Working Copy

TITLE V PERMIT APPLICATION
FLORIDA POWER & LIGHT COMPANY
LAUDERDALE PLANT
FORT LAUDERDALE, FLORIDA

Prepared For:
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, Florida 33408

Prepared By:
Golder Associates Inc.
6241 NW 23rd Street, Suite 500
Gainesville, Florida 32653-1500

June 2003
0237560

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4 Copies - FDEP Bureau of Air Regulation
1 Copy – Florida Power & Light Company
1 Copy – Florida Power & Light Lauderdale Plant
1 Copy – Golder Associates Inc.

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Florida Power & Light Company	
2. Site Name: Lauderdale Plant	
3. Facility Identification Number: 0110037 [ ] Unknown	
4. Facility Location: Street Address or Other Locator: 2 Miles West of Ravenswood Road City: Ft. Lauderdale County: Broward Zip Code: 33004	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: Kevin Washington – Senior Environmental Specialist
2. Application Contact Mailing Address: Organization/Firm: Florida Power & Light - Environmental Services Street Address: 700 Universe Blvd. City: Juno Beach State: Florida Zip Code: 33408
3. Application Contact Telephone Numbers: Telephone: (561) 691-2877 Fax: (561) 691-7049

Application Processing Information (DEP Use)

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

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

[ ] Initial Title V air operation permit 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:_____

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

Current construction permit number:_____

Operation permit number to be revised:_____

[ ] Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected:_____

[X] Title V air operation permit revision 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 number to be revised:_: 0110037-001-AV
Reason for revision:_Renewal of Existing Title V Permit_____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

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

Owner/Authorized Representative or Responsible Official

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

2. Owner/Authorized Representative or Responsible Official Mailing Address:
Organization/Firm: Lauderdale Plant
Street Address: 4300 SW 42 Ave.
City: Fort Lauderdale State: Florida Zip Code: 33314

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
Telephone: (954) 527-3601 Fax: (954) 527-3636

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative(check here [ ], if so) or the responsible official (check here [X], if so) 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 _____ Date May 13, 2003

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky
Registration Number: 14966

2. Professional Engineer Mailing Address:
Organization/Firm: Golder Associates, Inc. *
Street Address: 6241 NW 23rd Street, Suite 500
City: Gainesville State: Florida Zip Code: 32653

3. Professional Engineer Telephone Numbers:
Telephone: (352) 336-5200 Fax: (352) 336 - 6603

* Board of Professional Engineers Certificate No. 00001670

4. Professional Engineer Statement:

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

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

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

If the purpose of this application is to obtain a Title V source air operation permit (check here [X], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

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

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

Signature 6/12/03

Date

(seal)

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
035	Combined Cycle Unit 4A		N/A
036	Combined Cycle Unit 4B		N/A
037	Combined Cycle Unit 5A		N/A
038	Combined Cycle Unit 5B		N/A
003	Bank of 12 simple cycle Gas Turbines- Units 1-12		N/A
015	Bank of 12 simple cycle Gas Turbines- Units 13-24		N/A
027	Storage Tank No. 2		N/A
028	Storage Tank No. 3		N/A
029	Storage Tank No. 5		N/A
032	Gasoline Storage Tank (underground)		N/A
033	Diesel Storage Tank (underground)		N/A
030	Two Gas turbines Dump Tanks		N/A
	Unregulated Emissions Sources		N/A
039	Site Solvent Usage		N/A

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:

Application Comment

Renewal of existing Title V Permit.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17 East (km): 580.2 North (km): 2883.3			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 26-4-5 Longitude (DD/MM/SS): 80-11-54			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment (limit to 500 characters): This facility contains four combined cycle generating units units, and two banks of 12 gas turbines.			

Facility Contact

1. Name and Title of Facility Contact: Kathryn Pascale
2. Facility Contact Mailing Address: Organization/Firm: FPL Port Everglades Plant Street Address: P.O. Box 155 City: Dania State: Florida Zip Code: 33004
3. Facility Contact Telephone Numbers: Telephone: (954) 797-1338 Fax: (954) 797- 1579

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source? [ ] Unknown
2. [X] Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?
5. [ ] Synthetic Minor Source of HAPs?
6. [Y] One or More Emissions Units Subject to NSPS?
7. [X] One or More Emission Units Subject to NESHAP?
8. [ ] Title V Source by EPA Designation?
9. Facility Regulatory Classifications Comment (limit to 200 characters): This facility is located in a former non-attainment area for ozone (redesignated to an air quality maintenance area) therefore several of the generating units are subject to NOx-RACT. Units 4A&B and 5A&B are subject to NSPS Subpart GG. The black-start propane-fired auxiliary boiler is subject to the recordkeeping requirements of NSPS Subpart Dc.

List of Applicable Regulations

FDEP Title V Core List (see attached)	

Title V Core List Effective: 03/01/02

[**Note:** The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 06-01-01

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals.
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 06-21-01

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.: Emission Estimates.
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions

62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit - Title V Source, Form and Instructions.
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.: Application for Transfer of Air Permit - Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES- PRECONSTRUCTION REVIEW, effective 08-17-00

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-16-01

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.: Statement of Compliance Form

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 03-02-99

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.
62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 03-02-99

62-297.310, F.A.C.: General Test Requirements.
62-297.330, F.A.C.: Applicable Test Procedures.
62-297.340, F.A.C.: Frequency of Compliance Tests.
62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.
62-297.350, F.A.C.: Determination of Process Variables.
62-297.570, F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94
CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	3. Requested Emissions Cap tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
SO2	A				
NOx	A				
CO	A				
PM	A				
PM10	A				
VOC	A		99.92	See Comments	The volatile organic compound (VOC) emissions at the facility (with the exception of CT 4A, 4B, 5A, and 5B VOC emissions) are limited to 99.92 TPY by permit AC 06-179848. Please refer to Attachment FS_10.
H133	A				
SAM	A				
H114	B				
FL	B				
H021	B				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID:PFLFS_1.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID:PFLFS_2.bmp [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: PFLFS 3.bmp [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [X] Attached, Document ID: PFLFS_4.doc [ ] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [X] Attached, Document ID: PFLFS_5.doc [ ] Not Applicable [ ] Waiver Requested
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID:_____ [X] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:
   [X] Attached, Document ID:PFLFS_8doc_____ [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [X] Attached, Document ID: PFLFS_9.doc_
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [ ] Not Applicable

10. Alternative Methods of Operation:
    [X] Attached, Document ID: PFLFS_10.doc___ [ ] 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

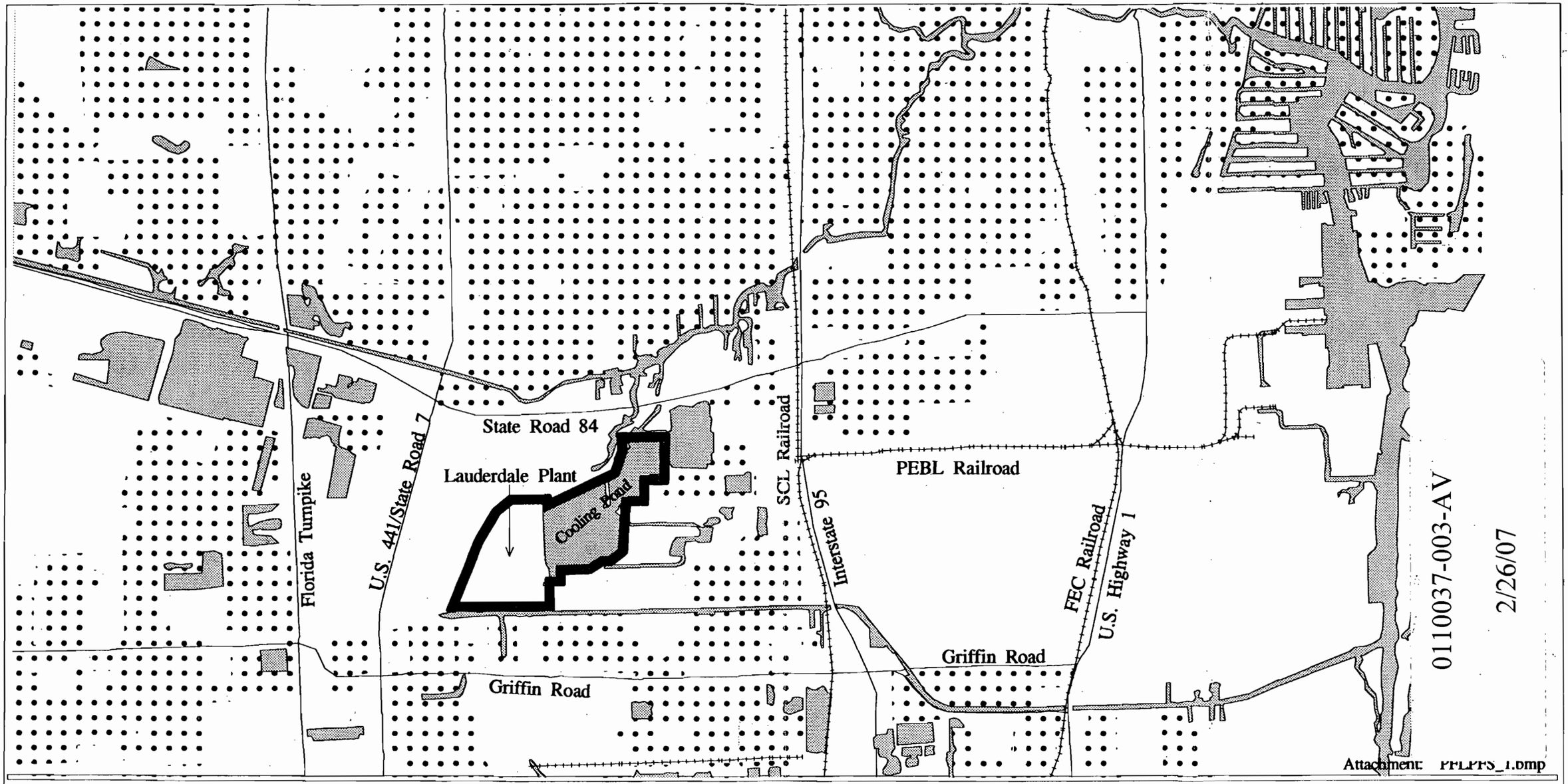
13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)
    [X] Not Applicable

14. Compliance Report and Plan:
    [X] Attached, Document ID: PFLFS_14.doc[ ] Not Applicable

15. Compliance Certification (Hard-copy Required):
    [X] Attached, Document ID: PFLFS_15.doc_ [ ] Not Applicable

ATTACHMENT PFLFS_1

AREA MAP SHOWING FACILITY LOCATION



Lauderdale Plant Area Map
Broward County

FPL Environmental Affairs

/export/home/ron/pfl-site.map (2-95)

