of the steam flow quantity. The fuel consumption of each CT is measured by an orifice plate which compensates for temperature and pressure. The orifice plate is accurate to +/- 1 percent of the fuel flow.

The pitot tube and orifice plate each generate a milliamp signal during operation. These signals are sent to the power plant's distribution control system (DCS). The DCS calculates and records the steam-to-fuel ratio at all times to the setpoints which were established during initial startup testing for the combined-cycle unit.

If a condition develops in which the steam-to-fuel ratio varies more than 1 percent from the established curve, an audible alarm alerts the operator at the plant control center who can initiate actions to correct the situation.

ATTACHMENT UF-EU1-L4

DESCRIPTION OF STACK SAMPLING FACILITIES

Figure 6. Stack sampling port location
University of Florida Co-Gen Unit

EAST ELEVATION

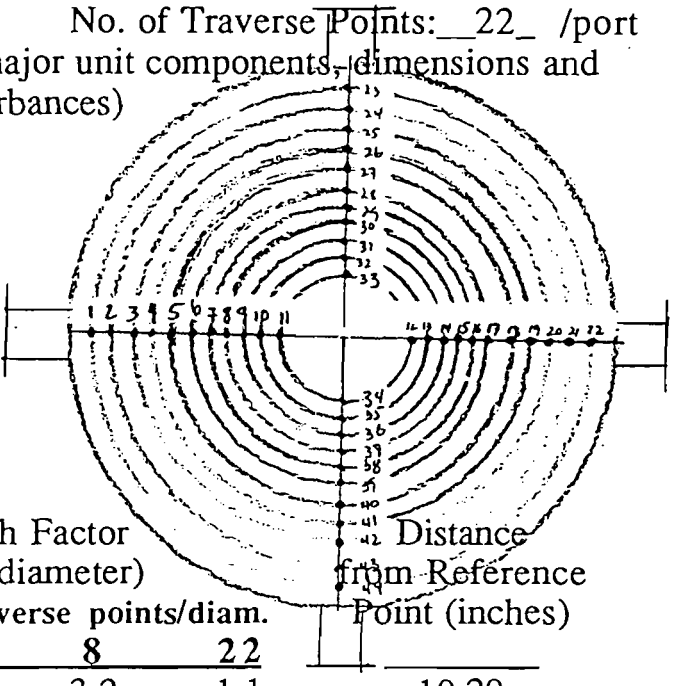
Florida Power
CORPORATION

Circular Stack Sampling Traverse Point Layout
(EPA Method 1)

Date: June 3, 1994
Plant: FPC : University of Florida
Source: GE LM-6000
Technician(s): RJK, LJB, SAJ, SMB

Port + Stack ID: 126 in.
Port Extension: 9 in.
Stack ID: 117 in.
Stack Area: 74.66 ft^2
Total Req'd Traverse Points: 44
No. of Traverse Points: 22 /diam.
No. of Traverse Points: 22 /port

Stack Diagram (Side View showing major unit components, dimensions and nearest upstream and downstream disturbances)



Traverse Point Number	Length Factor (% of diameter) Number of traverse points/diam. 4	6	8	22	Distance from Reference Point (inches)
1	6.7	4.4	3.2	1.1	10.29
2	25.0	14.6	10.5	3.5	13.10
3	75.0	29.6	19.4	6.0	16.02
4	93.3	70.4	32.3	8.7	19.18
5		85.4	67.7	11.6	22.57
6		95.6	80.6	14.6	26.08
7			89.5	18.0	30.06
8			96.8	21.8	34.51
9				26.2	39.65
10				31.5	45.86
11				39.3	54.98
12				60.7	80.02
				68.5	89.15
				73.8	95.35
				78.2	100.05
				82.0	104.94
				85.4	108.92
				88.4	112.43
				91.3	115.82
				94.0	118.98
				96.5	121.91
				98.9	124.71

ATTACHMENT UF-EU1-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT UF-EU1-L6
PROCEDURES FOR STARTUP/SHUTDOWN

Startup for the combustion turbines (CT) begins with "lighting off" of the machines on either natural gas or light distillate oil. A period of from two to several hours is required to allow metal temperatures in the heat recovery steam generator (HRSG) and in the steam turbine to equilibrate without undue metal stress, before putting the unit "on the line" and sending electrical power to the grid.

The CT utilizes state-of-the-art combustors for NO_x minimization during startup and shutdown. Emissions are continuously monitored by Continuous Emission Monitors (CEMs) for O_2 and NO_x. If excess emissions are encountered during startup or shutdown, the nature and cause of any malfunction is identified, along with the corrective actions taken or preventative measures adopted. Corrective actions may include switching the unit from automatic (remote) to local control, or changing fuel combination(s). Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

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

ATTACHMENT UF-EU1-L10

ALTERNATIVE METHODS OF OPERATION

Attachment UF-EU1-L10

Alternative Methods of Operation

Combustion Turbine

The combustion turbine can operate on both natural gas and distillate oil. The construction permit allocated full-load equivalent fuel usage of 8,146.8 hours/year on natural gas and 219 hours/year on distillate oil. The emission limits in terms of tons/year were based on these operating rates. The construction permit also provided for greater natural gas usage in the event distillate oil is not used to the maximum extent as provided in the permit (i.e, oil usage less than 219 hours per year). The permit allows for an additional 1.9 hours/year operation for each hour that oil is not burned below its allocation of 219 hours/year. If oil is not used an additional 416.1 hours/year of natural gas firing is allowed for a total of 8,562.9 hours/year operation on natural gas. This would allow an adjustment (i.e.,increase) in the annual emission limits for gas firing of 5.1 percent.

ATTACHMENT UF-EU1-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

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

REQUEST TO CHANGE CONDITIONS THAT ARE OBSOLETE AND OUTDATED

This request is to modify or remove from the Title V permit, several conditions of the FDEP issued PSD/air construction permit (AC53-214903;PSD-FL-190) 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 2:

FPC requests that the limits for the duct burner be combined with the combustion turbine for the purpose of demonstrating compliance. The initial compliance tests that demonstrated compliance with 40 CFR Part 60 Subpart Db has been conducted. Since the annual emissions of the duct burner are less than 100 tons/year, there is no underlying requirement in the FDEP rules that would require annual testing. Annual compliance tests are only required under the Department's rule if emissions are 100 tons/year or more [see Rule 62-297.310(7)(a)4.b.]. In addition, the duct burner cannot operate independently of the combustion turbine. The request is to modify the emission limits for NOx from the duct burner = 18.7 lbs/hr to combustion turbine(CT)/duct burner (DB) =58.3 lb/hr [39.6 lb/hr (CT) + 18.7 lb/hr (DB)] and modify the emission limits for CO from the duct burner = 38.8 lbs/hr to CT/DB =66.9 lb/hr [38.8 lb/hr (CT) + 28.1 (DB) lb/hr]. It is requested that compliance be tested on an annual basis for the CT and the CT/DB. The application has been prepared to indicate the implementation of this request.

FPC also requests that the tons/yr limits be combined as a limit for the cogeneration unit. The purpose of the limits for NOx was to "net-out" of PSD review for this pollutant by using emission reduction from existing boilers. The resulting total tons of 194.3 tons/year met that requirement for netting out of PSD review and included the emissions from the cogeneration unit (see Specific Condition 3). The total NOx limit incorporates the NOx emission limits for each unit which is 174.6 tons/yr. Thus, having separate limits is obsolete. The limits for CO were established by the limits for NOx. It is therefore requested that the tons/yr limits be 174.6 tons/yr for NOx and 202.6 tons/yr for CO.

Specific Condition 7

This condition is now unnecessary, since compliance has been demonstrated for NOx and CO. The condition is outdated and should not be included in the Title V permit.

Department of
Environmental Protection

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

Lawton Chiles
Governor

Virginia B. Wetherell
Secretary

February 23, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jeffrey Pardue, Director
Environmental Service Department
Florida Power Corp.
P.O. Box 14042
St. Petersburg, FL 33733

Dear Mr. Pardue:

RE: FPC UF Cogen
AC01-204652/PSD-FL-181(A)
Request to Amend Permit

Attached is one copy of the proposed amendment to the construction permit, Intent to Issue, and Notice of Intent to Issue (for publication by the applicant) for the above referenced emission unit.

Please submit any comments you may have concerning the Department's proposed action to Mr. A. A. Linero, P.E., at the above address. If you have any questions, please call Mr. Martin Costello or Mr. Linero at (904) 488-1344.

Sincerely,

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

CHF/mc/t

cc: Ernest Frey, NED
Jewell Harper, EPA

DRAFT

February XX, 1996

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Jeffrey Pardue, Director
Environmental Service Department
Florida Power Corp.
P.O. Box 14042
St. Petersburg, FL 33733

Dear Mr. Pardue:

RE: FPC UF Cogen
AC01-204652/PSD-FL-181(A)
Request to Amend Permit

The Department has evaluated your request for an increase in the heat input to the combustion turbine for operation at ambient temperatures near 45 F and a corresponding increase in the short term NO_x emission standard (lb/hr). Your request indicated that no increase in annual NOx emissions would occur as a result of this change (application page 8). The Department hereby amends the above referenced permit Specific Conditions 2 and 3 as follows:

2. Emissions from this facility shall not exceed the limits listed below:

Pollutant	Source	Fuel	Basis of Limit	lbs/hr	tons/yr
NOx	Turbine	Gas	EBM*:25 ppmvd @ 15% O2	~~35.0~~ 39.6	142.7
	Turbine	Oil	EBM*:42 ppmvd @ 15% O2	66.3	7.3
	D. Burner	Gas	EBM*:0.1 lb/MMBtu	18.7	24.6
SO_2	Turbine	Oil	BACT:0.5% Sulfur Max.	---	---
	Boiler 4	Oil	BACT:0.5% Sulfur Max.	---	---
	Boiler 5	Oil	BACT:0.5% Sulfur Max.	---	---
VE	Turbine	Gas/Oil	Equivalent of mass EBM*	10%/20% opacity**	
	D. Burner	Gas	" " "	10% opacity**	
	Boiler4	Gas/Oil	" " "	10%/20% opacity**	
	Boiler 5	Gas/Oil	" " "	10%/20%opacity**	
CO	Turbine	Gas	BACT: 42 ppmvd	38.8	158.0
	Turbine	Oil	EBA***:75 ppmvd	70.5	7.7
	D. Burner	Gas	BACT:0.15 lb/MMBtu****	28.1	36.9

*EBM: Established by manufacturer
**Except for one 6-minute period per hour of not more than 27% opacity
***EBA: Established by applicant
****BACT limit proposed by applicant in Table A-2 of application

3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

	Natural Gas			No. 2 Fuel Oil		
	M ft^3/hr*	MM ft^3/yr	hrs/yr*	M gal/hr*	M gal/yr	hrs/yr*
Turbine	~~367.9~~ 420.3	2997.2**	8146.8**	2.9	635.1	219.0**
Duct Burner	197.7	519.5	2628.0	0	0	0

*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.

**An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hrs/yr), in which case, the emissions limits in Specific Condition No. 2 shall be adjusted accordingly.

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit AC01-204652/PSD-FL-181(A).

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources Management

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 _____ 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.