N W E S

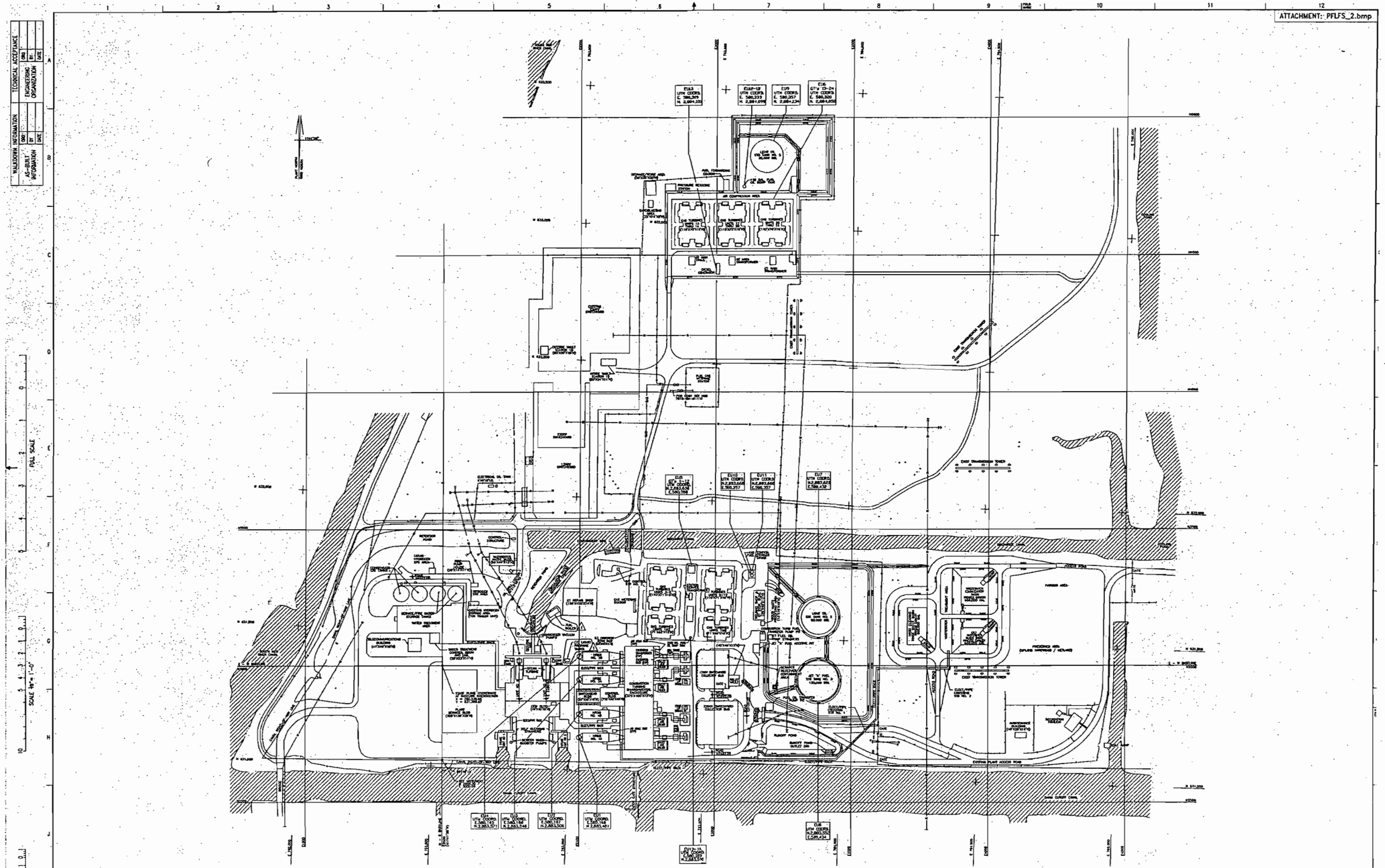
- Water
- Residential Areas
- Lauderdale Plant Site
- Major Roads
- Railroads

ATTACHMENT PFLFS_2

FACILITY PLOT PLAN

Best Available Copy

ATTACHMENT: PFLFS_2.bmp



1	4-30-03	ADDED AUX. BOILER & LIQUID PROPANE TANKS FOR TITLE V PERMIT	
0	7/18/02	ISSUED FOR TITLE V PERMIT	
REV	DATE	REVISION DESCRIPTION	ELV BY / PWR PWR / CH / CSP COR / CSP APR / KJW ORG / PFL ETS

FPL

SYSTEM: YY	DISCIPLINE: N/A	PLANT/UNIT: LAUDERDALE PLANT	BAR CODE
SCALE: N/A	CAD FILE NAME: FL015460	TITLE: FACILITY PLOT PLAN ATTACHMENT FS-2 TITLE V	
DRAWING SIZE: E(30"X42")	EPL ARCHIVE NAME: FL015460		
DRAWING NUMBER: PFL4-M0005-YY		SHEET: 1 OF 1	REV: 1

FPC5176/FPC6308-E 5/93

ATTACHMENT PFLFS_3

PROCESS FLOW DIAGRAM

ATTACHMENT: PFLFS_3.bmp

TECHNICAL ACCEPTANCE	ORG	BY	DATE
ENGINEERING ORGANIZATION			
WALKDOWN INFORMATION			
AS-BUILT INFORMATION			

EU5
GAS TURBINES 1-12

EU6
GAS TURBINES 13-24

LIQUID FUEL

F.O DUMP TANK 2500 GAL. — EU12-A

F.O DUMP TANK 110 GAL. — EU12-B

T5
75,000 BBL.
#2 FUEL OIL
EU9

DIESEL FUEL TANK 1000 GAL. — EU11

GASOLINE TANK 4000 GAL. — EU10

UNDERGROUND TANKS

ELECT. TO SWYD. (TYP)

STACK (TYP)

T2
80,000 BBL.
#2 FUEL OIL
EU7

NATURAL GAS

COMBUSTION TURBINE ENVIRONMENTAL ENCLOSURE

DUCTBURNERS (TYP)

TURB./GEN. NO. 4

TURB./GEN. NO. 5

AUX. BOILER 1

STEAM

EU4 HRSG 5B CT-5B

EU3 HRSG 5A CT-5A

EU2 HRSG 4B CT-4B

EU1 HRSG 4A CT-4A

1,000 GAL. JET FUEL ADDITIVE

EU8
T3
150,000 BBL.
JET "A" FUEL

LIQUID FUEL LINE

NOTES:
1. ACRONYMS:
   - DG-DIESEL GENERATOR
   - EU-EMISSION UNIT
   - FO-FUEL OIL
   - CT-COMBUSTION TURBINE
   - GT-GAS TURBINE
   - HRSG-HEAT RECOVERY STEAM GENERATOR
2. INSIGNIFICANT SOURCES ARE NOT SHOWN
3. EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX: EU * (EMISSION UNIT NUMBER)

COMBINED CYCLE UNITS 4 & 5

SCALE 3/8" = 1'-0"

SCALE 1/4" = 1'-0"

REV	DATE	REVISION DESCRIPTION	ELV			KJW	PFL
1	4-3-03	ADDED AUX. BOILER FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS
0	7/18/95	ISSUED FOR TITLE V APPLICATION	BY	CH	COR	APR	ORG

FPL

SYSTEM: YY	DISCIPLINE: N/A	PLANT/UNIT: LAUDERDALE PLANT	BAR CODE
SCALE: N/A	CAD FILE NAME: FL015461	TITLE: FACILITY SOURCE FLOW DIAGRAM ATTACHMENT FS-3 TITLE V	
DRAWING SIZE: B(11"X17")	FPL ARCHIVE NAME: FL015461		
DRAWING NUMBER: PFL4-M0101-YY		SHEET: 1 OF 1	REV: 1

GSYM/FPGBDR-B 5/93

ATTACHMENT PFLFS_4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Attachment PFLFS_4.doc

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 fugitive particulate matter include:

- fugitive dust from paved and unpaved roads
- sandblasting abrasive material from plant maintenance activities
- fugitive particulates from the use of bagged chemical products (soda ash, di-, tri- and monosodium phosphate, and other chemicals as needed)

Several precautions were taken to prevent emissions of particulate matter in the *original design* of the facility. These include:

- Paving of roads, parking areas and equipment yards

- Landscaping and planting of vegetation

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 17-296.310 F.A.C.:

- Use of containment devices to contain and capture sand in the small sandblast facility. The plant facility also constructs temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.

- Maintenance of paved areas as needed

- Regular mowing of grass and care of vegetation

- Limiting access to plant property by unnecessary vehicles.

- Bagged chemical products are stored in weather-tight buildings until they are used. Spills of powdered chemical products are cleaned up as soon as practicable.

ATTACHMENT PFLFS_5

FUGITIVE EMISSIONS IDENTIFICATION

Attachment PFLFS-5.doc
Fugitive Emission Identification

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PFLFS-3. FPL is not aware of 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 (VOC's)

Fugitive emissions of VOC's include those resulting from the use of cleaners and solvents for maintenance and operation. The site has a current permit condition (reference Section III, Subsection D of Title V Permit [0110037-001-AV]) which limits solvent losses during the calendar year. The VOC emissions from these solvents are calculated by the following method:

> "The solvent loss (volume) shall be equal to the total volume purchased/in stock minus the solvent volume reclaimed/disposed of offsite. The solvent volume loss shall then be multiplied by the emission factor (mass VOC per volume of solvent) to derive a TPY value. The total solvent TPY emission value will be added to the VOC emissions from the gas turbines and storage tanks, and the total VOC losses from these sources shall not exceed 99.92 TPY."

VOC's are also emitted by the various fuel oil storage tanks on the plant property, and by the combined-cycle combustion turbines and the simple-cycle gas turbines. VOC emissions for each of these emission units are covered in the respective ***Emission Unit*** sections of this permit application.

Hazardous Air Pollutants (HAP's)

Fugitive emissions of HAP's have been estimated to be less than the reporting threshold and are therefore not addressed in this application.

ATTACHMENT PFLFS_8

LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

Following are several pages of proposed insignificant activities at the facility. These were identified in the initial Title V application and those emission units where air pollutants could be limited were listed. The insignificant activities listed in the current Title V permit (Appendix I-1 of 0110037-001-AV).