_____ _____
Clerk Date

Copies to be furnished to:

Ernest Frey, NED
Jewell Harper, EPA

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an
Application for Permit Amendment
Florida Power Corp.
P.O. Box 14042
St. Petersburg, FL 33733
Alachua County
_____/

DEP File No. AC01-204652
PSD-FL-181(A)

INTENT TO ISSUE

The Department of Environmental Protection (Department) gives notice of its intent to issue a amendment to the above referenced permit for the proposed changes detailed in the application specified above, for the reasons stated below.

The applicant, Florida Power Corp., applied to the Department of Environmental Protection to amend the air construction permit to provide an increase in the fuel usage rate limit (from 367.9 to 420.3 thousand cubic feet of natural gas per hour) for the combustion turbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr). This action was requested to accommodate operation at ambient conditions (45°F) which allows for higher operation rates for this unit equipped with an evaporative cooler on the inlet to the turbine. The facility's annual emissions cap for NOx emissions will not increase. This facility is located on the campus of the University of Florida, Alachua County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that the previous construction permit has expired and that a new permit with the approved amendments is required for the proposed changes.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

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, 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 permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. 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 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 intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/ request 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 intent 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.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **INTENT TO ISSUE PERMIT** all copies were mailed by certified mail before the close of business on 2-27-96 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.

Clerk 2-27-96
Date

Copies furnished to: Ernest Frey, NED
Jewell Harper, EPA

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF INTENT TO ISSUE PERMIT
AC01-204652/PSD-FL-181(A)

The Department of Environmental Protection (Department) gives notice of its intent to issue an amended permit to Florida Power Corp. (FPC), P.O. Box 14042, St. Petersburg, FL 33733 to increase the fuel usage rate limit (from 367.9 to 420.3 thousand cubic feet of natural gas per hour) for the combustion turbine with a corresponding increase in the short term NOx emission standard (from 35.0 to 39.6 lb/hr) at FPC's facility located on the campus of the University of Florida on Mowry Road in Alachua County. This action was requested to accommodate operation at ambient conditions (45°F) which allow for higher operation rates for this unit equipped with an evaporative cooler on the inlet to the turbine. The facility's annual emissions cap for NOx emissions will not increase.

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 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, within 14 days of publication of this notice. 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 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 Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/ request 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 publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7577

Department of Environmental Protection
Gainesville Branch Office
5700 S.W. 34th Street, Suite 1204
Gainesville, Florida 32608

Any person may send written comments on the proposed action to Administrator, New Source Review at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

p.2 - Are they willing to grant our May request.

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

May 22, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director
Environmental Service Department
Florida Power Corporation
P. O. Box 14042
St. Petersburg, Florida 33733

Dear Mr. Pardue:

RE: University of Florida Cogeneration Facility Alachua County
AC01-204652 and PSD-Fl-181
Request for Amendment of Construction Permit

The Department is in receipt of your March 31 letter requesting to incorporate the EPA approved custom fuel monitoring schedule and to amend Specific Conditions No. 2, No. 3, and No. 8 of the above mentioned permit. This permit was issued under a stipulated settlement (OGC case No. 91-1113). The Department has evaluated your request and determines the following:

CUSTOM FUEL MONITORING SCHEDULE:

FPC'S REQUEST:

To incorporate the EPA approved custom fuel monitoring schedule for sulfur in natural gas.

DEPARTMENT'S RESPONSE:

The Department will amend the permit to incorporate the fuel monitoring schedule. The attached EPA custom fuel monitoring schedule shall be part of this permit.

SPECIFIC CONDITION NO.2

FPC'S REQUEST:

To delete reference to boiler No. 2 with no increases in the current cap for typ of NO_x for boilers No. 4 and 5.

DEPARTMENT'S RESPONSE:

Based on discussion with Company personnel, we understand FPC will withdraw this request and will use a rental boiler and the emergency order if needed. The Department's Office of General Counsel will review the draft order.

SPECIFIC CONDITION No.3

FPC'S REQUEST:

An Alternate to the NSPS testing requirements for the Subpart Db duct burner was proposed which involved combining the NO_x emission limits from the turbine and the duct burner. You provided a draft letter from the Department to EPA which proposed to demonstrate compliance with the duct burner NSPS NO_x emission standards (0.2 lb/MMBtu) without conducting a Method 20 upstream of the duct burner.

DEPARTMENT'S RESPONSE:

- Subpart Db establishes NO_x emission limits for the gas fired duct burner (0.2 lb/MMBtu pursuant to 40 CFR 60.44b) and Method 20 is specified upstream and down stream of the duct burner to demonstrate compliance (40 CFR 60.46b).

- 40 CFR 60.8(e)(1) requires the owner or operator of an affected facility to provide or cause to be provided, performance testing facilities including sampling ports adequate for test methods applicable to such facility.

- The requested alternate testing procedure must be reviewed pursuant to Rule 62-297.620, F.A.C., Exceptions and Approval of Alternate Procedures and Requirements (attached). FPC should provide the information required in Rule 62-297.620, F.A.C.

- The Department intends to deny the request to combine the emission limits from the turbine and duct burner unless and until an approved alternate sampling procedure is obtained from the Department's Emissions Monitoring Section. These are separate NSPS emissions units (Subpart GG and Subpart Db) and current NSPS regulations require that compliance be demonstrated for each emissions unit. The draft letter to EPA will not be sent. We understand that a second (revised) draft letter to EPA will be sent by FPC to the Department for review.

o The Department intends to amend AC01-203652/PSD-FL-181 to require NO_x and CO testing prior to obtaining the operating permit. Compliance testing on the duct burner will not be required annually since this emissions unit emits less than 100 tpy of NO_x or CO and there are significant difficulties with conducting the required Method 20 upstream of the duct burner. This will allow additional time for FPC to resolve the duct burner compliance test issues.

SPECIFIC CONDITION No. 8

FPC'S REQUEST:

To increase heat input rate from the turbine by 10% and corresponding increases in lb/hr of NO_x with no increases in tpy. FPC indicated that tpy NO_x limits would be demonstrated using the water-to-fuel monitor until 1996 when a NO_x CEMS would be used in place of the water/fuel monitor. The NO_x CEMS will be installed to meet the requirements of 40 CFR Part 75.

DEPARTMENT'S RESPONSE:

o The revised BACT determination for PSD-FL-181 established BACT for CO only. NO_x was not triggered for PSD review. There were 114.9 tpy of NO_x offsets listed from shutting down units 1, 2, and 3. The net increase in emissions totaled 39.7 tpy, just 0.3 tpy below the significance level for PSD review. From that BACT determination:

> "The application indicates that emissions of other pollutants will not be subject to a BACT determination. The applicant narrowly escaped PSD review for NO_x by lowering firing rates, and since increased firing rates may be requested at some time in the future, the Department will require that retrofit costs associated with the applicant's decision not to make initial provisions for future installation of advanced catalytic control shall not be considered in any cost analysis required for any future requested increase in capacity".

o BACT for similar combustion turbines when PSD-FL-181 was under review was 15 ppmvd @ 15% oxygen for gas firing to be obtained by 1997 or 1998. These emission levels were thought to be achievable using dry low NO_x combustor technology or SCR. This BACT, 15 ppmvd @ 15% oxygen, has been demonstrated currently using dry low NO_x burners. The NO_x standard in PSD-FL-181 was set at 25 ppmvd @ 15% oxygen for natural gas.

o The requested increase in lb/hr of NO_x emissions constitutes a modification. If approved, the Department would reissue the construction permit and public notice this action.

o The following information is requested to help the Department resolve this request. Please describe how FPC determined that increased heat rates, and corresponding increased NO_x emission rates, are achievable based on the initial performance test. Provide manufactures curves and example calculations. Please describe how tpy of NO_x are monitored for each emissions unit. State if any F factors will be used when the NO_x CEMS system is used for NO_x tpy monitoring. Supply example calculations and state all assumptions for these calculations. Describe fuel and process monitoring associated with the NO_x monitoring.

Submit any written inquiries or additional information to me at the above address. If you have any questions or need clarification on any of these items, please call Martin Costello at (904)488-1344.

Sincerely,

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

CHF/mc/h

attachments: Mr. Pardue's letter of March 31, 1995
EPA's custom fuel monitoring schedule guidance
Rule 62-297.620, F.A.C.

cc: Robert Leetch, NED
John Reynolds
Mike Harley
Morton Benjamin
Martin Costello

62-297.620 Exceptions and Approval of Alternate Procedures and Requirements.

(1) The owner or operator of any emissions unit subject to the provisions of this chapter may request in writing a determination by the Secretary or his/her designee that any requirement of this chapter (except for any continuous monitoring requirements) relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to such emissions unit and shall request approval of an alternate procedures or requirements.

(2) The request shall set forth the following information, at a minimum:

(a) Specific emissions unit and permit number, if any, for which exception is requested.

(b) The specific provision(s) of this chapter from which an exception is sought.

(c) The basis for the exception, including but not limited to any hardship which would result from compliance with the provisions of this chapter.

(d) The alternate procedure(s) or requirement(s) for which approval is sought and a demonstration that such alternate procedure(s) or requirement(s) shall be adequate to demonstrate compliance with applicable emission limiting standards contained in the rules of the Department or any permit issued pursuant to those rules.

(3) The Secretary or his/her designee shall specify by order each alternate procedure or requirement approved for an individual emissions unit source in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be final agency action, reviewable in accordance with Section 120.57, Florida Statutes.

(4) In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule.

Specific Authority: 403.061, F.S.

Law Implemented: 403.021, 403.031, 403.061, 403.087, F.S.

History: Formerly 17-2.700(3); Amended 6-29-93; Formerly 17-297.620; Amended 11-23-94.

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

CERTIFIED - RETURN RECEIPT

RECEIVED
AUG 15 1994
Environmental Svcs
Department

August 4, 1994

Mr. W. Jeffery Pardue, C.E.P.
Florida Power Corporation
P.O.Box 14042 (H2G)
St. Petersburg, Florida 33733

Dear Mr. Pardue:

Alachua County - AP
Florida Power Corp. at UF

Emission Unit	Permit No.	ID No.
Cogen GT Plant	AC01-204652	31JAX01000101

This permit is extended to 06-02-95 to coordinate this emissions unit with the submittal of the Title V source (facility) permit application which shall be submitted by 04-02-95 per FAC Rule 17-213.420(1)(a)1.a.

Since this extension is in lieu of processing an operation permit application for a short-term operation permit, the testing required by this permit shall be performed initially and annually thereafter.

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

If there are any questions, please contact Johnny Cole at (904) 448-4310, Ext. 236.

Sincerely,

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

EEF:RJC

AUG 21 1992

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 South
St. Petersburg, Florida 33733

DER File No. AC 01-204652
PSD-FL-181
Alachua County

Enclosed is Permit Number AC 01-204652 to construct a 43 MW cogeneration facility at the University of Florida's Central Heat Plant facility in Gainesville, Alachua County, Florida, issued pursuant to Section(s) 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 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:
A. Kutyna, NED
J. Harper, EPA
C. Shaver, NPS
K. Kosky, P.E.

Final Determination

Florida Power Corporation/University of Florida Cogeneration Project
Alachua County, Florida

Permit No. AC 01-204652
PSD-FL-181

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

August 7, 1992

Final Determination

The Technical Evaluation and Preliminary Determination for the permit to construct a 43 megawatt cogeneration facility at the University of Florida Central Heat Plant in Gainesville, Alachua County, Florida, was distributed on June 30, 1992. The Notice of Intent to Issue was published in the Gainesville Sun on July 3, 1992. Copies of the evaluation were available for public inspection at the Department's Tallahassee and Jacksonville offices.

Comments were submitted by the applicant on July 29, 1992, requesting modification of Specific Conditions Nos. 3, 4, and 7. The Department made the following changes in response to those comments:

Specific Condition No. 3 - Specific limits for Boilers 4 and 5 were replaced with a total NO_x cap to provide operational flexibility in the event of gas curtailments.

Specific Condition No. 4 - The required operating rate during the compliance test was modified to reflect the maximum capacity achievable at a given ambient temperature.

Specific Condition No. 7 - Language was added to clarify that a revised BACT analysis is dependent on the facility meeting the emission limits.

The final action of the Department will be to issue construction permit AC 01-204652 (PSD-FL-181) as modified.

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
3201 - 34th Street South
St. Petersburg, FL 33733

Permit Number: AC 01-204652
PSD-FL-181
Expiration Date: December 31, 1994
County: Alachua
Latitude/Longitude: 29°38'23"N
82°20'55"W
Project: UF Cogeneration Facility

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 the construction of a 43 Megawatt cogeneration facility consisting of replacement of existing boiler Nos. 1, 2, and 3 with a GE LM-6000 combustion turbine in series with a duct burner at a designed flow of 325,200 ACFM, and operating existing boiler Nos. 4 and 5 as auxiliary units.

Particulate emissions shall be controlled by using clean fuels and good combustion practices. CO emissions shall be initially controlled by proper combustion techniques. NO_x emissions shall be initially controlled by steam injection. Future control requirements for CO and NOx will be established by a revised BACT determination if deemed necessary by the Department.

The facility is located at the existing Central Heat Plant on the campus of the University of Florida in Gainseville, Alachua County, Florida. The UTM coordinates are 369.4 km East and 3,279.3 km North.

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

Attachments are listed below:

1. FPC letter dated 11-13-91.
2. FPC letter dated 11-25-91.
3. KBN letter dated 12-2-91.
4. DER incompleteness letter dated 12-31-91.
5. FPC letter dated 1-2-92.
6. EPA letter dated 1-8-92.
7. DER letter to EPA dated 1-16-92.

Attachments Cont'd

8. KBN letter dated 1-30-92.
9. FPC letter to EPA dated 2-6-92.
10. DER letter to EPA dated 2-12-92.
11. DER letter to EPA dated 2-14-92.
12. FPC response to incompleteness dated 3-5-92.
13. FWS letter to DER dated 4-2-92.
14. EPA letter to DER dated 4-8-92.
15. KBN letter to DER dated 4-8-92.
16. EPA letter to DER dated 6-16-92.
17. FPC letter to DER dated 6-19-92.
18. FPC letter to DER dated 7-29-92.

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.

GENERAL CONDITIONS:

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

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

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

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

GENERAL CONDITIONS:

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.

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)

GENERAL CONDITIONS:

14. The permittee shall comply with the following:

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

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

c. Records of monitoring information shall include:

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

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

SPECIFIC CONDITIONS:

1. Unless otherwise indicated, the construction and operation of the subject cogeneration facility shall be in accordance with the capacities and specifications stated in the application.

PERMITTEE:
Florida Power Corporation

Permit Number: AC 01-204652
PSD-FL-181
Expiration Date: December 31, 1994

SPECIFIC CONDITIONS:

2. Emissions from this facility shall not exceed the limits listed below:

Pollutant	Source	Fuel	Basis of Limit	lbs/hr	tons/yr
NOx	Turbine	Gas	EBM*:25 ppmvd @ 15% O2	35.0	142.7
	Turbine	Oil	EBM*:42 ppmvd @ 15% O2	66.3	7.3
	D.Burner	Gas	EBM*:0.1 lb/MMBTU	18.7	24.6
SO2	Turbine	Oil	BACT:0.5% Sulfur Max.	-	-
	Boiler 4	Oil	BACT:0.5% Sulfur Max.	-	-
	Boiler 5	Oil	BACT:0.5% Sulfur Max.	-	-
VE	Turbine	Gas/Oil	Equivalent of mass EBM*	10%/20% opacity**	
	D.Burner	Gas	" " "	10% opacity	
	Boiler 4	Gas/Oil	" " "	10%/20% opacity**	
	Boiler 5	Gas/Oil	" " "	10%/20% opacity**	
CO	Turbine	Gas	BACT:42 ppmvd	38.8	158.0
	Turbine	Oil	EBA***:75 ppmvd	70.5	7.7
	D.Burner	Gas	BACT:0.15 lb/MMBTU****	28.1	36.9

*EBM: Established by manufacturer
**Except for one 6-minute period per hour of not more than 27% opacity
***EBA: Established by applicant
****BACT limit proposed by applicant in Table A-2 of application

3. Fuel consumption rates and hours of operation for the turbine and duct burner shall not exceed those listed below:

	Natural Gas			No. 2 Fuel Oil		
	M ft3/hr*	MM ft3/yr	hrs/yr*	M gal/hr*	M gal/yr	hrs/yr*
Turbine	367.9	2997.2**	8146.8**	2.9	635.1	219.0**
Duct Burner	197.7	519.5	2628.0	0	0	0

*Based on maximum firing rates. Units may run at lower rates for more hours within annual fuel limits.

**An additional 1.9 hours/yr operation on natural gas will be allowed for each 1.0 hour/yr that fuel oil is not burned (up to 219 x 1.9 hours/yr), in which case, the emission limits in Specific Condition No. 2 shall be adjusted accordingly.

$367.9 \times 10^3 \frac{ft^3}{hr} \times \frac{1,100\ ft^3}{ft^3} = 404.7$ [illegible]

SPECIFIC CONDITIONS:

Boilers Nos. 4 and 5, firing natural gas or No. 2 fuel oil, may be operated as necessary for backup, as long as total NO_x emissions from the four sources within the permitted facility do not exceed 194.3 tons NO_x per year. The permittee shall maintain the required fuel use records to demonstrate compliance with this condition and include the total NO_x emission calculation in each annual operating report.

4. Before this construction permit expires, the cogeneration facility and Central Heat Plant (Boilers 4 and 5) stacks shall be sampled or tested as applicable according to the emission limits in Specific Condition No. 2. Annual compliance tests shall be conducted each year thereafter. Compliance tests shall be run at 96% to 100% of the maximum capacity achievable for the average ambient temperature during the compliance tests. The turbine manufacturer's capacity vs. temperature (ambient) curve shall be included with the compliance test results. Tests shall be conducted using the following reference methods:

NO_x: EPA Method 20
SO_2: Fuel supplier's sulfur analysis
VE: EPA Method 9
CO: EPA Method 10

5. The DER Northeast District office shall be notified at least 30 days prior to the compliance tests. Compliance test results shall be submitted to the DER Northeast District office and the Bureau of Air Regulation office within 45 days after completion of the tests. Sampling facilities, methods, and reporting shall be in accordance with F.A.C. Rule 17-2.700 and 40 CFR 60, Appendix A.

6. A continuous operations monitoring system shall be installed, operated, and maintained in accordance with 40 CFR 60.334. The natural gas, fuel oil and steam injection flows to the cogeneration turbine along with the power output of the generator shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to DER upon request.

7. The permittee shall have the option of including, in the initial construction, adequate modules and other provisions necessary for future installation of state-of-the-art catalytic abatement or equivalent CO and NOx control systems. Within 90 days of receipt of the initial compliance test results, the Department shall, if CO emission limits are not met, review the need for making a revised determination of Best Available Control Technology for CO.

SPECIFIC CONDITIONS:

If test results from the turbine and duct burner show that it is unlikely that NO_x limits can be met, a revised BACT determination for NO_x shall also be considered. The Department may revise the BACT determination to require installation of such technology if so indicated by the revised BACT cost/benefit analysis. If the permittee has elected not to provide for future addition of such technology in the initial construction and later applies for a permit modification to increase capacity, the retrofit costs associated with not making provisions for such technology (initially) shall not be considered by the Department in the retrofit cost analysis required for the future expansion.

8. Boilers Nos. 1, 2 and 3 shall permanently cease operation upon receipt of the operation permit for the cogeneration facility.

9. 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).

10. An application for an operation permit must be submitted to the Northeast 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

Revised
Best Available Control Technology (BACT) Determination
University of Florida Cogeneration Project
Alachua County

The applicant proposes to install a 43 MW cogeneration facility to replace existing boiler capacity at the University of Florida - Gainesville campus in Alachua County. The facility will consist of a General Electric LM-6000 Gas Turbine Generator exhausting through a duct-fired heat recovery steam generator which will produce steam for the University campus. The turbine and duct burner will be fired by natural gas with No. 2 fuel oil being used only as a backup fuel for the turbine.

A BACT determination is required for all regulated air pollutants emitted in amounts equal to or greater than the significant emission rates listed in Table 500-2 of Florida Administrative Code (F.A.C.) Rule 17-2.500.

The following table presents the estimated actual emissions in tons per year proposed by the applicant for NO_x, SO_2, PM/PM_{10}, VOC, and H_2SO_4. The Department accepts the applicant's proposed emissions for those pollutants, but will require a more stringent CO limit for the turbine during natural gas firing than proposed by the applicant (42 ppmvd vs. 75 ppmvd).

	Gas Turbine		Duct Burner	Total	Offsets	Increase	PSD
	NG	Oil	NG				
NO_x	142.7	7.3	24.6	174.6	134.9	39.7	40.0
SO_2	4.3	21.6	0.7	26.6	36.1	-9.5	40.0
PM/PM_{10}	10.2	1.1	2.5	13.8	3.4	10.4	25/15
CO	158.0	7.7	36.9	202.6	20.4	182.2	100.0
VOC	6.5	0.4	10.6	17.5	1.1	16.4	40.0
H_2SO_4	0.3	2.0	0.1	2.4	0.8	1.6	7.0

Emissions are based on firing natural gas in the turbine for 8,147 hours/yr at 348 MMBTU/hr and natural gas in the duct burner for 2,628 hours/yr at 187 MMBTU/hr. Oil firing in the turbine is based on 219 hours/yr at 382.6 MMBTU/hr.

Turbine performance under natural gas firing is based on NO_x emissions of 25 ppmvd (corrected to 15 percent O2). Performance on oil firing is based on NO_x emissions of 42 ppmvd (corrected to 15 percent O2). SO_2 emissions are based on 0.5 percent sulfur.

Date of Receipt of a Complete Application

March 6, 1992

BACT Determination Requested by Applicant

Control Technology: Combustion efficiency for cogeneration CO control.

Emission Limits: 75 ppmvd CO (natural gas or No. 2 oil - 0.5% Sulfur max.)
(No request made for Boilers 4 and 5)

BACT Determined by the Department

Control Technology: Combustion efficiency for cogeneration CO control.

Emission Limits:	Turbine - Natural gas firing:	42 ppmvd CO
	Turbine - No. 2 oil firing:	75 ppmvd CO
	Maximum % Sulfur - No. 2 oil:	0.5 % S
	Duct Burner - Natural gas:	0.15 lb CO/MMBTU
	Boilers 4 & 5: (Gas/Oil)	10%/20% Opacity

BACT Determination Procedure

In accordance with F.A.C. Chapter 17-2, 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 control methods, systems and techniques. In addition, the regulations require 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.