1. Fire Protection Equipment
2. Mobile Emergency Diesel Generator
3. Fuel Gas System Miscellaneous Vents
4. Fuel Oil System Miscellaneous Vents
5. Gas Metering Area Miscellaneous Vents

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

UNITS 4 AND 5 COMBINED CYCLE POWER BLOCK

Combustion Turbine and Accessories
1½" Ø H_2 Continuous Generator Vent to Atmosphere

1" Ø Lube Oil Vents to Atmosphere

Lube Oil Vapor Extractor Vents to Atmosphere

¾" Fuel Gas Vent Purge

Heat Recovery Steam Generators (HRSG)
High Pressure Steam Drum Silencers

Intermediate Pressure Steam Drum Silencers
Low Pressure Steam Drum Silencers

1" Ø N_2 Vents to Atmosphere

Sample Cooler Relief Valves

Main Steam and Reheat Steam
Main Steam and Reheat Silencers

1" Ø Main Steam and Reheat Vents to Atmosphere

Steam Turbine Systems
¾ " Ø Vents to Atmosphere

8" Ø Relief Valve Vents to Atmosphere

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

UNITS 4 AND 5 COMBINED CYCLE POWER BLOCK

Condensate
Feedwater Heater Relief Valve Vents to Atmosphere

1" Ø Feedwater Heater Vents

6" Ø Gland Seal Condensate Blower Discharge

Miscellaneous Vents to Atmosphere

¾ " Ø X 1" Ø Relief Valve Vents to Atmosphere

Condensate Storage Tank Vent

HRSG Blowdown System
1" Ø Vents to Atmosphere

14" Ø Intermittent Blowdown Stack

1" Ø Continuous Blowdown Tank Vent

Condenser and Air Evacuation System
LP Turbine Diaphragm Seals

1" Ø Vents to Atmosphere

8" Ø Exhaust Cond. Vacuum Pump Separators

4" Ø Exhaust Water Trap Silencers Priming Vacuum Pumps

Combustion Turbine Wash System
Miscellaneous Vents to Atmosphere

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

UNITS 4 AND 5 COMBINED CYCLE POWER BLOCK

Circulating and Open Cooling Water System
1" Ø Relief Valves

Miscellaneous Air Release Valves ✓

1" Ø Vents to Atmosphere

Service and Well Water System
Storage Tank Vents to Atmosphere

1" Ø Vents to Atmosphere

Lube Oil Transfer System
Lube Oil Holding Tank Vent (10,000 Gal.) ✓

1" Ø Vents to Atmosphere

Bulk Gas System
N_2 Supply Line Relief Valve Vent

CO_2 Storage Tank Fill Line Relief Valve Vents ✓

CO_2 Supply Line Relief Valve Vents

Intermediate Pressure HRSG Feedwater and Steam System
1" Ø Deaerator Vents to Atmosphere

1" Ø I.P.S.H. Discharge Vents to Atmosphere ✓

I.P.S.H. Discharge Silencers

8" Ø IP Steam System Silencers

1" Ø IP Steam System Vents to Atmosphere

1" Ø IP FW Vents to Atmosphere

Temporary Steam Blow System
6" to 18" Ø Vents to Atmosphere

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

UNITS 4 AND 5 COMBINED CYCLE POWER BLOCK

Feedwater System
1" Ø Vents to Atmosphere

Strainer Vents

Steam Turbine Lube Oil System
Vapor Extractor Vents

Lube Oil Dump Tank Vent

C. T. Control Building
Battery Room Roof Vents

D. C. PNL. & U.P.S. Room Pwr. Roof Vents

Stairway Roof Vent

Restrooms Roof Vent

Kitchen Roof Vent

Conference & Break Room Exhaust Fan

C. T. Environmental Enclosure
Elevator Equipment and Restroom Roof Vent

Roof Vents and Exhaust Fans

Closed Cooling Water System
Miscellaneous Vents to Atmosphere

Miscellaneous Relief Valve Vents

CCW Head Tank Vent

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

UNITS 4 AND 5 COMBINED CYCLE POWER BLOCK

Gas Regulator and Filter Yard
Miscellaneous Vents to Atmosphere

Gas Scrubber Relieve Valves

Gas Metering Area
Miscellaneous Vents to Atmosphere

Moisture collection tank

Fuel Gas System
Miscellaneous Vents to Atmosphere

Unpaved Areas
Limited Vehicular Traffic

Fuel Oil System
1" Ø F.O. Delivery Piping Vents

F.O. Additive Tank

5' Ø x 8 LG. 6"-Vent (1,000 Gal.)

2" Ø CT Combustor Drain Collection Header Vent

CT Shell Drain Anti-Splash Box Vent

C.E.M. Monitoring Equipment
Gas Bottles

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

UNITS 4 & 5 COMBINED CYCLE POWER BLOCK

Miscellaneous Activities
Plant Grounds Maintenance

Routine Maintenance/Repair Activities
Non-Halogenated Solvent Cleaning Operations

Internal Combustion Engines which Drive compressors, Generators, Water Pumps or Other Auxiliary Equipment

Transformers, Switches and Switchgear, Processing & Venting
Electrically Heated Equipment Used for Heat Treating, Tracing, Drying, Soaking, Case Hardening or Surface Conditioning

Air Compressors and Centrifuges Used for Compressing Air

Storage of Product in Sealed Containers

Miscellaneous Mobile Vehicle Operation
Cars, Light Trucks, Heavy Duty Trucks, Back Hoes, Tractors, Forklifts, Cranes, Etc.

Miscellaneous Mobile Equipment Operation
Compressors, Chain Saws, Small Generators, (< 100kw) Welding Machines, Electric Saws & Drills, Etc.

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

GENERAL SITE

Water Plant Analysis Room
Exhaust Hood w/12" Blower ✓

Water Treatment
Miscellaneous Relief Valves

Mixed Bed Blower Relief Valve

Clearwell 12" Ø Vent

Forced Draft-Vacuum Degasifier Vents 12"

Vacuum Pump Discharger Vents

Neutralization Tank

Mist Eliminator Vent ✓

Scale Inhibitor Tank/Vent

12' Ø x 20' LG. Acid Storage Tank with Mist Control Vent

12' Ø x 20' LG. Caustic Storage Tank Breather Vent

Hazardous Waste Building
14" Pwr. Roof Vent Oil Storage Room ✓

14" Power Roof Vent Solvent & Chemical Storage Room with Closed Containers

14" Pwr. Roof Vent Waste Storage

Fire Pump House
2" Diesel Day Tank Vent (500 Gal.)

6" Diesel Engine Exhaust ✓

28" X 28" Exhaust Fan

ATTACHMENT PFLFS_8

LAUDERDALE PLANT – LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

Machine Shop
24" Air Operated Fans ✓

Recreation Pavilions
Smoker w/2 - 8" Vents

Charcoal Cooking Area Exhaust Fan 12"

Accessory Component Repair Building
12" Exhaust Fan

Fire Protection System
1" Ø Vents to Atmosphere ✓

Storm Water Basins
Retention and Detention Ponds

GENERAL SITE

G. T. Component Repair Shop
Roof Exhaust Fan

Large Exhaust Hood Fans

Paint Room and Booth Exhaust Fans

Sandblasting Machine Exhausts to Cyclone and Filter Bags

G. T. Repair and Overhaul Shop
Roof Exhaust Fans

Restroom Roof Vent

Temporary Facilities
Restroom Trailer Roof Vents

Plant Service Building (Maintenance/Repair/Storage/Offices/Restrooms
Roof Exhaust Fans ✓

Exhaust Fume Hood

Waste Water Treatment
600,000 Gallon Oily Waste Water Surge Basin

900,000 Gallon Waste Water Equalization Basin

800,000 Gallon HRSG Cleaning Rinse Water Basin

ATTACHMENT PFLFS_8

LAUDERDALE PLANT - UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

PH Adjustment Tank/Mixers

Relief Valves

Air Receiver Tank Relief Valve

Waste Water Treatment Control Building
Roof Vents

Lab Hood Vent

Waste Water System
Restroom Toilet and Sink Vents

4"-Vents at Pump Lift Stations

1"- Ø Air Release Valves

Waste Water Treatment
Oil-Water Separator Vent

Air Type Oil-Water Separator Relief Valve

Decant Tank Vent

Waste Oil Holding Tank Compartment "A" & "B" Vent

12' Ø x 20' LG. Acid Storage Tank Dry with Mist Eliminator

12' Ø x 20' LG. Caustic Storage Tank 4" Vent

ATTACHMENT PFLFS_8

LAUDERDALE PLANT - UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Activities
Plant Grounds Maintenance

Routine Maintenance/Repair Activities

Non-Halogenated Solvent Cleaning Operations

Internal Combustion Engines which Drive compressors, Generators, Water Pumps or Other Auxiliary Equipment

Transformers, Switches and Switchgear, Processing & Venting

Electrically Heated Equipment Used for Heat Treating, Tracing, Drying, Soaking, Case Hardening or Surface Conditioning

Air Compressors and Centrifuges Used for Compressing Air

Storage of Product in Sealed Containers

Maintenance/Painting Activities

Miscellaneous Mobile Vehicle Operation
Cars, Light Trucks, Heavy Duty Trucks, Back Hoes, Tractors, Forklifts, Cranes, Etc.

Miscellaneous Mobile Equipment Operation
Compressors, Chain Saws, Small Generators, (< 100kw) Welding Machines, Electric Saws & Drills, Etc.

Miscellaneous Other Activities
Home heating and comfort heating with a gross maximum heat output of less than one million Btu/hour

Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight

Vacuum pumps used in laboratory operations

Equipment used for steam cleaining

Belt or drum sanders having a total sanding surface of five square feet or less and other equipment used exclusively on wood or plastics or their products having a density of 20 pounds per cubic foot or more

ATTACHMENT PFLFS_8

LAUDERDALE PLANT - UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Other Activities (continued)
Equipment used exclusively for space heating, other than boilers.

Laboratory equipment used exclusively for chemical or physical analyses

VariousBrazing, soldering or welding equipment

Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents

Fire & Safety equipment

Surface coating facilities in ozone attainment areas (provided that < 6.0 gallons of coatings per day are applied).

Degreasing units using heavier-than-air vapors exlusively, except any such unit using or emitting any substance classified as a hazardous air pollutant.

Use of spray cans & solvents for routine maintenance activities

ATTACHMENT PFLFS_8

LAUDERDALE PLANT - UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

GAS TURBINE SITES 1 AND 2

G.T. Site 1 & 2
½" Air Storage Tank Vent

½" Air Storage Tank Relief Valve

2" Engine L.O. Breather Vents

2" X 4" Gen. Cooling Air Discharger

6" Batt. Room Vent w/Blower

CO_2 Fire Suppression

Restroom Vents

½" Aux.. Engine Lube Oil Tank Breather Vents

24" Aux. Equipment Room Exhaust Fan

4" Gen./Expander Lube Oil Vapor Extractor

Miscellaneous Vents and Relief Valves
1" Gas Vents

¾" Gas Scrubber Vent

ATTACHMENT PFLFS_9

LIST OF EQUIPMENT/ACTIVITIES
REGULATED UNDER TITLE VI

Attachment PFLFS_9.doc

EQUIPMENT / ACTIVITIES REGULATED UNDER TITLE VI

The Lauderdale facility currently has over 100 refrigeration and air-conditioning units on the plant site. Of these, twelve air-conditioning units currently meet the 50-pound reporting threshold established by the Department:

Unit	Location	Pounds CFC
Combined-cycle	Relay room	50
Combined-cycle	Relay room	50
Combined-cycle	Relay room	50
Combined-cycle	Relay room	50
Combined-cycle	Breaker room	120
Combined-cycle	Breaker room	120
Combined-cycle	Breaker room	120
Combined-cycle	Breaker room	120
Combined-cycle	Breaker room	120
Combined-cycle	Control room	360
Combined-cycle	Control room	360
NA	New Service Bldg.	120
NA	New Service Bldg.	120

ATTACHMENT PFLFS_10

ALTERNATIVE METHODS OF OPERATION

Attachment FS-10.doc
Alternative Methods of Operation

Combined cycle units

Each "combined cycle unit" consists of two combustion turbines (emissions units), two heat-recovery steam generators (HRSGs) and one steam turbine-generator.

The "normal" operating method for each combined cycle unit is: two combustion turbines firing, two HRSGs and one steam turbine operating . However, each unit may also be operated with only one combustion turbine supplying one HRSG and one steam turbine or in simple cycle mode which is one combustion turbine and no steam turbine or in simple cycle mode which is one combustion turbine and no steam turbine.

The 2 combined cycle units at the Lauderdale plant site may be operated 24 hours per day, 365 days per year at heat input rates from 0 to 100% of the permitted maximum on both natural gas fuel or on light distillate fuel oil. The combined cycle units as a group are limited to 54,129,421 MMBtu/year total heat input (at 75 degrees F; approximately 87% capacity factor), and as a group are additionally limited to 14,426,844 MMBtu/year total heat input at 75 degrees Fahrenheit (approximately 25% capacity factor) for distillate fuel operation, under the plant's existing PSD permit and Site Certification. The individual CT units do not currently have annual individual heat input limitations.