A review of EPA's BACT/LAER Clearinghouse indicates that catalytic oxidation is the most stringent control technique. An oxidation catalyst control system allows unburned CO to react with oxygen at the surface of a precious metal catalyst such as platinum. Combustion of CO starts at about 300°F and reaches near completion (above 90%) at temperatures above 600°F. Catalytic oxidation occurs at temperatures 50 percent lower than for thermal oxidation thus reducing the thermal energy required. The oxidation catalyst is typically located directly after the turbine or as an integral part of the steam generator. Catalyst size depends on the exhaust flow, temperature, and desired efficiency.

Catalytic oxidation for CO control has been employed in nonattainment areas and is considered to be LAER technology capable of reducing CO emissions to the 10 ppm range. Due to economics, applications of catalytic oxidation technology have thus far been limited to small cogeneration facilities burning natural gas. Oxidation catalysts have not been used on base-loaded fuel oil-fired turbines in simple cycle or combined cycle facilities since extended use of sulfur-containing fuel would result in increased corrosion. Also, trace metals in the fuel could poison catalysts during prolonged fuel oil firing.

Using the applicant's proposed CO emission level of 75 ppmvd, the total annualized cost of CO catalytic oxidation for this project is $508,156 with a cost effectiveness of about $1,970/ton of CO removed. The cost effectiveness is based on 87% efficiency (75 ppmvd to 10 ppmvd) and includes a heat rate penalty of 0.2% based on an energy loss of $50/MW associated with pressure drop across the catalyst. A review of previous BACT determinations indicates that $1,970/ton would not be prohibitive. However, the decision to require catalytic oxidation should be based on a cost/benefit analysis once compliance testing has been done. Therefore, the Department will propose initial BACT emission limits for CO consistent with recent BACT determinations for similar sources. These limits are to be revised, if necessary, upon evaluation of the compliance test data. The turbine limit proposed by the applicant for fuel oil operation (75 ppmvd) is more stringent than a recent BACT determination for similar sources (78 ppmvd).

Other Air Pollutants Not Subject to BACT Determination

The application indicates that emissions of other pollutants will not be subject to a BACT determination. The applicant narrowly escaped PSD review for NO_x by lowering firing rates, and since increased firing rates may be requested at some future date, the Department will require that retrofit costs associated with the applicant's decision not to make initial provisions for future installation of advanced catalytic control shall not be considered in any cost analysis required for any future requested increase in capacity.

Details of the Analysis May be Obtained by Contacting:

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

Recommended by:

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

August 14 1992
Date

Approved by:

Carol M. Browner, Secretary
Dept. of Environmental Regulation

August 17 1992
Date

ATTACHMENT UF-EU1-L13

COMPLIANCE ASSURANCE MONITORING PLAN

ATTACHMENT UF-EU1-L13

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

ATTACHMENT UF-EU1-L14

ACID RAIN PERMIT APPLICATION

Phase II Permit Application

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

This submission is: ☒ New ☐ Revised

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

FPC University of Florida, Cogeneration Plant, FL, 7345

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
Unit No. 1	Yes	*No*	*1/31/94*	1/1/96 for NOx
	Yes			
Unit No. 1	Yes	No	1/31/94	1/1/95 for SO2
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

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

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

Phase II Permit - Page 2

Plant Name (from Step 1)
FPC University of Florida, Cogeneration Plant

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

Standard Requirements

Permit Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from Step 1)
FPC University of Florida, Cogeneration Plant

Recordkeeping and Reporting Requirements (cont.)

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

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

Liability.

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

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

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

Certification

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

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

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
University of Florida	FL	7345

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) University of Florida

Certification

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

Signature (designated representative)	Date 11/8/94
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# 1	ID#	ID#	ID#	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): **Duct Burner System associated with HRSG**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters): **This emission unit cannot operate unless the combustion turbine is operational (See Emission Unit Information Section 1).**		

Emissions Unit Control Equipment Information

A.

1. Description (limit to 200 characters):

Low-NOx Burners

2. Control Device or Method Code: 24

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: **31 Jan 1994**	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer: **Colen**	Model Number:
4. Generator Nameplate Rating:	MW
5. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		**188**	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 natural gas-firing, 950 Btu/cf (LHV). These duct burners can only fire on natural gas. Requested hours of operation based on maximum fuel use rate.

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

24	hours/day	**7**	days/week
52	weeks/yr	**2,628**	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 UF-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 Att. UF-FE-2**
2. Emission Point Type Code: [ ] 1 [x] 2 [ ] 3 [ ] 4
3. Descriptions of Emissions Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **DB only operates when CT is operating. DB and CT gases exhaust through single stack.**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **See Emission Unit 1, Combustion Turbine**
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W
6. Stack Height: feet
7. Exit Diameter: feet
8. Exit Temperature: °F

9. Actual Volumetric Flow Rate:	acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters): **See Emission Unit Information Section 1, Part E, Emission Point Information, combustion turbine.**	

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): **Natural Gas**	
2. Source Classification Code (SCC):	
3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.198**	5. Maximum Annual Rate: **519**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: **950**	
10. Segment Comment (limit to 200 characters): **Field #5: 519.5. Field #7: 1 gr/100 cf. Max annual rate is based on 2,628 hr/yr operation at max hr fuel use rate but can be increased if lower firing rates are utilized.**	

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
NOx	024		EL
CO			EL
VOC			NS

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: **50** %
3. Potential Emissions: **18.7** lb/hour **24.6** tons/year
4. Synthetically Limited? [**X**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.1 lb/MMBtu** Reference: **Permit Limit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Permit limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emissions unit limited to 2,628 hr/yr operation at maximum fuel usage rate of 197.7 x 10^3 cf/hr.**

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

A.

1. Basis for Allowable Emissions Code: **Other**
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: **18.7 lb/hr**
4. Equivalent Allowable Emissions: **18.7** lb/hour **24.6** 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): **Permit limit for DB. Requesting limit to be combined with CT limit for demonstrating compliance. See Attachment UF-EU1-L12**

B.

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

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

Pollutant Detail Information:

1. Pollutant Emitted: **CO**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **28.1** lb/hour **36.9** tons/year
4. Synthetically Limited? [**x**] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.15 lb/MMBtu** Reference: **Permit limit (BACT)**
7. Emissions Method Code: [**x**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Permit limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): **Emissions limited by hour of operation (2,628 hr/yr) at maximum fuel usage rate of 197.7 x 10^3 cf/hr.**

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

A.

1. Basis for Allowable Emissions Code: **Other**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **28.1 lbs/hr**	
4. Equivalent Allowable Emissions:	**28.1** lb/hour **36.9** 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): **Permit limit for DB. Requesting limit to be combined with CT limit for demonstrating compliance. See Attachment UF-EU1-L12**	

B.

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

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 2

1.	Visible Emissions Subtype: **VE10**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **10** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **Annual Compliance Test, EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standards established as part of construction permit. Determined during initial operation. Annual testing not required unless fuel oil usage > 400 hr/yr.**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 2

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

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor _____ of _____

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

Continuous Monitoring System Continuous Monitor _____ of _____

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

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

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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

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

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

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

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

2. Increment Consuming for Nitrogen Dioxide?

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

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

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

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

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

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

3.	Increment Consuming/Expanding Code:			
	PM	[ ] C	[ ] E	[X] Unknown
	SO_2	[ ] C	[ ] E	[X] Unknown
	NO_2	[ ] C	[ ] E	[X] Unknown
4.	Baseline Emissions:			
	PM	lb/hour		tons/year
	SO_2	lb/hour		tons/year
	NO_2			tons/year
5.	PSD Comment (limit to 200 characters):			
	Emission unit escaped PSD review by netting out based on facility-wide emissions before and after the modification. Facility has an annual emission limit of 194.3 tons/yr for NOx.			

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: UF-EU2-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: UF-EU2-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[x] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[X] Attached, Document ID: UF-EU1-L4	
	[ ] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[ ] Not Applicable
	[X] Previously Submitted, Date: 7 Aug 1995	
6.	Procedures for Startup and Shutdown	
	[ ] Attached, Document ID: _____	[X] Not Applicable
7.	Operation and Maintenance Plan	
	[ ] Attached, Document ID: _____	[X] Not Applicable
8.	Supplemental Information for Construction Permit Application	
	[ ] Attached, Document ID: _____	[X] Not Applicable
9.	Other Information Required by Rule or Statute	
	[ ] Attached, Document ID: _____	[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

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

13. Compliance Assurance Monitoring Plan

[X] Attached, Document ID: UF-EU1-L13 [ ] Not Applicable

14. Acid Rain Permit Application (Hard Copy Required)

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

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

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

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

[X] Not Applicable

ATTACHMENT UF-EU2-D

APPLICABLE REQUIREMENTS LISTING

ATTACHMENT UF-EU2-D

Applicable Requirements Listing - Power Plants

EMISSION UNIT: UF Cogeneration Facility: Duct Burners

FDEP Rules:
Air Pollution Control-General Provisions:
62-204.800(7)(b)3. (State Only) - NSPS Subpart Db (Applicable to DBs Only; EU1)
62-204.800(7)(d) (State Only) - NSPS General Provisions

Stationary Sources-General:

62-210.650	- Circumvention
62-210.700(1)	- Excess Emissions
62-210.700(4)	- Excess Emissions
62-210.700(6)	- Excess Emissions

Stationary Sources-Emission Monitoring (Applicable to CT/DB):

62-297.310(1)	- Test Runs-Mass Emission
62-297.310(2)(b)	- Operating Rate; other than CTs;no CT
62-297.310(3)	- Calculation of Emission
62-297.310(4)(a)1.	- Applicable Test Procedures;Sampling time
62-297.310(4)(b)	- Sample Volume
62-297.310(4)(d)	- Calibration
62-297.310(4)(e)	- EPA Mehtod 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)1.	- Applies to CT/DB
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.b.	- Annual Test
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(8)	- Test Reports

Federal Rules:
NSPS General:

40 CFR 60.7(b); (f)	- Notification and Recordkeeping
40 CFR 60.8(e)	- Performance Tests
40 CFR 60.11(a)	- Compliance (Ref. S. 60.8)
40 CFR 60.11(d)	- Compliance (maintain air pollution conrol equipment)

NSPS Subpart Db:

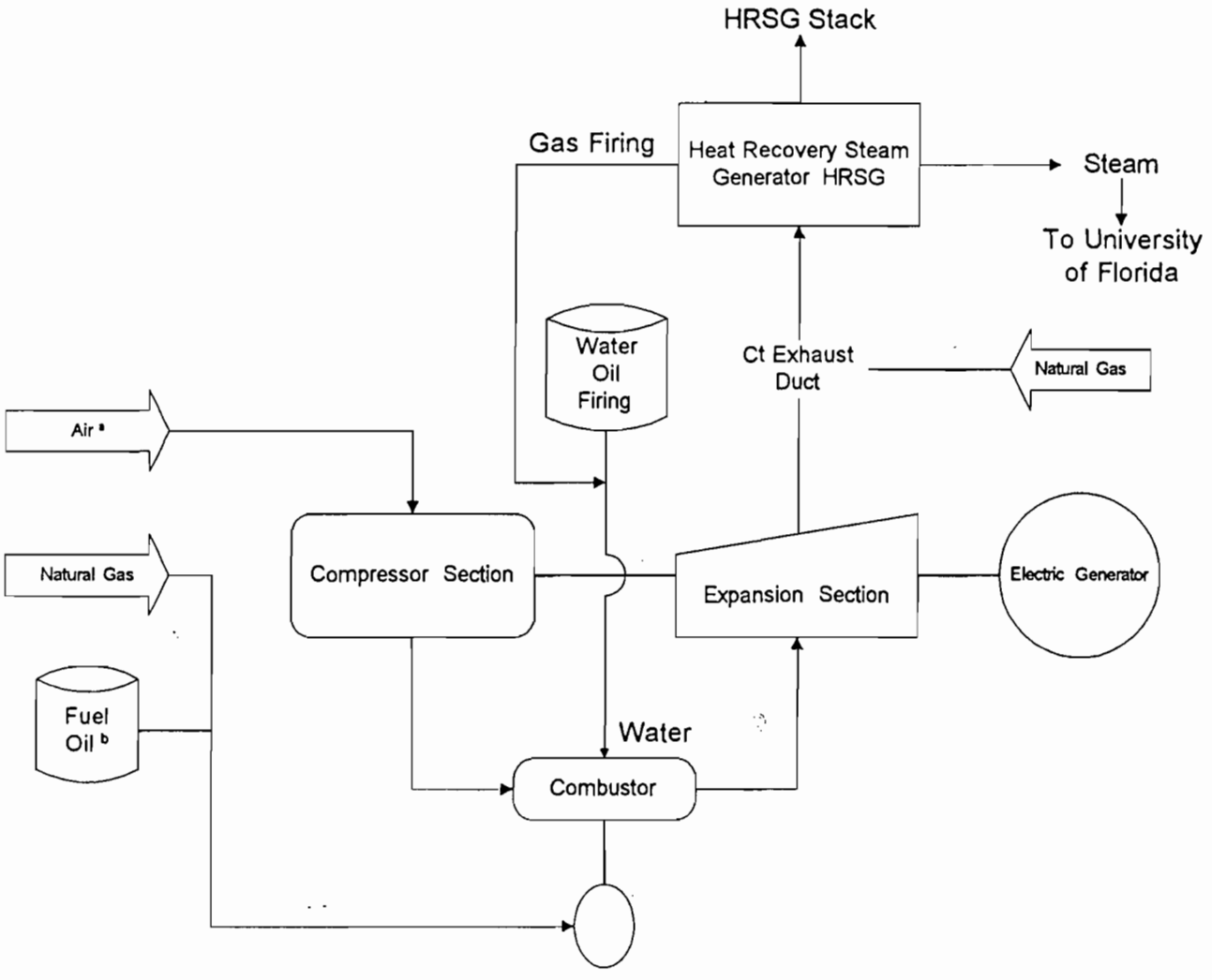
40 CFR 60.44b(a)(4)(i)	- NOx; gas (0.2 lb/mmBtu)
40 CFR 60.46b(a)	- Compliance and Performace Methods; comply at all times
40 CFR 60.46b(c)	- Performance tests for NOx
40 CFR 60.46b(f)	- NOx for DB systems
40 CFR 60.48b(h)	- Monitoring for NOx not required for DB

The Acid Rain Program Rules are identified in Attachment UF-E01-D and are applicable to the combustion turbine and duct burners as a single unit.

?

ATTACHMENT UF-EU2-L1

PROCESS FLOW DIAGRAM



Notes:
(a) cooled from ambient
(b) emergency backup only-10 days/year

Flow Diagram of Emission Unit

Florida Power Corporation		*Emission Unit:* CombustionTurbine / Duct Burner	KBN Engineering and Applied Sciences, Inc.
Emission Units	University of Florida	*Process Area:* Overall Plant	
		Filename: FPCUF2.VSD	
		Latest Revision Date: 6/7/95 01:26 PM	

ATTACHMENT UF-EU2-L2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT UF-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

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): **No.4 Steam Boiler**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters):		

Emissions Unit Control Equipment Information

A.

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

B.

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

C.

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

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

Emissions Unit Details

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

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		70	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):

Max Heat Input Rate = 69.6 (rounded to 70). Max heat input based on permit limit of 68,000 cf of gas/hour (1024 Btu/cf-HHV). Max fuel input for oil is 444 gal/hour (20,140 Btu/lb-HHV; 7.2 lb/gal).

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:

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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

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

Not Applicable

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

See Attachment UF-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 Att. UF-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): **Boiler gases exhaust through a single stack.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **NA**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**82** feet
7. Exit Diameter:	**5** feet
8. Exit Temperature:	**350** °F

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

   Natural gas firing

2. Source Classification Code (SCC):

   1-03-006-02

3. SCC Units:

   Million Cubic Feet Burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
0.068	**596**

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
0.01	

9. Million Btu per SCC Unit:

   1,024

10. Segment Comment (limit to 200 characters):

    Field #7: 1 gr/100 cf. Boilers No.4,5 - reduced operations when oper. permit for cogen unit received (Boilers 1,2, & 3 taken out of service). Facility-wide annual NOx emission limit 194.3 TPY.

Segment Description and Rate: Segment 2 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): **1-02-005-01**
3. SCC Units: **Thousand Gallons Burned**

4. Maximum Hourly Rate: **0.444**	5. Maximum Annual Rate: **3,889**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **145**	

10. Segment Comment (limit to 200 characters): **1. See segment comment for natural gas firing**

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
NOx			NS
SO2			EL
CO			NS

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**

2. Total Percent Efficiency of Control: %

3. Potential Emissions: **32** lb/hour **140** tons/year

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

5. Range of Estimated Fugitive/Other Emissions:

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

6. Emission Factor: **0.5 % sulfur**

   Reference: **Permit**

7. Emissions Method Code:

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

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

   Permit limit

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

   Potential emissions based on fuel oil-firing. Boiler 4 will have reduced operations when the air operation permit for cogeneration unit is received.

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

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.5 % sulfur**	
4. Equivalent Allowable Emissions:	**32** lb/hour **140** 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): **Rule 62-296.406; AC permit condition from combustion turbine.**	

B.

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

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 5

1.	Visible Emissions Subtype: **VE10**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **10** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **Annual Compliance Test EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standard established as part of construction permit for cogeneration unit. 2. Gas-firing**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 5

1.	Visible Emissions Subtype: **VE20**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: **60** % 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. Visible emission limit during soot-blowing and load changing for up to 3 hr in 24 hr. 2. Rule 62-210.700(3).**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 5

1.	Visible Emissions Subtype: **VE**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour
4.	Method of Compliance: **Best operating practices**
5.	Visible Emissions Comment (limit to 200 characters): **1. Not to exceed 2 hr in 24 hrs for malfunction. 2. Rule 62-210.700(1).**

Visible Emissions Limitations: Visible Emissions Limitation 4 of 5

1.	Visible Emissions Subtype: **VE20**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standard established as part of construction permit for cogeneration unit. 2. Oil-firing. Annual test not required if F.O. use < 400 hr/yr.**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 5 of 5

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour
4.	Method of Compliance: Best operating practices
5.	Visible Emissions Comment (limit to 200 characters): Excess emissions for startup, shutdown. Rule 62-210.700(2).

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

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

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor _____ of _____

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

Continuous Monitoring System Continuous Monitor _____ of _____

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

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

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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

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

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

   [ ] 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):			
	1. Facility has an annual emission limit of 194.3 TPY for NOx in order to escape PSD review by netting out facility-wide emissions before and after the modification for the CT and DB			

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: UF-EU3-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: UF-EU3-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: 7 Aug 1995	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: UF-EU3-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: UF-EU3-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: UF-EU3-L12 [ ] Not Applicable

13. Compliance Assurance Monitoring Plan

[X] Attached, Document ID: UF-EU3-L13 [ ] Not Applicable

14. Acid Rain Permit Application (Hard Copy Required)

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

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

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

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

[X] Not Applicable

ATTACHMENT UF-EU3-D

APPLICABLE REQUIREMENTS LISTING

ATTACHMENT UF-EU3-D

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU03 - Steam Boiler Unit 4 FPC UF Cogeneration Facility

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	- Malfunction only for FFGS
62-210.700(2)	- Startup/Shut down for FFGS
62-210.700(3)	- Load Change/soot blowing for FFGS
62-210.700(4)	- maintenance
62-210.700(6)	

Stationary Sources-Emission Standards:

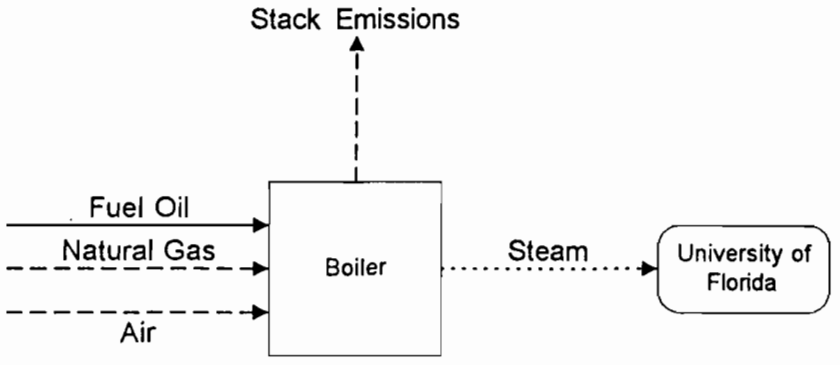
62-296.406(1), (2),(3)	- VE; BACT

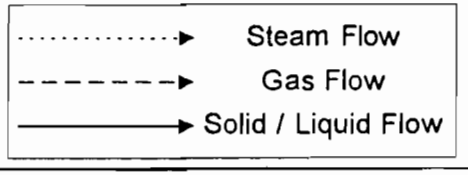
Stationary Sources-Emission Monitoring:

62-297.310(2)(b)	- Operating Rate
62-297.310(4)(a)2.	- Applicable Test Procedures;Sampling time
62-297.310(5)	- Determination of Process Variables
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Compliace Tests (fuel sampling)
62-297.310(8)	- Test Reports

ATTACHMENT UF-EU3-L1

PROCESS FLOW DIAGRAM





Florida Power Corporation		*Emission Unit:* Boilers No. 4, 5	KBN Engineering and Applied Sciences, Inc.
		Process Area: Overall Plant	
Emission Units	University of Florida	*Filename:* FPCUF1.VSD	
		Latest Revision Date: 6/7/95 01:30 PM	

ATTACHMENT UF-EU3-L2

FUEL ANALYSIS OR SPECIFICATION

ATTACHMENT UF-EU3-L2
FUEL ANALYSIS

Natural Gas Analysis

Parameter	Typical Value	Max Value
Relative density	0.58 (compared to air)	
heat content	950 - 1140 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 UF-EU3-L2
FUEL ANALYSIS

No. 2 Fuel Oil

Parameter	Typical Value	Max Value
API gravity @ 60 F	30[1]	-
Relative density	7.3 lb/gal [2]	
Heat content	19,500 Btu / lb (HHV)	
% sulfur	0.04 [2]	0.5 [3]
% nitrogen	0.025-0.03	
% ash	negligible	0.1 [1]

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

[1] Data taken from the FPC fuel procurement specification

[2] Data from laboratory analysis

[3] Data from current air permit.