Possible Scenarios

UNIT	FUEL	Heat Input per hour @ 75 deg. F
4A	0 - 100% GAS	0 - 1775.62 MMBtu/hour
4A	0 - 100% OIL	0 - 1646.9 MMBtu/hour
4B	0 - 100% GAS	0 - 1775.62 MMBtu/hour
4B	0 - 100% OIL	0 - 1646.9 MMBtu/hour
5A	0 - 100% GAS	0 - 1775.62 MMBtu/hour
5A	0 - 100% OIL	0 - 1646.9 MMBtu/hour
5B	0 - 100% GAS	0 - 1775.62 MMBtu/hour
5B	0 - 100% OIL	0 - 1646.9 MMBtu/hour

Please note that the heat input rates and heat input limitations will fluctuate with ambient temperature. Also note that the above heat input numbers do not reflect the presence of ductburners.

Attachment FS-10.doc
Alternative Methods of Operation

Ductburners

The combined-cycle units as constructed did not incorporate duct burners although they were designed to accommodate them. However, duct burners were initially permitted for the facility. FPL requested in 1993 that because the ductburners were never installed, the heat input and associated emissions that would have been associated with the duct burners be reallocated to the combustion turbines, until such time as FPL installed the duct burners. The heat input numbers given above for the combustion turbines reflect the "without ductburners" condition. If and when FPL install ductburners in the future, the appropriate heat input will be reallocated to the ductburners, so long as the total heat input in any one of the four combustion turbine-HRSG sets does not exceed 1775.62 mmBtu / hour.

Simple-cycle Gas turbine units

Each of the 24 simple-cycle gas turbine units at the Lauderdale plant site may be operated 24 hours per day, 365 days per year at heat input rates from 0 to 702 MMBtu/hour on natural gas fuel or on light distillate fuel oil, or a combination thereof. The FDEP NOx RACT permits (AO 06-148760 and AO 06-148761) for the facility limited the combined capacity factor of each bank of 12 GT units to 7379 x 10^9 btu/year (approximately equal to 10 percent capacity factor per year). No capacity factor restriction is imposed upon the individual GT units. This limit was established in the initial Title V permit. However, the underlying Rule establishing NOx RACT through a "case-by case" procedure (i.e., Rule 62-296.570(4)F.A.C.) was subsequently changed to specific emission limits. For the 24 GTs, the emission limits established in final NOX RACT Rule 62-296.570 (4)(b)5 F.A.C are 0.50 lb/MMBtu when firing natural gas and 0.90 lb/MMBtu when firing distillate oil. Since the current limitation on fuel use was established in an operating permit, it is not federally enforceable. This heat input requirement must be noted as not being federally enforceable in the renewed Title V permit.

Prior to the operating permit requirements establishing the NOx RACT heat input limit, a construction permit (AC 06-179848) was issued that limited the existing Lauderdale Plant site, excluding the new combustion turbines, to 99.92 tons/year. This tons/year limit was applicable to the existing fossil fuel fired steam generators (i.e., Units 4 and 5), GTs 1-24 and VOCs from tanks and solvent use. The 99.92 tons/year limit requirement is federally enforceable for these sources and included in the current Title V permit. The heat input limit established by this permit is based on the total VOC limitation of 99.92 minus the amount of tons/year limitations from other sources (i.e., tanks, solvents). This amount is 10.083 tons/years referenced by Subsections III. C. and D. of the Title V permit. The remaining VOC emissions (89.837 tons/year) are allocated to GTs 1-24, since the existing steam electric units have been replaced. The heat input limitation based on these VOC emissions is as follows: 89.837 tons/year x 2,000 lb/ton x MMBtu/0.0034 lb VOC = 52,845,294 MMBtu/year or 52,845 x 10^9 Btu/year. The VOC emission factor of 0.0034 lb VOC/MMBtu was the basis for the construction permit and determined based on testing when natural gas was fired. The VOC emission factor for distillate oil was 0.0013 lb VOC/MMBtu and would be less restrictive.

Each "gas turbine unit" consists of two aircraft derivative gas turbines, which exhaust through an air driven electrical generator and a single common stack. These peaking simple-cycle gas turbine units have historically been regulated per bank of twelve individual units, and not individually. Also note that the Department has assigned an APIS number to each bank of twelve units, rather than to each individual GT.

Attachment FS-10.doc
Alternative Methods of Operation

Above-ground Fuel Tank Vents

The above-ground fuel tanks may be in use from 0 - 100% capacity for 365 days per year. These tanks will contain light distillate oil. Tank volumes and thruputs (listed in FDEP permit AO-06-230614) are as follows:

	Volume	Thruput	VOC Limit
Tank #2	80,000 bbls	54,260,842 gallons	2.33 tpy
Tank #3	150,000 bbls	106,079,730 gallons	4.46 tpy
Tank #5	75,000 bbls	54,260,842 gallons	2.29 tpy

(Note that these tanks supply fuel to the GT's and/or CT's.)

Attachment FS-10.doc
Alternative Methods of Operation

Gas Turbine Dump Tanks

The gas turbine dump tanks' function is to collect fuel oil that remains in the fuel lines which supply the gas turbines, upon a unit trip, or a switch from liquid fuel to natural gas fuel. Tank volumes and thruputs (derived from FDEP permit AO-06-230164) are as follows:

	Volume	Thruput	VOC Limit
GT Site 1 Dump Tank	2,500 gal ✓	} 300,000 gal ✓	0.003 tpy ✓
combined GT Site 2 Dump Tank	110 gal ✓		

ATTACHMENT PFLFS_14

COMPLIANCE REPORT AND PLAN

SEE ATTACHMENT PFLFS_15

ATTACHMENT PFLFS_15

COMPLIANCE CERTIFICATION

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☒ **Annual Requirement (Partial)**	☐ **Transfer of Permit**	☐ **Permanent Facility Shutdown**

REPORTING PERIOD*	REPORT DEADLINE**
January 1, through March 6, of 2003 (year)	July 1, 2003

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: **FLORIDA POWER & LIGHT COMPANY**

Site Name: **LAUDERDALE PLANT** Facility ID No. **0110037-001-AV** County: **BROWARD**

COMPLIANCE STATEMENT (Check only one of the following three options)

X **A.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

___ **B.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.*
2. Description of the incident.*

* SEE ATTACHMENTS

___ **C.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph **B.** above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

(Signature of Title V Source Responsible Official) 3/6/03 *(Date)*

Name: **Rudy Sanchez** Title: **Plant General Manager**

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, 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.

(Signature of Acid Rain Source Designated Representative) 4-7-03 *(Date)*

Name: **Nancy M. Kierspe** Title: **Designated Representative**

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J 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.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (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.

2. 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.

3. Description of Emissions Unit(s) Addressed in This Section (limit to 60 characters): Combined Cycle Units 4A, 4B, 5A, and 5B – Each one, an identical Combustion Turbine exhausting through it's own identical HRSG.

4. Emissions Unit Identification Number: 035 (4A), 036 (4B), 037 (5A), 038 (5B)
[ ] No ID [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 05/23/93 – 4A&4B 06/09/93 – 5A&5B	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]

9. Emissions Unit Comment: (Limit to 500 Characters) There are 4 identical combined-cycle combustion turbines. Each CT is connected to an electrical generator, and each CT generates heat, producing steam in a heat recovery steam generator (HRSG). The steam from 2 sets of 2 HRSG's is then sent to the Unit 4 and Unit 5 steam turbine-generators, respectively, for additional electric power. The 4 combined-cycle CT's have a current annual aggregate heat input of 54,129,421 mmbtu, and an aggregate heat input limitation of 14,426,844 mmbtu when firing distillate oil.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

   Steam or water injection

2. Control Device or Method Code(s): 028

Emissions Unit Details

1. Package Unit:
   Manufacturer: Westinghouse Model Number: MW501F
2. Generator Nameplate Rating: 231.25 MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		1775.62	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year		8760 hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

The maximum heat input given above reflects natural gas fuel at 75 degrees F. Maximum heat input while firing light distillate oil is 1646.9 mmbtu/hr. at 75 degrees F.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Refer to Title V Core list – previously attached

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? CT HRSG Stack 4A, 4B, 5A, 5B	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): NA		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA		
5. Discharge Type Code: V	6. Stack Height: 150 feet	7. Exit Diameter: 18 feet
8. Exit Temperature: 330 °F	9. Actual Volumetric Flow Rate: 2422969 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 580.168 North (km): 2883.481		
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above is the designed flow rate while firing light distillate oil at 40 degrees F. The designed flow rate while firing natural gas at 40 degrees F is 2,419,751 acfm.		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment ___1__ of __2___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Light distillate oil burned in combined cycle CTs		
2. Source Classification Code (SCC): 2-01-009-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 12.11	5. Maximum Annual Rate: 106084	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.3	8. Maximum % Ash: 0.05	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): Max. annual rate reflects the annual heat input limitation of 14,426,844 mmbtu at 75 degrees F of operation on #2 oil, which is a permit limitation in the current PSD permit.		

Segment Description and Rate: Segment ___2__ of ___2__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas burned in combined cycle CTs		
2. Source Classification Code (SCC): 2-01-002-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 1.69	5. Maximum Annual Rate: 14814	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters): Natural gas and distillate may be co-fired, primarily during fuel switching (from oil to gas or from gas to oil). The maximum annual rate is based on 100% load for 8760 hours at 75 degrees F.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOx	028	NA	EL
CO	NA	NA	EL
PM	NA	NA	EL
PM10	NA	NA	EL
VOC	NA	NA	EL
SAM	NA	NA	NS
FL	NA	NA	NS
H114	NA	NA	NS
H021	NA	NA	NS
H113	NA	NA	NS
H133	NA	NA	NS
HAPS	NA	NA	NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Carbon Monoxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 100 lb/hour 438 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 2.75 Reference: Permit #PSD-FL-145	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 100 lb/hr on oil (permit limit) 89 lb/hr on gas (permit limit) Note: There are no annual emission limits or fuel usage limitations for individual CT's. Therefore, the maximum potential emissions can be the maximum of oil firing: (100 lb/hr/CT* 8760 hr/yr) / 2000 lb/ton = 438 tons/ yr/CT (8760 hours of operation)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____1__ of ____3__

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 lb/hr	4. Equivalent Allowable Emissions: 100 lb/hour ✓ 438 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test (EPA Method 10) if oil is fired for more that 400 hours during the previous 12 months (Refer permit PSD-FL-145).	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of distillate oil operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Carbon Monoxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____2__ of ____3__

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 89 lb/hr	4. Equivalent Allowable Emissions: 89 lb/hour ✓ 389.8 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test (EPA Method 10) if natural gas operation is more that 400 hours during the previous 12 months.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Carbon Monoxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year.	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____3__ of ____3__