ATTACHMENT UF-EU3-L6

PROCEDURES FOR STARTUP AND SHUTDOWN

ATTACHMENT UF-EU3-L6

PROCEDURES FOR STARTUP AND SHUTDOWN MINIMIZING EXCESS EMISSIONS

Startup of the fossil-fuel boilers begins when fuel (either natural gas or oil) is introduced into one or more burners within the boiler and lighted (commencement of combustion). Startup is complete and steady-state operation begins when the combustion process has stabilized and the steam load on the unit is stable.

Shutdown of the fossil-fuel boilers begins when unit steam load is decreased to below 10 percent of maximum and continues until the final burner gun is removed from service and the final Induced-draft or Forced-draft fan is removed from service.

Countermeasures which may be taken in the event of excess emissions include, but are not limited to:

- proper excess air adjustments
- recognizing and removal of faulty burners
- removal of the unit from automatic control
- reduction of unit steam load
- stopping and restarting of boiler cleaning devices
- lowering load rate
- pressure rate changes
- change to alternate fuel

Knowledge of the appropriate countermeasures to take under an excess emissions condition is a part of the routine operator training for the engineers who operate the boilers. In addition, plant operations and supervisory staff are periodically given training. Topics include current permit limits, maximum allowable duration of excess emissions, appropriate countermeasures for excess emissions, duty to notify, etc.

ATTACHMENT UF-EU3-L10

ALTERNATIVE METHODS OF OPERATION

ATTACHMENT UF-EU3-L10
ALTERNATIVE METHODS OF OPERATION
Steam Boiler

The steam boiler can operate on both natural gas and distillate oil. The University of Florida Cogeneration Facility was permitted based on phasing out the use of several existing steam boilers (i.e., Boilers 1, 2, and 3) and reducing the usage of several other boilers (i.e., Boilers 4 and 5) when the cogeneration facility is operating. This resulted in a "netting out" of Prevention of Significant Deterioration (PSD) for a majority of the pollutants, including nitrogen oxides (NO_x). To insure that facility-wide NO_x emissions did not exceed the PSD significant emissions rates, a facility-wide emission cap for NO_x was placed in the construction permit for the cogeneration facility. The emission cap is 194.3 tons per year which would effectively allow the cogeneration unit to operate at full capacity with some operation of Boilers 4 and 5. In the event the cogeneration unit is inoperable, Boilers 4 and 5 would have to operate continuously in order to supply steam to the University of Florida and Shands Hospital. There are no individual operating limits on Boilers 4 and 5 other than the requirement that total NO_x emissions from the entire facility must not exceed 194.3 tons/year.

ATTACHMENT UF-EU3-L12

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

ADDITIONAL APPLICABLE REQUIREMENTS

Applicable Requirements as defined in Rule 62-210.200(29) not identified in Section D of this emission unit section are included in this attachment of the application. Any air operation permit issued by the Department (or local program designee) and included in this attachment is provided for information purposes. The specific conditions of the operating permit are not Applicable Requirements as defined in Rule 62-210.200(29) unless implementing a specific Applicable Requirement of the Department's rules (e.g., emission limitations and consent orders). See also Attachment UF-EU1-L12.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT

ORDER
GRANTING TEMPORARY
USE OF EMERGENCY BACKUP BOILER
CAPABILITY TO MEET COMMITMENT
FOR UNINTERRUPTIBLE STEAM DEMAND

Florida Power Corporation (FPC) having requested issuance of an order to permit use of an Emergency Backup Boiler at its University of Florida Cogeneration Site and the Department having been fully advised in the premises, the Secretary finds as follows:

FINDINGS OF FACT

1. FPC has a commitment to the University of Florida, including Shands Hospital, to provide an uninterruptible supply of steam.

2. In the unlikely event that the cogeneration facility and either Backup Boiler 4 or 5 (or both) become inoperable, an emergency backup steam supply source will be required. This is because Backup Boilers 4 and 5 are both necessary to provide replacement steam for loss of the cogeneration facility and cannot supply all steam potentially necessary if required to serve as backups for each other.

CONDITIONS OF USE OF EMERGENCY BACKUP BOILER

1. In accordance with the Florida Statutes, Chapter 120.59 pertaining to Orders, the Secretary is authorized to grant exceptions from air construction permits and can allow the use of an Emergency Backup Boiler in order that Florida Power Corporation (FPC) may meet its commitment for uninterruptible steam demand when the primary sources of steam supply are inoperable.

2. In the event that FPC is unable to meet steam demand to the University of Florida due to the inoperability of any of the primary sources of steam supply (i.e., the cogeneration facility and Backup Boilers 4 and 5), the Secretary authorizes FPC to operate an additional boiler as an Emergency Backup.

3. The use of such an Emergency Backup shall not result in an increase in permitted air emissions over the limits prescribed by the Department in Permit No. AC01-204652 (PSD-FL-181).

ORDER

Subject to the Conditions of Use of Emergency Backup Boiler cited above, the Secretary hereby grants approval to FPC for use of an Emergency Backup Boiler at its University of Florida Cogeneration site. DONE AND ENTERED THIS _____ day of_____, 199__, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

_____
VIRGINIA WETHERELL
Secretary

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301
Telephone: (904) 488-4805

File: u\:UFORDER

decision of the agency or hearing officer on any such request will not be proposed agency action governed by s. 120.57.

(3) A party may seek enforcement of a subpoena, order directing discovery, or order imposing sanctions issued under the authority of this act by filing a petition for enforcement in the circuit court of the judicial circuit in which the person failing to comply with the subpoena or order resides. A failure to comply with an order of the court shall result in a finding of contempt of court. However, no person shall be in contempt while a subpoena is being challenged under subsection (2). The court may award to the prevailing party all or part of the costs and attorney's fees incurred in obtaining the court order whenever the court determines that such an award should be granted under the Florida Rules of Civil Procedure.

History.—s. 1, ch. 74-310; s. 8, ch. 75-191; s. 9, ch. 76-131; s. 7, ch. 76-425; s. 3, ch. 84-173.

120.59 Orders.—

(1)(a) The final order in a proceeding which affects substantial interests must be in writing and include findings of fact and conclusions of law separately stated, and it must be rendered within 90 days:

1. After the hearing is concluded, if conducted by the agency,

2. After a recommended order is submitted to the agency and mailed to all parties, if the hearing is conducted by a hearing officer, or

3. After the agency has received the written and oral material it has authorized to be submitted, if there has been no hearing.

The 90-day period may be waived or extended with the consent of all parties.

(b) Each final order that must be indexed or listed pursuant to s. 120.53 must have attached a copy of the complete text of any materials incorporated by reference; however, if the quantity of the materials incorporated makes attachment of the complete text of the materials impractical, the order may contain a statement of the location of such materials and the manner in which the public may inspect or obtain copies of the materials incorporated by reference.

(c) Each agency order that must be indexed or listed pursuant to s. 120.53 must be sequentially numbered by the agency in the order rendered, according to a numbering system approved by the Department of State pursuant to s. 120.53.

(2) Findings of fact, if set forth in a manner which is no more than mere tracking of the statutory language, must be accompanied by a concise and explicit statement of the underlying facts of record which support the findings. If, in accordance with agency rules, a party submitted proposed findings of fact or filed any written application or other request in connection with the proceeding, the order must include a ruling upon each proposed finding and a brief statement of the grounds for denying the application or request.

(3) If an agency head finds that an immediate danger to the public health, safety, or welfare requires an immediate final order, it shall recite with particularity the facts underlying such finding in the final order, which shall be appealable or enjoinable from the date rendered.

(4) Parties shall be notified either personally or by mail of any order; and, unless waived, a copy of the final order shall be delivered or mailed to each party or to his attorney of record. Each notice shall inform the recipient of any administrative hearing or judicial review that is available under s. 120.57 or s. 120.68, shall indicate the procedure which must be followed to obtain the hearing or judicial review, and shall state the time limits which apply.

(5) If a recommended order is submitted to an agency, the agency shall return a copy of its final order to the division within 15 days after the order is filed with the agency clerk.

(6)(a) In any proceeding pursuant to s. 120.57(1), a prevailing party shall be entitled to recover costs from the nonprevailing adverse party, and shall also be entitled to recover a reasonable attorney fee, as provided herein. The provisions of this subsection shall not apply to a prevailing or nonprevailing party that is an agency.

(b) The final order in a proceeding pursuant to s. 120.57(1) shall award costs and a reasonable attorney fee to the prevailing party only where the nonprevailing adverse party has been determined by the hearing officer to have participated in the proceeding for an improper purpose.

(c) In all proceedings pursuant to s. 120.57(1), the hearing officer shall determine whether any party, other than a party that is an agency, participated in the proceeding for an improper purpose as defined in this subsection. In making such determination, the hearing officer shall consider whether the nonprevailing adverse party has participated in two or more other such proceedings involving the same nonagency prevailing party and the same project as an adverse party and in which such two or more proceedings the nonprevailing adverse party did not establish either the factual or legal merits of its position and shall consider whether the factual or legal position asserted in the instant proceeding would have been cognizable in the previous proceedings. In such event, it shall be rebuttably presumed that the nonprevailing adverse party participated in the pending proceeding for an improper purpose.

(d) In any proceeding in which the hearing officer determines that a party participated in the proceeding for an improper purpose, the recommended order shall so designate and shall recommend the award of costs and attorney fees.

(e) For the purpose of this subsection:

1. "Improper purpose" means participation in a proceeding pursuant to s. 120.57(1) primarily to harass or to cause unnecessary delay or for frivolous purpose or to needlessly increase the cost of licensing or securing the approval of an activity.

2. "Costs" shall have the same meaning as the costs allowed in civil actions in this state as provided in chapter 57.

3. "Nonprevailing adverse party" shall mean a party that has failed to have substantially changed the outcome of the proposed or final agency action which is the subject of a proceeding. In the event that a proceeding results in any substantial modification or condition intended to resolve the matters raised in a party's petition, it shall be determined that the party having raised

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

CERTIFIED - RETURN RECEIPT

August 5, 1994

Mr. Johnny Miller
Supt., Heat Plant II
University of Florida
Building 473
Gainesville, Florida 32611

Dear Mr. Miller:

Alachua County - AP
University of Florida - Heat Plant II

Emissions Unit	Permit No.	ID No.
#1 Boiler	AO01-214826	31GVL01001402
#2 Boiler	AO01-214828	31GVL01001403
#3 Boiler	AO01-214829	31GVL01001404
#4 Boiler	AO01-214830	31GVL01001411
#5 Boiler	AO01-214831	31GVL01001415

Each permit above is extended to 09-02-95 to coordinate each emissions unit with the submittal of the Title V source (facility) permit application which shall be submitted by 07-02-95 per FAC Rule 17-213.420(1)(a)1.b.

Since each extension is in lieu of processing an operation permit application for a short-term operation permit, the testing required by each permit shall continue to be performed at the interval in each permit.

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

If there are any questions, please contact Johnny Cole at (904) 448-4310, Ext. 236.

Sincerely,

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

EEF/JLC

Florida Department of Environmental Regulation
Northeast District • Suite B200, 7825 Baymeadows Way • Jacksonville, Florida 32256-7577
Lawton Chiles, Governor

NOTICE OF PERMIT ISSUANCE

Carol M. Browner, Secretary

CERTIFIED - RETURN RECEIPT

Mr. Johnny Miller, Superintendent
Univeristy of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

Dear Mr. Miller:

Alachua County - AP
University of Florida
No. 4 Steam Boiler

Enclosed is Permit Number A001-214830 to operate the subject air pollution source, pursuant to Section 403.087, Florida Statutes (FS).

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

The Petition shall contain the following information;

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

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

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

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

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

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

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

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

Executed in Jacksonville, Florida.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Clerk 8/28/92 Date

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

EEF:bt

Copies furnished to: John B. Koogler, Ph.D., P.E.
Gainesville Branch Office
Alachua County Office Environmental Protection

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 8/28/92 to the listed persons.

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor Carol M. Browner, Secretary

PERMITTEE:

University of Florida
Physical Plant Division
Bldg. 473
Gainesville, Florida 32611

I.D. Number:	31GVL01001411
Permit/Cert Number:	A001-214830
Date of Issue:	08-28-92
Expiration Date:	December 31, 1994
County:	Alachua
Latitude/Longitude:	29°38'24"N; 82°20'52"W
Project:	No. 4 Steam Boiler
UTM:	E-(17)369.5; N-3279.4

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

For the operation of No. 4 Steam Boiler.

Located west of Center Drive, north of Mowery Road, University of Florida, Gainesville, Alachua County, Florida.

In accordance with:

Operation Permit Application dated 08-23-77
Renewal application dated 06-21-82
Renewal application dated 07-08-87
BACT Determination received 09-24-87
Renewal application received 06-15-92

Administration 448-4300
Air 448-4310
Waste Management 448-4320

Water Facilities 448-4330
Water Management 448-4340
FAX 448-4366

PERMITTEE:
University of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

I.D. Number: 31GVL01001411
Permit/Cert: A001-214830
Date of Issue:
Expiration Date: December 31, 1994

GENERAL CONDITIONS:

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

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

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

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

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

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

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

GENERAL CONDITIONS

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

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

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

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

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

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

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

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

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

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

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

GENERAL CONDITIONS

13. This permit also constitutes:

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

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

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

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

    c. Records of monitoring information shall include:

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

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

PERMITTEE:
University of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

I.D. Number: 31GVL01001411
Permit/Certification Number: A001-214830
Date of Issue:
Expiration Date: December 31, 1994

SPECIFIC CONDITIONS:

1. The maximum input rate (operating rate) is shown below and shall not be exceeded without prior approval.

Rate	Material
444 GPH	No. 6 fuel oil[1]
68,000 CFH	Natural gas

[1]See SC #4, note 4 for quality requirements

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

3. The operating rate shall not exceed 110% of the operating rate during the most recent test except for testing purposes, but shall not exceed that rate in SC No. 1. After testing at an operating rate greater than 110% of the last test operating rate, the operating rate shall not exceed 110% of the last (submitted) test operating rate until the test report at the higher rate has been reviewed an accepted by the Department.

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

Pollutant	FAC Rule	Emission Rate lbs/hr	TPY
PM [1]	17-2.600(6)(b)	7.99[2]	31.97[3]
SO_2 [4]	17-2.600(6)(c)	110.56[5]	442.23[3]
VE [6]	17-2.600(6)(a)	20% opacity, except 40% for 2 min/hr	

[1]PM - Particulate matter
[2]Basis: 444 gals/hr; 1.5% S* in FO; AP-42 emission factor.
[3]From previous permit.
[4]SO_2 - sulfur dioxide
[5]Basis: 444 gals/hr; 1.5% S* in FO; 8.3 lbs/gal.
[6]VE - visible emissions

*Basis: BACT Determination dated 09-21-87 which limits the fuel oil fired to "new No. 6 fuel oil (FO) with a sulfur content not to exceed 1.5% by weight. "New" means oil refined from crude oil and has not been used.

Hours of operation are limited to 24 H/D, 7 D/W; 52 W/Y and shall be recorded.

PERMITTEE:
University of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

I.D. Number: 31GVL01001411
Permit/Certification Number: A001-214830
Date of Issue:
Expiration Date: December 31, 1994

SPECIFIC CONDITIONS:

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

Pollutant	Interval	Test Method
VE[1]	12 months from 01-20-92	DER 9
SO_2	12 months from 01-20-92	----[2]

[1]Basis: Rule 17-2.700(2)(a)3., FAC - test not required when liquid fuel is burned for a total of no more than 400 hours.
[2]Per FAC Rule 17-2.700(6)(c)1.b.

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

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

7. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1 including the previous year's total usage of No. 6 fuel oil and documenting the sulfur % content, by weight.

8. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

9. The ID Name and ID No. for this source is to be used on all correspondence.

10. This permit will be superseded by the cogeneration facility operation permit.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.
Clerk
8/8/97
Date

CERTIFICATION

PROJECT NAME: University of Florida
No. 4 Steam Boiler

APPLICATION NO: A001-214830

I HEREBY CERTIFY that the engineering features described in application No. A001-214830 provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, and geological features).

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

Andrew G. Kutyna
Signature and Seal

8/27/92
Date

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

NOTICE OF PERMIT ISSUANCE

Carol M. Browner, Secretary

CERTIFIED - RETURN RECEIPT

Mr. Johnny Miller, Superintendent
Univeristy of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

Dear Mr. Miller:

Alachua County - AP
University of Florida
No. 5 Steam Boiler

Enclosed is **Permit Number A001-214831** to operate the subject air pollution source, pursuant to Section 403.087, Florida Statutes (FS).

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

The Petition shall contain the following information;

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

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

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

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

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

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

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

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

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

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

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

EEF:bt

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

Copies furnished to: John B. Koogler, Ph.D., P.E.
Gainesville Branch Office
Alachua County Office Environmental Protection

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 8/28/92 to the listed persons.

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor — Carol M. Browner, Secretary

PERMITTEE:

University of Florida
Physical Plant Division
Bldg. 473
Gainesville, Florida 32611

I.D. Number:	31GVL01001415
Permit/Cert Number:	A001-214831
Date of Issue:	08-28-92
Expiration Date:	December 31, 1994
County:	Alachua
Latitude/Longitude:	29°38'24"N; 82°20'52"W
Project:	No. 5 Steam Boiler
UTM:	E-(17)369.5; N-3279.4

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

For the operation of No. 5 Steam Boiler.

Located west of Center Drive, north of Mowery Road, University of Florida, Gainesville, Alachua County, Florida.

In accordance with:

Operation Permit Application dated 08-23-77
Renewal application dated 06-21-82
Renewal application dated 07-08-87
BACT Determination received 09-24-87
Renewal application received 06-15-92

Administration 448-4300
Air 448-4310
Waste Management 448-4320

Water Facilities 448-4330
Water Management 448-4340
FAX 448-4366

PERMITTEE:
University of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

I.D. Number: 31GVL01001415
Permit/Cert: A001-214831
Date of Issue:
Expiration Date: December 31, 1994

GENERAL CONDITIONS:

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

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

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

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

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

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

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

GENERAL CONDITIONS

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

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

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

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

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

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

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

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

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

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

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

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

GENERAL CONDITIONS

13. This permit also constitutes:

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

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

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

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

c. Records of monitoring information shall include:

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

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

PERMITTEE:
University of Florida
Physical Plant Division, Bldg. 473
Gainesville, Florida 32611

I.D. Number: 31GVL01001415
Permit/Certification Number: A001-214831
Date of Issue:
Expiration Date: December 31, 1994

SPECIFIC CONDITIONS:

1. The maximum input rate (operating rate) is shown below and shall not be exceeded without prior approval.

Rate	Material
1,067 GPH	No. 6 fuel oil[1]
164,000 CFH	Natural gas

[1]See SC #4, note 4 for quality requirements

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

3. The operating rate shall not exceed 110% of the operating rate during the most recent test except for testing purposes, but shall not exceed that rate in SC No. 1. After testing at an operating rate greater than 110% of the last test operating rate, the operating rate shall not exceed 110% of the last (submitted) test operating rate until the test report at the higher rate has been reviewed and accepted by the Department.

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

Pollutant	FAC Rule	Emission Rate lbs/hr	Emission Rate TPY
PM [1]	17-2.600(6)(b)	19.20[2]	76.80[3]
SO_2 [4]	17-2.600(6)(c)	265.58[5]	1062.33[3]
VE [6]	17-2.600(6)(a)	20% opacity, except 40% for 2 min/hr	

[1]PM - Particulate matter
[2]Basis: 1067 gals/hr; 1.5% S* in FO; AP-42 emission factor.
[3]From previous permit.
[4]SO_2 - sulfur dioxide
[5]Basis: 1067 gals/hr; 1.5% S* in FO; 8.3 lbs/gal.
[6]VE - visible emissions

*Basis: BACT Determination dated 09-21-87 which limits the fuel oil fired to "new" No. 6 fuel oil (FO) with a sulfur content not to exceed 1.5% by weight. "New" means oil refined from crude oil and has not been used.

Hours of operation are limited to 24 H/D, 7 D/W; 52 W/Y and shall be recorded.

PERMITTEE:	I.D. Number:	31GVL01001415
University of Florida	Permit/Certification Number:	A001-214831
Physical Plant Division, Bldg. 473	Date of Issue:	
Gainesville, Florida 32611	Expiration Date:	December 31, 1994

SPECIFIC CONDITIONS:

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

Pollutant	Interval	Test Method
VE[1]	12 months from 01-20-92	DER 9
SO_2	12 months from 01-20-92	----[2]

[1]Basis: Rule 17-2.700(2)(a)3., FAC - test not required when liquid fuel is burned for a total of no more than 400 hours.
[2]Per FAC Rule 17-2.700(6)(c)1.b.

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

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

7. Submit an annual operation report for this source on the form supplied by the Department for each calendar year on or before March 1 including the previous year's total usage of No. 6 fuel oil and documenting the sulfur % content, by weight.

8. Any revision(s) to a permit (and application) must be submitted and approved prior to implementing.

9. The ID Name and ID No. for this source is to be used on all correspondence.

10. This permit will be superseded by the cogeneration facility operation permit.

Executed in Jacksonville, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

RECEIPT AND ACKNOWLEDGEMENT

Betty Farin 8/28/92
Date

DER Form 17-1.201(5) Effective November 30, 1982 Page 6 of 6

ATTACHMENT UF-EU3-L13

COMPLIANCE ASSURANCE MONITORING PLAN

CERTIFICATION

PROJECT NAME: University of Florida
No. 5 Steam Boiler

APPLICATION NO: A001-214831

I **HEREBY CERTIFY** that the engineering features described in application No. A001-214831 provide reasonable assurance of compliance with the applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Title 17. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, and geological features).

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

Andrew G. Kutyna
Signature and Seal

8/27/92
Date

III. EMISSIONS UNIT INFORMATION

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

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

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one:

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

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

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

[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): **No.5 Steam Boiler**		
2. Emissions Unit Identification Number: [ ] No Corresponding ID [X] Unknown		
3. Emissions Unit Status Code: **A**	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code: **49**
6. Emissions Unit Comment (limit to 500 characters):		

Emissions Unit Control Equipment Information

A.