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1489 tons/yr	4. Equivalent Allowable Emissions: 1489 tons/year ✓
5. Method of Compliance (limit to 60 characters): Annual Operating Report.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given on this page represents the annual tpy limit for CO. Also, the tpy given in field 4 reflects the "without ductburners" condition, and represents emissions from 4 combustion turbines.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control: 70
3. Potential Emissions: 422 lb/hour 1848 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 422 lb/hr Reference: Permit #PSD-FL-145	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Oil Calculation (422 lb/hr * 8760 hr/yr) / 2000 lb/ton = 1848.4 tons/ yr. for one combustion turbine Gas Calculation (264 lb/hr * 8760 hr/yr) / 2000 lb/ton = 1156.3 tons/ yr. for one combustion turbine	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____1__ of ___3___

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 264 lb/hr	4. Equivalent Allowable Emissions: 264 lb/hour 1156 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test (EPA Method 20) or RATA test at 90%-100% of capacity.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____2__ of ___3___

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 422 lb/hr	4. Equivalent Allowable Emissions: 422 lb/hour 1848 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test (EPA Method 20) if oil operation>400 hours in previous 12 months.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of distillate oil operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____3__ of ___3___

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 4868 tons/yr	4. Equivalent Allowable Emissions: 4868 tons/year ✓
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given on this page represents the annual tpy limit currently in effect. Also, the tpy given in field 4 reflects the "without ductburners" condition, and represents emissions from 4 combustion turbines.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: PM - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: 58 lb/hour 254 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 58 lb/hr Reference: Permit #PSD-FL-145	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 58 lb/hr on oil (permit limit) 14.7 lb/hr on gas (permit limit) Note: There are no annual emission limits or fuel usage limitations for individual CT's. Therefore, maximum potential emissions can be the maximum oil firing.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 58 lb/hr	4. Equivalent Allowable Emissions: 58 lb/hour ✓ 254 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack teat using EPA Method 5 or 17 only when oil firing >400 hours in the previous 12 months.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of distillate oil operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: PM - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___2___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 14.7lb/hr	4. Equivalent Allowable Emissions: 14.7 lb/hour ✓ 64.4 tons/year
5. Method of Compliance (limit to 60 characters): Not required for natural gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
**(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)**

Pollutant Detail Information

1. Pollutant Emitted: PM - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___3___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 424.7 tons/yr	4. Equivalent Allowable Emissions: 424.7 tons/year ✓
5. Method of Compliance (limit to 60 characters): None	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given on this page represents the annual tpy limit on PM/PM10 for this emission unit. Values in fields 3 & 4 above are reflective of the "without ductburners" condition.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Particulate Matter PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: 58 lb/hour 254 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 58 lb/hr Reference: Permit #PSD-FL-145	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 58 lb/hr on oil (permit limit) 14.7 lb/hr on gas (permit limit) Note: There are no annual emission limits or fuel usage limitations for individual CT's. Therefore, maximum potential emissions can be the maximum oil firing.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 58 lb/hr	4. Equivalent Allowable Emissions: 58 lb/hour ✓ 254 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack teat using EPA Method 5 or 17 only when oil firing >400 hours in the previous 12 months.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of distillate oil operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___2___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 14.7lb/hr	4. Equivalent Allowable Emissions: 14.7 lb/hour ✓ 64.4 tons/year
5. Method of Compliance (limit to 60 characters): Not required for natural gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___3___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 424.7 tons/yr	4. Equivalent Allowable Emissions: 424.7 tons/year ✓
5. Method of Compliance (limit to 60 characters): None	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given on this page represents the annual tpy limit on PM/PM10 for this emission unit. Values in fields 3 & 4 above are reflective of the "without ductburners" condition.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Sulfur Dioxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: 538 lb/hour 1571 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 538 lb/hr Reference: Site Certification	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): From permit: a maximum of 0.3% sulfur in fuel oil for hourly emissions and an average sulfur content of 0.2 % for annual emissions. Permit limit for SO_2: 538 lb/hr/CT on oil and 4.9 lb/hr/CT on gas Annual permit limit: 1,582 TPY for all CT's Oil: ([538 lb/hr/CT]/[0.3])*(0.2%)*(8760 hr/yr)(2000) = 1571 TPY/CT (8760 hours of operation)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 538 lb/hr	4. Equivalent Allowable Emissions: 538 lb/hour ✓ 1571 tons/year
5. Method of Compliance (limit to 60 characters): Average composite of as received samples – sulfur content of distillate oil using ASTM D-2880-71 or equivalent.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of distillate oil operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Sulfur Dioxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___2___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 4.9lb/hr	4. Equivalent Allowable Emissions: 4.9 lb/hour ✓ 21.46 tons/year
5. Method of Compliance (limit to 60 characters): Fuel analysis – For natural gas the customized fuel monitoring schedule is used.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Sulfur Dioxide	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___3___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1582.8 tons/yr	4. Equivalent Allowable Emissions: 1582.8 tons/year ✓
5. Method of Compliance (limit to 60 characters): Annual Operating Report (from fuel analysis)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given on this page represents the annual tpy limit for SO_2 for this emission unit.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: Volatile Organic Compounds	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7.8 lb/hour 34.2 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 7.8 lb/hr Reference: Permit #PSD-FL-145	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 7.8 lb/hr on oil (permit limit) 1.3 lb/hr on gas (permit limit) (7.8 lb/hr/CT)*(8750 hr/yr)(2000) = 34.2 TPY/CT (8760 hours of operation) (7.8 lb/hr/CT)*(8750 hr/yr)*(25%)(2000) = 8.5 TPY/CT (25% Capacity Factor)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 7.8 lb/hr	4. Equivalent Allowable Emissions: 7.8 lb/hour ✓ 34.2 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack teat using EPA Methods 25A or 18 only when oil firing >400 hours in the previous 12 months.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above is (worst-case) for distillate oil operation of one CT at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___2___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.3lb/hr	4. Equivalent Allowable Emissions: 1.3 lb/hour 5.7 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack teat using EPA Methods 25A or 18 only when natural gas is fired >400 hours in the previous 12 months.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Pollutant Detail Information

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___3___ of ___3___

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 50 tons/yr	4. Equivalent Allowable Emissions: 50 tons/year ✓
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given on this page represents the annual tpy limit on VOC for this emission unit. The limit above represents the 75 deg. F condition. Values in fields 3 & 4 above are reflective of both natural gas and distillate oil operation for the 4 CT's.	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___2___

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): The allowable opacity limits listed above are applicable to operation on natural gas. DEP Rule 62-210.710(1) allows 2 hours per 24 hours of excess emissions for startup, shutdown, and malfunction.	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor __1___ of ___2__

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TECO Model Number: 42 Serial Number: See # 7 below	
5. Installation Date: See #7 below	6. Performance Specification Test Date: 11/14/95

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.

	Serial Number	Installation Date	Performance Specification Test Date
4A	42D-49813-284	11/22/94	11/14/95
4B	42D-49808-284	11/22/94	11/14/95
5A	42D-49873-284	11/22/94	11/14/95
5B	42D-49858-284	11/22/94	11/14/95

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___2___ of ___2___

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Oil firing: DEP Rule 62-210.700(1), allows excess emissions up to 2 hours/ 24 hrs, for start-up, shutdown, and malfunction	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor __2___ of ___2__

1. Parameter Code: EM	2. Pollutant(s): CO_2
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Milton Roy Model Number: 42D	Serial Number: See # 7 below
5. Installation Date: See # 7 below	6. Performance Specification Test Date: See # 7 below

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.

	Serial Number	Installation Date	Performance Specification Test Date
4A	N4C0317T	11/22/94	11/14/95
4B	N4C0308T	11/22/94	11/14/95
5A	N4C0311T	11/22/94	11/14/95
5B	N4C0318T	11/22/94	11/14/95

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: PFLFS_3_ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: PFLU1_2.doc [ ] 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: PFLU1_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:__4A, 4B, 5A, 5B - 09/24/02 [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: PFLU1_ 6.doc [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
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
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: PFLU1_ 11.doc [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID:_____ [N/A] Not Applicable

13. Identification of Additional Applicable Requirements
[X] Attached, Document ID: PFLU1_13.doc [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: PFLU1_15

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

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

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

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:___N/A _

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____N/A__

[ ] Not Applicable

ATTACHMENT PFLU1_2

FUEL ANALYSIS OR SPECIFICATION

Attachment PFLU1_2.doc

Fuel Analysis
Natural Gas Analysis (typical)[3]

Parameter	Typical value	Max value
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124	none
% sulfur (grains/CCF)	0.43[1]	1 gr/ccf[2]
% nitrogen (by volume)	0.8	none
% ash	negligible	none

*Note: The values listed are "typical" values based upon information supplied to FPL 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. biocide is added.

(1) Data from laboratory analysis

(2) Data from PSD permit revision dated July 19, 1993

(3) The values are "typical" based upon the following:
- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

Attachment PFLU1_2.doc

Fuel Analysis
No. 2 Distillate oil (typical)[4]

Parameter	Typical value
API gravity (@ 60 F)	35.0[2]
Heat content (Btu/bbl)	19,130[3]
% sulfur	0.2 - 0.3[1]
% nitrogen	no specification
% ash	<0.01[2]

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(3) Data taken from the Lauderdale Site Certification Application

(4) The values are "typical" based upon the following:
- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

Attachment PFLU1_2.doc
Fuel Analysis - Fuel Additive

When firing light distillate oil, the combustion turbines require a lubricity enhancer to be added to the oil. This material is added at a rate of 1/2 gallon per 1,000 barrels of fuel oil. Below is typical analytical information FPL has gathered for the current additive. Note that the information given is for the lubricity enhancer that is currently utilized at the facility. FPL reserves the right to change the additive used at any time.

Parameter	Typical Value
Relative density	23.2 (API gravity)
Heat content	17,676 btu/lb
% sulfur	0.07
% nitrogen	0.13
% ash	0.03

*Note: The values listed are "typical" values based upon analysis performed by the FPL Central Laboratory on 6/10/94. However, analytical results from grab samples of fuel additive taken at any given point in time may vary from those listed.As oil is received a stabilizer and a biocide is added.

Attachment PFLU1_2.doc

Fuel Analysis
Jet A Distillate oil (typical)[4]

Parameter	Typical value	Specifications
API gravity (@ 60 F)	41.8[3]	37 - 51[1]
Heat content (Btu/bbl)	19,673[3]	18,400 minimum[1]
% sulfur	0.2 - 0.3[2]	0.3 maximum[2]
% nitrogen		none
% ash	<0.001[1]	0.001[1]

Footnotes:
(1) Data taken from FPL fuel specifications.

(2) CT's are limited to 0.3 percent maximum, 0.2 percent annual average sulfur content.

(3) Data taken from laboratory analysis.

ATTACHMENT PFLU1_4

DESCRIPTION OF STACK SAMPLING FACILITIES

ATTACHMENT NO. PFLU1_4.bmp

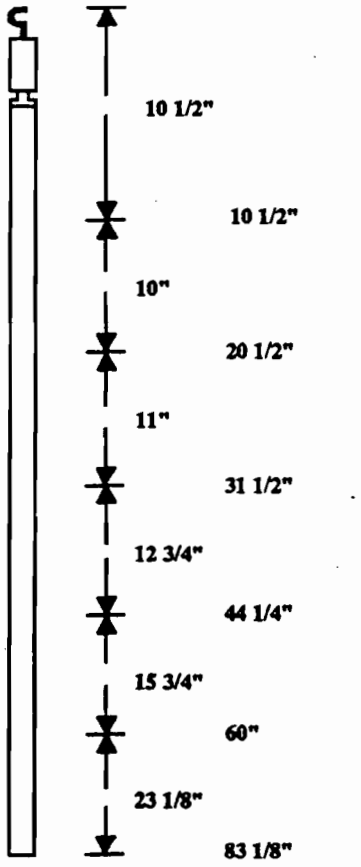
FLORIDA POWER & LIGHT CO.
STACK SAMPLING FACILITIES
FORT LAUDERDALE SITE

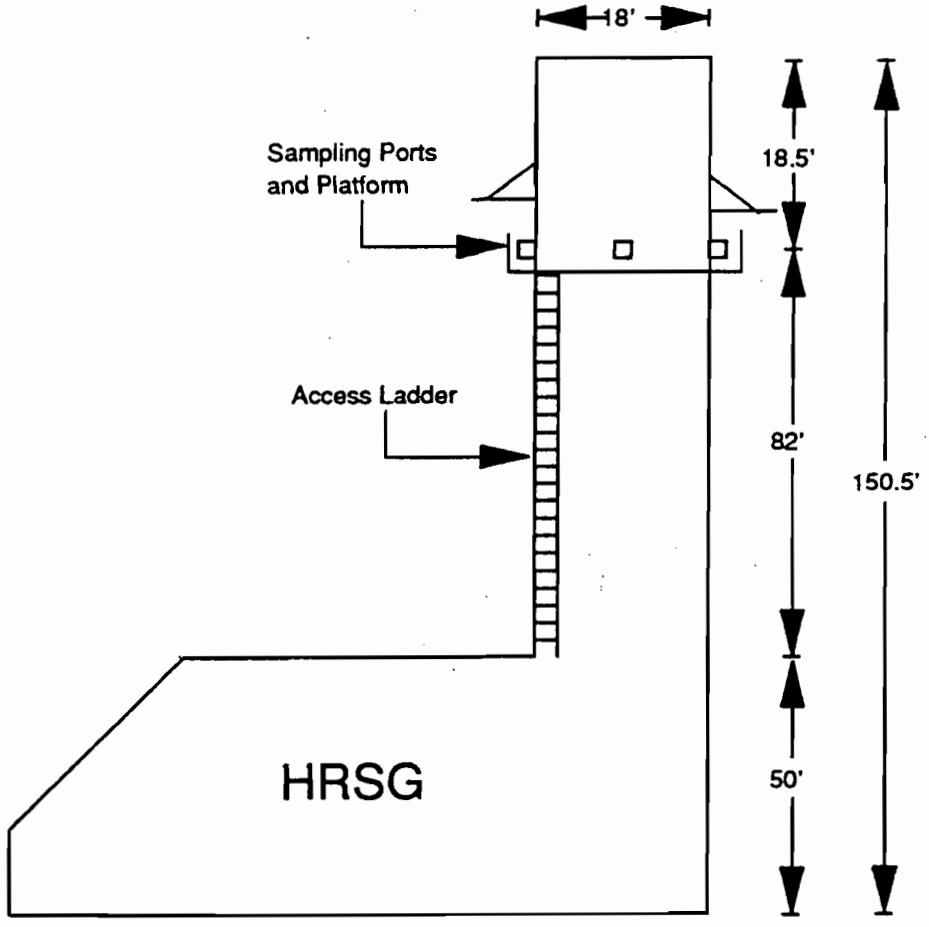
Gas & Distillate Oil Fired Combined Cycle
Units 4 & 5

STACK SPECIFICATIONS

SAMPLING DIAMETER: 216 in.
SAMPLING AREA: 254.5 sq. ft.
SAMPLING PORT DEPTH: 6.0 in.
No. OF PORTS: 4, 4" diameter
No. OF POINTS PER TRAVERSE: 6
TOTAL No. OF POINTS : 24
SAMPLING TIME PER POINT: 2.5 min.
TOTAL SAMPLING TIME: 60.0 min.
NOTE: DRAWING IS NOT TO SCALE

PROBE DIAGRAM





Probe support above each port is provided by a 15 ' channel iron beam with a trolley system. Lighting and 15 amp 110 V standard plugs are provided on the platform. Additional power is available at the base of the stack.

FILE:PFLTTLV
03/08/94

01105

ATTACHMENT PFLU1_6

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PFLU1_6.doc

Procedures for Startup and Shutdown - Combustion Turbines

The combustion turbines utilize steam injection for NOx control. Upon startup, one CT is brought on line and up on load as quickly as possible in order to begin producing injection steam as soon as possible and thereby minimize periods of excess NOx emissions. Steam injection also has some effect on opacity, so that if the steam injection system has problems, opacity may also be affected.

Per 40 CFR 60.334(a), the steam-to-fuel ratio for each CT is continuously monitored via the plant's Distributed Control System (DCS) (a computer system). This ratio is continuously compared to the values on the NOx steam injection curves (refer to Attachment PFLU1_3.doc). The NOx steam injection curves were prepared by performing stack tests while varying the steam-to-fuel ratios, in order to achieve repeatable NOx emission rates within permitted values.

In addition, per 40 CFR 75, a NOx continuous emission monitor (CEM) has been installed on this unit. Note that this unit meets the definition of a "gas-fired unit" under 40 CFR 72.2, and is thus not required to install an SO2 monitor or an opacity monitor. This facility uses the protocol in 40 CFR 75 Appendix D to monitor for SO2.

If excess emissions are encountered at any time during startup or normal operation (i.e. the steam-to-fuel ratio is exceeded), an audible alarm sounds in the control room, alerting the operator that excess NOx emissions are occurring. The operator immediately begins corrective actions (e.g.verify validity of alarm and adjusting the steam flow and/or fuel flow), working within the physical limitations of the combustion turbine and heat recovery steam generator (HRSG) in order to bring the steam-to-fuel ratio into compliance as soon as possible. If the steam-to-fuel ratio is not in compliance within 2 hours of initial startup, load on the CT may be reduced to a point where there are no excess NOx emissions.

Shutdown of the combustion turbines does not typically cause excess emissions. In any event, the DCS system continuously monitors the steam-to-fuel ratio, and alerts plant operators to any exceedances.

Each control center operator is required to undergo extensive training on the proper operational procedures for the combustion turbines and heat recovery steam generators. Part of this training addresses current permit limits and corrective actions to be undertaken should a malfunction or other situation occur which causes excess emissions.

ATTACHMENT PFLU1_11

ALTERNATIVE METHODS OF OPERATION

Attachment PFLU1_11.doc

Alternative Methods of Operation - Combustion turbines

Each combustion turbine will operate primarily on natural gas fuel, with light distillate oil as a backup fuel. Each CT will be operated independently of any other, and can operate from 0 to 1775.62 MMBtu/hour on gas fuel and 0 to 1646.9 MMBtu/hour on distillate oil. (Both heat input rates are given at 75 degrees F). If and when duct burners are installed in the heat recovery steam generators (HRSG's), the CT's may operate with or without the ductburners as needed. If the ductburners are installed, the maximum heat input to the CT will be reduced by an amount equal to the heat input reallocated to the ductburners, so that the total heat input is less than 1775.62 mmBtu / hour at 75 degrees F. Note that the ductburners (if installed) will only be operated while the CT is firing natural gas fuel; the ductburners will not be used while the CT is firing distillate oil fuel.

The current plant air construction permit (AC 06-179848), PSD permit (PSD-FL-145) and Site Certification (PA-89-6636) limit emissions of individual pollutants on an annual basis in terms of tons per year for 4 CT's, and on an hourly basis in terms of lbs/hour/CT. These permit limits give FPL the flexibility to operate each of the 4 CT's, so long as neither the annual aggregate limits nor the hourly limits for each CT are exceeded. An analogous situation exists for each of the regulated pollutants in the permits, for example NOx. The four combustion turbines have an annual aggregate NOx limit of 4,868 tpy (without ductburners installed; 4,716 tpy with ductburners installed). This annual limit is also representative of an approximate 87% capacity factor for the 4 CT's. However, any individual CT may operate 8,760 hours per year, as long as neither the aggregate annual NOx limit nor the hourly NOx limits are exceeded.

Compressor washes are periodically performed on the combustion turbines. There are 2 types of compressor washes: water washes and detergent washes. Water washes are performed at a frequency based on compressor performance characteristics (usually once per week) and consist of injecting water at approximately 26 gpm for 10 to 60 minutes. Detergent washes consist of bringing the combustion turbine off-line and 1) at spin-speed injecting a detergent solution, 2) conducting a soak and drain while the CT is on turning gear (rotating slowly) for 20 minutes, 3) performing a water wash at spin-speed for approximately 10 minutes, 4) performing a second soak and drain, 5) performing a spin-dry. The detergent wash is also performed based on compressor performance and operational status. The type of detergent mix used will depend on the frequency of compressor cleaning evolutions, the type of compressor fouling experienced, and the extent to which fouling occurs.

The four combustion turbines have an annual aggregate heat input limit of 54,129,421 mmBtu for all fuels combined. This heat input is approximately equivalent to an 87% capacity factor for the 4 CT's.The four combustion turbines also have an annual aggregate heat input limit of 14,426,844 mmBtu/year (@75°F) for firing distillate oil, which is approximately equivalent to a 25% capacity factor. However, any individual CT may operate 8,760 hours per year, as long as the aggregate annual heat input limit is not exceeded.

Emissions from the combustion turbines are affected by ambient temperature, type of fuel, and megawatt load on the unit. Ambient temperature is a factor because at cooler ambient temperatures the air is more dense; therefore more air can be forced through the unit, with a correspondingly higher fuel usage (and therefore higher emissions) than at higher ambient temperatures. Higher megawatt production is also possible at lower ambient temperatures.

The type of fuel combusted affects emissions due to the variability of contaminants contained in the fuel and differences in the combustion process for different fuels. Please refer to Emission Unit Supplemental Information Question #2 for fuel analytical information.

ATTACHMENT PFLU1_13

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-035	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-036	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-037	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5A)
-038	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5B)

The four combined-cycle combustion turbines (CTs) are identical in configuration. Each CT is connected to an electrical generator, and each CT generates heat which produces steam in a heat recovery steam generator (HRSG). The steam from two HRSGs is then sent to a steam turbine generator for additional electrical power. The **combined** CT 4A and CT 4B units are designated Unit 4; in like manner, the **combined** CT 5A and CT 5B units are designated Unit 5. Unit 4 and Unit 5 each have a net summer continuous capability of 430 MW. NOx emissions are controlled by using steam injection. Duct modules, suitable for later installation of selective catalytic reduction equipment, have been installed. Unit 4 commenced commercial operation in May, 1993; Unit 5 commenced commercial operation in June, 1993.

{Permitting notes: the emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b)38., F.A.C; PSD-FL-145, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; and Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

General

A.1. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

A.2. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

Essential Potential to Emit (PTE) Parameters

A.3. Permitted Capacity. The maximum heat input (lower heating value) to each combustion turbine shall not exceed 1,775.62 MMBtu/hr while firing natural gas nor 1,646.9 MMBtu/hr while firing fuel oil, at 75 degrees F.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; PSD-FL-145, Specific Condition No. 1]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

A.4. Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.20**.
[Rule 62-297.310(2), F.A.C.]