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

B.

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

C.

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

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

Emissions Unit Details

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

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		**168**	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Operating Capacity Comment (limit to 200 characters): **1. Maximum heat input based on permit limit of 164,000 cubic feet of gas/hour (1024 Btu/cf-HHV) 2. Maximum fuel input for oil is 1,067 gallons/hour (20,140 Btu/lb-HHV; 7.2 lb/gal.)**			

Emissions Unit Operating Schedule

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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

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

Not Applicable

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

See Attachment UF-EU4-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 Att. UF-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): **Boiler gases exhaust through a single stack.**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **Not Applicable**	
5. Discharge Type Code: [ ] D [ ] F [ ] H [ ] P [ ] R [x] V [ ] W	
6. Stack Height:	**82** feet
7. Exit Diameter:	**6** feet
8. Exit Temperature:	**400** °F

9. Actual Volumetric Flow Rate:	**56,250** acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters): **1. Information for 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):

   Natural gas firing

2. Source Classification Code (SCC):

   1-03-006-01

3. SCC Units:

   Million Cubic Feet Burned

4. Maximum Hourly Rate:	5. Maximum Annual Rate:
0.164	**1,383**

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur:	8. Maximum Percent Ash:

9. Million Btu per SCC Unit:

   1,024

10. Segment Comment (limit to 200 characters):

    Field #7: 1 gr/100 cf. BLRs No. 4, 5 - reduced operations when oper. permit for cogen unit received (BLRs 1,2, & 3 taken out of service). Facility-wide annual NOx emission limit 194.3 TPY.

Segment Description and Rate: Segment 2 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): **1-02-005-01**	
3. SCC Units: **Thousand Gallons Burned**	
4. Maximum Hourly Rate: **1.067**	5. Maximum Annual Rate: **9,347**
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: **0.5**	8. Maximum Percent Ash: **0.1**
9. Million Btu per SCC Unit: **145**	
10. Segment Comment (limit to 200 characters): **1. See segment comment for natural gas firing**	

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
NOx			NS
SO2			EL
CO			NS
PM			NS
PM10			NS

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

Pollutant Detail Information:

1. Pollutant Emitted: **SO2**
2. Total Percent Efficiency of Control: %
3. Potential Emissions: **76.8** lb/hour **336.5** tons/year
4. Synthetically Limited? [ ] Yes [**X**] No
5. Range of Estimated Fugitive/Other Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/yr
6. Emission Factor: **0.5 % sulfur** Reference: **Permit**
7. Emissions Method Code: [**X**] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
8. Calculation of Emissions (limit to 600 characters): **Permit limit**
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): ***Potential emission based on fuel oil-firing. Boiler 5 will have reduced operations when the air operation permit for cogeneration is received.***

Emissions Unit Information Section 4 **of** 5

Allowable Emissions (Pollutant identified on front page)

A.

1. Basis for Allowable Emissions Code: **OTHER**	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: **0.5 % Sulfur**	
4. Equivalent Allowable Emissions:	**76.8** lb/hour **336.5** 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): **BACT, permit condition from combustion turbine.**	

B.

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

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 1 of 5

1.	Visible Emissions Subtype: **VE10**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **10** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **Annual Compliance EPA Test Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standard established as part of construction permit for cogeneration unit. 2. Gas-firing**

Visible Emissions Limitations: Visible Emissions Limitation 2 of 5

1.	Visible Emissions Subtype: **VE20**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: **60** % Maximum Period of Excess Opacity Allowed: **60** min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters):

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 3 of 5

1.	Visible Emissions Subtype: **VE**
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: **100** % Maximum Period of Excess Opacity Allowed: **60** min/hour
4.	Method of Compliance: **Best operating practices**
5.	Visible Emissions Comment (limit to 200 characters): **1. Not to exceed 2hr in 24hrs for malfunction. 2. Rule 62-210.700(1)**

Visible Emissions Limitations: Visible Emissions Limitation 4 of 5

1.	Visible Emissions Subtype: **VE20**
2.	Basis for Allowable Opacity: [ ] Rule [X] Other
3.	Requested Allowable Opacity Normal Conditions: **20** % Exceptional Conditions: **27** % Maximum Period of Excess Opacity Allowed: **6** min/hour
4.	Method of Compliance: **EPA Method 9**
5.	Visible Emissions Comment (limit to 200 characters): **1. VE standard established as part of construction permit for cogeneration unit. 2. Oil-firing. Annual test not required if F.O. use < 400 hr/yr.**

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Visible Emissions Limitations: Visible Emissions Limitation 5 of 5

1.	Visible Emissions Subtype: VE
2.	Basis for Allowable Opacity: [X] Rule [ ] Other
3.	Requested Allowable Opacity Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour
4.	Method of Compliance: Best operating practices
5.	Visible Emissions Comment (limit to 200 characters): Excess emissions for startup, shutdown. Rule 62-210.700(2).

Visible Emissions Limitations: Visible Emissions Limitation _____ of _____

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

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor _____ of _____

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

Continuous Monitoring System Continuous Monitor _____ of _____

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

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

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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

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

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

   [ ] 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):			
	1. Facility has an annual emission limit of 194.3 TPY for NOx in order to escape PDS review by netting out facility-wide emissions before and after the modification for the CT and DB			

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

Supplemental Requirements for All Applications

1.	Process Flow Diagram	
	[X] Attached, Document ID: UF-EU3-L1	
	[ ] Not Applicable	[ ] Waiver Requested
2.	Fuel Analysis or Specification	
	[X] Attached, Document ID: UF-EU3-L2	
	[ ] Not Applicable	[ ] Waiver Requested
3.	Detailed Description of Control Equipment	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
4.	Description of Stack Sampling Facilities	
	[ ] Attached, Document ID: _____	
	[X] Not Applicable	[ ] Waiver Requested
5.	Compliance Test Report	
	[ ] Attached, Document ID: _____	[X] Not Applicable
	[ ] Previously Submitted, Date: _____	
6.	Procedures for Startup and Shutdown	
	[X] Attached, Document ID: UF-EU3-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: **UF-EU3-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: **UF-EU3-L12** [ ] Not Applicable

13. Compliance Assurance Monitoring Plan

[X] Attached, Document ID: **UF-EU3-L13** [ ] Not Applicable

14. Acid Rain Permit Application (Hard Copy Required)

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

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

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

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

[x] Not Applicable

ATTACHMENT UF-EU4-D

APPLICABLE REQUIREMENTS LISTING

ATTACHMENT UF-EU4-D

Applicable Requirements Listing - Power Plants

EMISSION UNIT: EU03 - Steam Boiler Unit 4 FPC UF Cogeneration Facility

FDEP Rules:

Stationary Sources-General:

62-210.700(1)	- Malfunction only for FFGS
62-210.700(2)	- Startup/Shut down for FFGS
62-210.700(3)	- Load Change/soot blowing for FFGS
62-210.700(4)	- maintenance
62-210.700(6)	

Stationary Sources-Emission Standards:

62-296.406(1), (2),(3)	- VE; BACT

Stationary Sources-Emission Monitoring:

62-297.310(2)(b)	- Operating Rate
62-297.310(4)(a)2.	- Applicable Test Procedures;Sampling time
62-297.310(5)	- Determination of Process Variables
62-297.310(7)(a)3.	- Permit Renewal Test Required
62-297.310(7)(a)4.	
62-297.310(7)(a)9.	- FDEP Notification - 15 days
62-297.310(7)(c)	- Waiver of Compliace Tests (fuel sampling)
62-297.310(8)	- Test Reports

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 UF-EU5-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:

   387

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 UF-EU5-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: **13,871**	
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 UF-EU5-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 not known.			

ATTACHMENT UF-EU5-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.

Table1. Trivial(De Minimis)/Unregulated/Exempt Activities

Area	Emission Unit Description	Type/ Pollutant	Status (A)
UF COGENERATION FACILITY SITE:			
Water Lab	Solvent Use and Hood	Vent & Fug./VOC	ER
Generator	Lube Oil Vent	Vent/VOC	UR
Turbine	Lube Oil Vent	Vent/VOC	UR
Water Treatment	Sodium Hypochloride Tanks 2 @ 185 gal; 2 @ 360 gal	Vent	TR
	Sulfuric Acid Tanks 1 @ 185 gal	Vent	TR
	Calgon EL-5600 Tank 1 @ 165 gal	Vent	TR
	Calgon XLP-190 1 @ 165 gal	Vent	TR
	Burolock HP-33 Tank 1 @ 165 gal	Vent	TR
	Pre-Tech 3000 Tank 1 @ 165 gal	Vent	TR
	Pre-Tech 4040 Tank 1 @ 165 gal	Vent	TR
	Stainless Steel Tanks 6 @ 50 gal	Vent	TR
	Pre-Tech, H2SO4, NaOH Tanks; 3 @ 180 gal	Vent	TR
	Decarbonator Rmonves CO2 from raw water	Vent	TR
Bulk Tanks	Sodium Hydroxide - 8,000 gal	Vent	TR

	Sulfuric Acid - 8,000 gal	Vent	TR
Turbine	Cooling Air	Vent	TR
Natural Gas Compressor	Natural Gas Blow-off	Vent	TR
	Line Purge	Vents/N2	TR
HRSG	Natural Gas Blow-off	Vent	TR
	Various Steam Vents & Pressure Relief Valves	Vents	TR
Fuel Storage	No. 2 Diesel Tank	Vent	UR
Turbine Bldg	Fresh Water Cooling Tower	Vents	UR
General Site	Surface Coating < 6.0 gal/day	Fug.	ER
	Brazing, Soldering or Welding	Fug.	ER/TR
	Plant Grounds Maintenance	Fug.	TR
	Routine Maintneance	Fug.	TR
	Oil water separators (2)	Fug.	TR
	CEM Equipment & Calibration Gas Venting	Fug.	TR
	Compressed Air System	Vent	TR
	Non-halogenerated Solvent	Fug.	ER
Offices/Shops	Office Equipment Operation	Fug.	TR

	Routine Repairs	Fug.	TR
Substation	Transformers and Associated Equipment	Fug./VOC	TR
Parking Lot	Vehicles	Exhausts	ER
UF STEAM PLANT SITE:			
UF Boilers 4 & 5	Various Steam Vents & Pressure Relief Valves	Vents	TR
	2-50 gal Tanks for water treatment chemicals	Fug.	TR
General Site	Fresh Water Cooling Towers	Vents	UR
	Emergency Generator 350 kW Diesel	Stack	ER
	Diesel Tank	Vent	UR

(a) Status key:

ER = Exempt by Rule
TR = Trivial (pursuant to FDEP Guidance)
UR = Unregulated unit

Attachment UF-EU5-B6
General Emissions Unit Information

Table 2. FPC, University of Florida, Cogeneration Plant, Petroleum Product Storage and Throughput Operations

Unit/ FPC Tank No.	Storage Product	Storage Tank Size (gallons)	Potential Annual Throughput (gallons) (1)
UF/ oil	No. 2 fuel oil	193,200	6,935,650
UF/ oil	No. 2 fuel oil	193,200	6,935,650
	TOTAL	386,400	13,871,300

(1) Based on maximum fuel consumption allowed for Unit 4, Unit 5, and combustion turbine (219 hours permitted)

Unregulated or Exempt ?