A.5. Methods of Operation - (Fuels).
Only natural gas or light distillate fuel oil shall be fired in the CTs.
[Rule 62-213.410, F.A.C.; PSD-FL-145]

A.6. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year, provided that the annual heat input (lower heating value) to the four CTs does not exceed 54,129,421 MMBtu and the annual heat input attributed to light distillate fuel oil firing does not exceed 14,426,844 MMBtu (@ 75 degrees F).
[Rule 62-210.200(PTE), F.A.C.; PSD-FL-145, Specific Condition No. 2]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.7. The maximum allowable emissions from each CT, in accordance with the BACT determination, shall not exceed the following emissions, at 75 degrees F:

			Emission Limitations	
Pollutant	**Fuel**	**Basis**	**lb/hr/CT**	**4 CTs (TPY)***
NOx	Gas	42 ppmvd**	264	4868 (combined gas and oil total)
	Oil	65 ppmvd**	422	
VOC	Gas	1 ppmvd	1.3 ✓	50 (combined gas and oil total)
	Oil	6 ppmvd	7.8 ✓	
CO	Gas	30 ppmvd	89	1,489 (combined gas and oil total)
	Oil	33 ppmvd	100	
PM/PM_{10}	Gas		14.7	424.7 (combined gas and oil total)
	Oil		58	
SO_2	Gas		4.9	1,582.8 (combined gas and oil total)
	Oil		538	

Notes:
* Refers to the maximum facility emissions (four CTs), with capacity limitations of 25 percent on oil.
**ppm NOx, dry, corrected to ISO standard ambient air conditions and 15 percent oxygen.
[PSD-FL-145, Specific Condition No. 5]

A.8. The following potential emissions, determined by BACT, are tabulated for PSD and inventory purposes:

		Maximum Potential Emissions (@40 ° F)	
Pollutant	**Fuel**	**lb/hr/CT**	**4 CTs (TPY)**
H_2SO_4 Acid Mist	Gas	0.042	196 (combined gas and oil total)
	Oil	67	
Mercury	Gas	0.0192	0.3 (combined gas and oil total)
	Oil	0.0049	
Fluoride	Oil	0.0535	0.23
Beryllium	Oil	0.0041	0.02

Sulfuric acid mist emissions assume a maximum of 0.3 percent sulfur in fuel oil for hourly emissions, and an average sulfur content of 0.2 percent for annual emissions.
[PSD-145, Specific Condition No. 6]

A.9. Opacity. Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil.
[PSD-FL-145, Specific Condition No. 7]

A.10. Opacity. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
[40 CFR 60.11(a)]

A.11. Opacity. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
[40 CFR 60.11(c)]

A.12. Sulfur Dioxide. The maximum allowable sulfur (total) content of the natural gas burned at this facility shall not exceed 10 grains per 1,000 cubic feet (gr/1000 CF). The permittee shall monitor the sulfur content of the natural gas by the customized fuel monitoring schedule approved by EPA.
[PSD-FL-145, Specific Condition No. 5; Customized Fuel Monitoring Schedule, dated March 12, 1993]

A.13. Sulfur Dioxide. The sulfur content of the light distillate fuel oil shall not exceed a maximum of 0.3 percent, by weight, and shall not exceed an average of 0.2 percent, by weight, during any consecutive 12-month period. The 12-month average sulfur content shall be calculated as a weighted average based upon the sulfur content of the oil and the amount burned on a daily basis. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.335 by testing all oil shipments for sulfur content, nitrogen content, and heating value, using ASTM D 2800-96 or the latest edition.
[Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, and PSD-FL-145, Specific Conditions No. 5 and No. 11]

A.14. Nitrogen Oxides. The nitrogen oxides emissions from each combustion turbine unit shall be controlled by using steam injection for both natural gas and fuel oil firing modes.
[PSD-FL-145, Specific Condition No. 8]

Excess Emissions

A.15. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.16. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

A.17. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

A.18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.19. Except as specified in this condition for visible emissions testing on fuel oil, annual compliance tests shall be performed on each combustion turbine unit with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods, or equivalent, in accordance with the July 1, 1996 version of 40 CFR 60 Appendix A. The stack test for each turbine shall be performed according to the requirements of specific condition **A.20**.

Pollutant	EPA Reference Method	Gas	Oil
Particulate Matter	5 or 17		X
Visible Emissions	9	X	X
Carbon Monoxide	10	X	X
Nitrogen Oxides	20	X	X
Volatile Organic Compounds	25A	X	X
	Test Method		
Sulfur content	ASTM D 2880-96*		X
	ASTM D 1072-90(94) E-1, ASTM D 3031-81(86), ASTM D 4084-94, or ASTM D 3246-92*	X	

*or the latest edition.

The owner or operator shall conduct testing for visible emissions while firing fuel oil, using EPA Method 9, for each combustion turbine unit upon that turbine's exceeding 400 hours of operation on fuel oil, and every 150 hours of operation on fuel oil thereafter, in any given federal fiscal year (October 1 through September 30). Such tests shall be performed within 15 days of exceeding such operating hours, to allow for prior notification of the tests.
[Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, and PSD-FL-145, Specific Condition No. 10]

A.20. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at capacity. Capacity is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then an emissions unit may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. Subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.; PSD-FL-145, Specific Condition No. 23]

Monitoring of Operations

A.21. At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A.22. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_X emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ± 5.0 percent and shall be approved by the Administrator.
[40 CFR 60.334(a)]

A.23. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
(1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

(2) If the turbine is supplied its fuel without intermediate bulk storage, the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with 40 CFR 60.334(b). The Lauderdale Plant has an approved Customized Fuel Monitoring Schedule (dated March 12, 1993).
[40 CFR 60.334(b)(1) and (2)]

Continuous Monitoring Requirements

A.24. Continuous monitoring of the steam injection rates shall be operated and maintained in accordance with 40 CFR 60, Subpart GG, for each unit.
[PSD-FL-145, Specific Condition No. 12]

A.25. For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, the continuous emission monitoring system shall be installed, calibrated, operated and maintained in accordance with the quality assurance requirements of 40 CFR 75, adopted and incorporated by reference in rule 62-204.800, F.A.C. Compliance shall be demonstrated based on a 3-hour rolling average.
[40 CFR 60.13(a); and, Rules 62-213.440, 62-204.800 and 62-296.405(1)(c)3., F.A.C.]

A.26. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
[40 CFR 60.13(d)(1)]

A.27. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
[40 CFR 60.13(e)(1) and (2)]

A.28. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.
[40 CFR 60.13(f)]

A.29. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.
[40 CFR 60.13(g)]

Recordkeeping and Reporting Requirements

A.30. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

A.31. For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
a. *Nitrogen oxides*. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with the permitted nitrogen oxide standard by the initial performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the initial performance test. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).
[40 CFR 60.334(c)(1)]

A.32. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
[40 CFR 60.7(a)(4)]

A.33. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.
[40 CFR 60.7(b)]

A.34. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
[40 CFR 60.7(c)(1), (2), (3), and (4)]

A.35. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form

shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.
[40 CFR 60.7(d)(1) and (2)]

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)

A.36. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).
[40 CFR 60.7(e)(1)]

A.37. The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

A.38. To determine compliance with the oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption for each turbine and monthly records of heating value for such fuel. All records shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Department upon request.
[PSD-FL-145, Specific Condition No. 13]

A.39. Quarterly excess emission reports, in accordance with the July 1, 1996 version of 40 CFR 60.7 and 60.334, shall be submitted to the Broward County Department of Natural Resource Protection office.
[PSD-FL-145, Specific Condition No. 19]

A.40. The emissions units are also subject to the conditions contained in **Subsection E. Common Conditions.**

Subsection E. Common Conditions.

E.U. ID No.	Brief Description
-035	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-036	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-037	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5A)
-038	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5B)
-003	Bank of 12 Combustion Turbines (Nos. 1 to 12)
-015	Bank of 12 Combustion Turbines (Nos. 13 to 24)

The following conditions apply to the emissions units listed above:

Test Methods and Procedures

E.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

E.2. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the

period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter Comparison check	2% 5%

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

E.3. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

ATTACHMENT PFLU1_15

ACID RAIN PART APPLICATION
PHASE II

Phase II Acid Rain Part 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

Plant Name **Lauderdale Plant**	State **FL**	ORIS Code **613**

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

a	b	Compliance Plan c	d	e
Unit ID#	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
4GT1	Yes	**NO**	**N/A**	**N/A**
4GT2	Yes	**NO**	**N/A**	**N/A**
5GT1	Yes	**NO**	**N/A**	**N/A**
5GT2	Yes	**NO**	**N/A**	**N/A**
	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 is being repowered, the Repowering Extension Plan form is included.

Plant Name (from Step 1)
Lauderdale Plant

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

Standard Requirements

Acid Rain Part 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 and 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 Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
(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 Department; 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 part application, the Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 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 EPA or the Department:
(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, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(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)
Lauderdale 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 an exemption under 40 CFR 72.7, 72.8 or 72.14, 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 40 CFR 76.11 (NO_x averaging 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, 76, 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 an exemption under 40 CFR 72.7, 72.8, or 72.14 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: Nancy Kierspe	
Signature Nancy Kierspe	Date 4-7-03

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J 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.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (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.

2. 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. Description of Emissions Unit Addressed in This Section (limit to 60 characters:
Lauderdale GT Site –1, Gas Turbines Units 1 through 12 and,
Lauderdale GT Site –1, Gas Turbines Units 13 through 24

4. Emissions Unit Identification Number: 003-GTs 1-12, and 015-GTs 13-24 [ ] No ID
ID: [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 08/01/70	8. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [N]

9. Emissions Unit Comment: (Limit to 500 Characters) These emission units are two sets of 12 each identical simple cycle gas turbines, (003-GT 1-12, and 015-GT 13-24) The generator nameplate rating for the gas turbines is reflective of one gas turbine (out of 12) at a 40 degree F condition. As with most gas turbines, ambient temperature is inversely related to heat input capability and is inversely related to megawatt out put for these machines.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: Manufacturer: Pratt & Whitney		Model Number: GG4A
2. Generator Nameplate Rating:	42 MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		8424	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year		8760 hours/year

8. Operating Capacity/Schedule Comment (limit to 200 characters):

Each GT EU of twelve gas turbines has a combined max. heat input rate of 8424 mmbtu/hr. The current Title V permit has limited the annual heat input to the bank of 12 GTs to 7379 X 10^9 BTU/yr based on the previous operating permit issued for NOx RACT. This limit is not federally enforceable (see Attachment PFLFS_10).

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Refer to Title V Core list – previously attached

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? GT 1, GT 2, GT 3, GT 4, GT 5, GT 6, GT 7, GT 8, GT 9, GT 10, GT 11, GT 12, and GT 13, GT 14, GT 15, GT 16, GT 17, GT 18, GT 19, GT 20, GT 21, GT 22, GT 23, GT 24	2. Emission Point Type Code: 3

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Each Emission Unit is comprised of 12 identical simple-cycle gas turbine units regulated collectively.
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

5. Discharge Type Code: V	6. Stack Height: 45 feet	7. Exit Diameter: 15.6 feet
8. Exit Temperature: 860 °F	9. Actual Volumetric Flow Rate: 1069740 acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet

13. Emission Point UTM Coordinates: Zone: 17 East (km): 580.241 North (km): 2883.068
14. Emission Point Comment (limit to 200 characters): Emission point UTM coordinates are for simple cycle GT 1. GTs 1-12 are regulated collectively as a bank of 12, and GTs 13-24 are regulated collectively as a bank of 12. Refer to Attachment PFLFS_2.

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment ___1__ of __2___

3. Segment Description (Process/Fuel Type) (limit to 500 characters): EU 5 Gas turbine bank (1-12) burning distillate oil and, EU 6 Gas turbine bank (13-24) burning distillate oil		
2. Source Classification Code (SCC): 2-01-001-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 61.94	5. Maximum Annual Rate: 54260.5	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash: 0.05	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): Max. Annual Rate information provided in #5 above, is based on heat input limitation, which is equal to a 10% capacity factor limit for each bank of 12 GTs required by a previously issued air operation permit (A006-230618). This limit is not Federally enforceable (see Attachment PFLFS_10).		

Segment Description and Rate: Segment ___2__ of ___2__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): EU 5 Gas turbine bank (1-12) burning natural gas and, EU 6 Gas turbine bank (13-24) burning natural gas		
2. Source Classification Code (SCC): 2-01-002-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 8.023	5. Maximum Annual Rate: 7028.02	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.000031	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters): Max. Annual Rate information provided in #5 above, is based on heat input limitation which is equal to a 10% capacity factor limit for each bank of 12 GTs required by a previously issued air operation permit (A006-230618). This limit is not Federally enforceable (see Attachment PFLFS_10). The GT's may also use 150 lb methane bottles to assist liquid fuel start-ups. Natural gas information above is provided for methane as well, since natural gas is mostly methane.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	NS
NOx	NA	NA	EL
CO	NA	NA	NS
PM	NA	NA	NS
PM10	NA	NA	NS
SAM	NA	NA	NS
VOC	NA	NA	EL
HAP	NA	NA	NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7572 lb/hour 3316.5 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.9 lb/mmbtu Reference: DEP Rule 62-296.570(4)(b)5. And NOx RACT Permit AO06-148760	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.9 lb/mmbtu*702 mmbtu/hr = 631.8 lb/hr 631 lb/hr/GT*12 GTs = 7572 lb/hr (7572 lb/hr * 8760 hr/yr) / 2000 lb/ton x 0.10* = 3316.5 tons/ yr * 0.10 is 10-percent capacity factor established by NO_x RACT operating permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions calculated at 40 degrees F for a maximum of 876 hours of operation which is equivalent to the NOx RACT heat input limit. This heat input limit is not Federally enforceable. However, any individual GT can operate up to 8760 hr/yr.	

Allowable Emissions Allowable Emissions ____1__ of ____2__

1. Basis for Allowable Emissions Code: NOx RACT	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.9 lb/mmbtu	4. Equivalent Allowable Emissions: 631 lb/hour 2763.78 tons/year
5. Method of Compliance (limit to 60 characters): Stack test once every 5 years using EPA Method 20 or modified EPA Method 20 – 1GT per bank of 12	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emission limits are from rule 62-296.570(4)(b)5., F.A.C. Emissions given above are for each gas turbine operating on liquid fuel.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: lb/mmbtu Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____2__ of ___2___

1. Basis for Allowable Emissions Code: NOx RACT	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.5 lb/mmbtu	4. Equivalent Allowable Emissions: 351 lb/hour 1537.38 tons/year
5. Method of Compliance (limit to 60 characters): Stack test once every 5 years using EPA Method 20 or modified EPA Method 20 – 1GT per bank of 12	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emission limits are from rule 62-296.570(4)(b)5., F.A.C. Emissions given above are for each gas turbine operating on natural gas fuel.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 57.28 lb/hour 25.1 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.0034 lb/mmbtu Reference: Permit AC 06-179848	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.0034 lb/mmbtu*8424 mmbtu/hr = 57.28 lb/hr for two banks of 12 GTs (57.28 lb/hr * 8,760 hr/yr) / 2000 lb/ton x 0.10* = 25.1 tons/ yr * 0.10 is 10-percent capacity factor established by NO_x RACT operating permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions calculated at 40 degrees F for a maximum of 876 hours of operation while firing natural gas fuel. A 10-percent capacity factor is not Federally enforceable (see Attachment PFLFS_10).	

Allowable Emissions Allowable Emissions ____1__ of ____5__

1. Basis for Allowable Emissions Code: Requested by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.0013 lb/mmbtu	4. Equivalent Allowable Emissions: 0.91 lb/hour 4.0 tons/year
5. Method of Compliance (limit to 60 characters): Stack test once every 5 years using EPA Method 20 or modified EPA Method 20 – 1GT per bank of 12	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emission limits for VOC are from the air construction permit AC 06-179848. Emissions given above are for each gas turbine operating on liquid fuel.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: lb/mmbtu Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____2__ of ___5___

1. Basis for Allowable Emissions Code: Requested by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.0034 lb/mmbtu	4. Equivalent Allowable Emissions: 2.39 lb/hour 10.45 tons/year
5. Method of Compliance (limit to 60 characters): Stack test once every 5 years using EPA Method 20 or modified EPA Method 20 – 1GT per bank of 12	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emission limits for VOC are from the air construction permit AC 06-179848. Emissions given above are for each gas turbine operating on natural gas.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: lb/mmbtu Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____3__ of ___5___

1. Basis for Allowable Emissions Code: Requested by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 57.28 lb/hr	4. Equivalent Allowable Emissions: 57.28 lb/hour 25.1 tons/year
5. Method of Compliance (limit to 60 characters): Stack test once every 5 years using EPA Method 20 or modified EPA Method 20 – 1GT per bank of 12	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions given above are for all 24 gas turbines operating concurrently on natural gas fuel and limited to 10-percent capacity factor established by NO_x RACT operating permit. This heat input limit is not Federally enforceable.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: lb/mmbtu Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____4__ of ___5___

1. Basis for Allowable Emissions Code: Requested by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 21.9 lb/hr	4. Equivalent Allowable Emissions: 21.9 lb/hour 9.59 tons/year
5. Method of Compliance (limit to 60 characters): Stack test once every 5 years using EPA Method 20 or modified EPA Method 20 – 1GT per bank of 12	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions given above are for all 24 gas turbines operating concurrently on #2 distillate fuel.	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: lb/mmbtu Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____5__ of ___5___

1. Basis for Allowable Emissions Code: Requested by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 99.92 tons/yr	4. Equivalent Allowable Emissions: 99.92 tons/year
5. Method of Compliance (limit to 60 characters): Annual tracking of VOC emissions from solvents, gas turbines, and fuel oil storage tanks	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Annual combined emission limit of 99.92 TPY VOC from solvents, gas turbines, and fuel oil storage tanks is given in construction permit AC 06-179848.	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___1___

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 20	
5. Visible Emissions Comment (limit to 200 characters): The maximum Period of Excess Opacity Allowed is 2 hours in 24 hours as stated in Rule 62-210.700(1) F.A.C.	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor ___0___ of ___0___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): Emission units 005 and 006 are not required to install continuous monitors because they are exempted per 40 CFR 72.6(b)(1).	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: PFLU5_1.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: PFLU1_2.doc [ ] 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: PFLU6_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:_GT7, GT21 – 12/03/02_ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: PFLU5_ 6.doc [ ] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
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
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: PFLU5_ 11.doc [ ] Not Applicable

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

13. Identification of Additional Applicable Requirements
[X] Attached, Document ID: PPEU5_13.doc [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part 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:__ N/A____

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

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

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:___N/A _

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____N/A__

[X] Not Applicable

ATTACHMENT PFLEU5_1

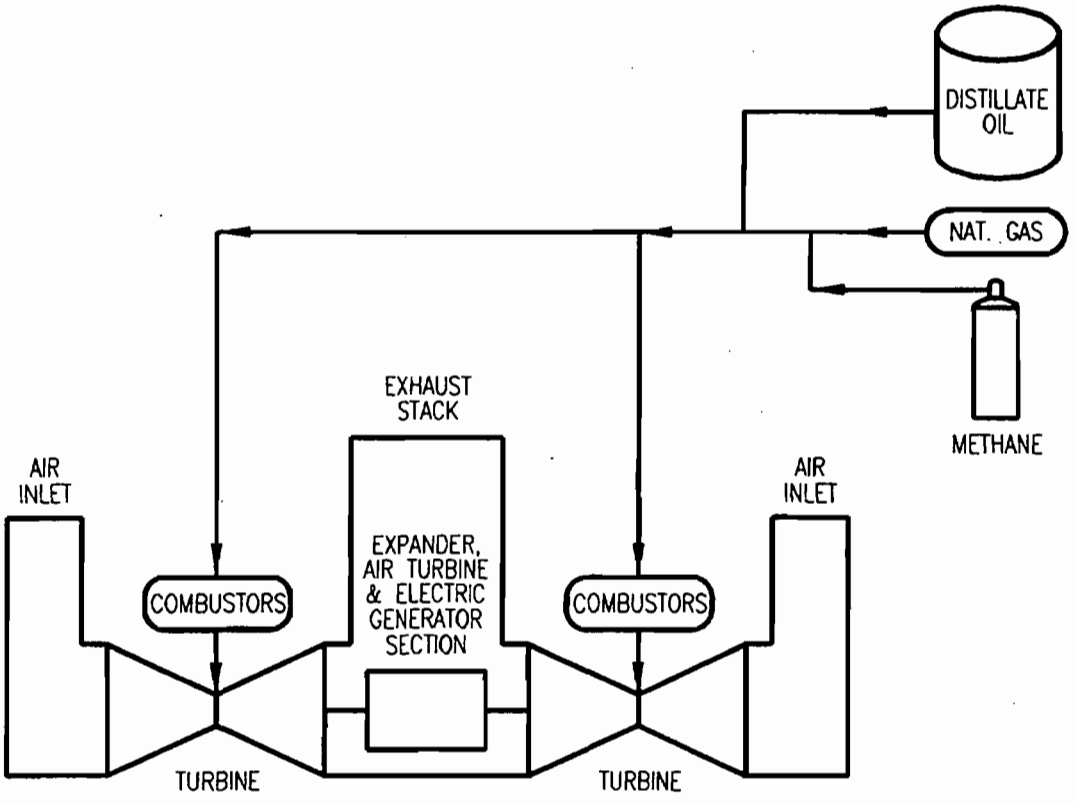
PROCESS FLOW DIAGRAM

ATTACHMENT: PFLEU5_1.bmp

TECHNICAL ACCEPTANCE			
ENGINEERING ORGANIZATION	ORG		
	BY		
	DATE		

WALKDOWN INFORMATION			
AS-BUILT INFORMATION	ORG		
	BY		
	DATE		

BAR CODE



TYPICAL GAS TURBINE ARRANGEMENT

NOTE:
THIS EMISSION UNIT SECTION CONTEMPLATES THE ENTIRE BANK OF TWELVE GAS TURBINES.

REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
0	7/18/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS

FPL

SYSTEM	DISCIPLINE: M	PLANT/UNIT: LAUDERDALE PLANT
SCALE: N/A	CAD FILE NAME: FL005466	TITLE: EMISSION UNIT FLOW DIAGRAM UNITS EU5-GT1 THRU GT12 ATTACHMENT NO. EU5
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: FL005466	
DRAWING NUMBER: PFL4-M0106-YY	SHEET: 1 OF 1	REV: 0

FPGSYM/FPGBDR-A 9/90

ATTACHMENT PFLU5_4

DESCRIPTION OF STACK SAMPLING FACILITIES

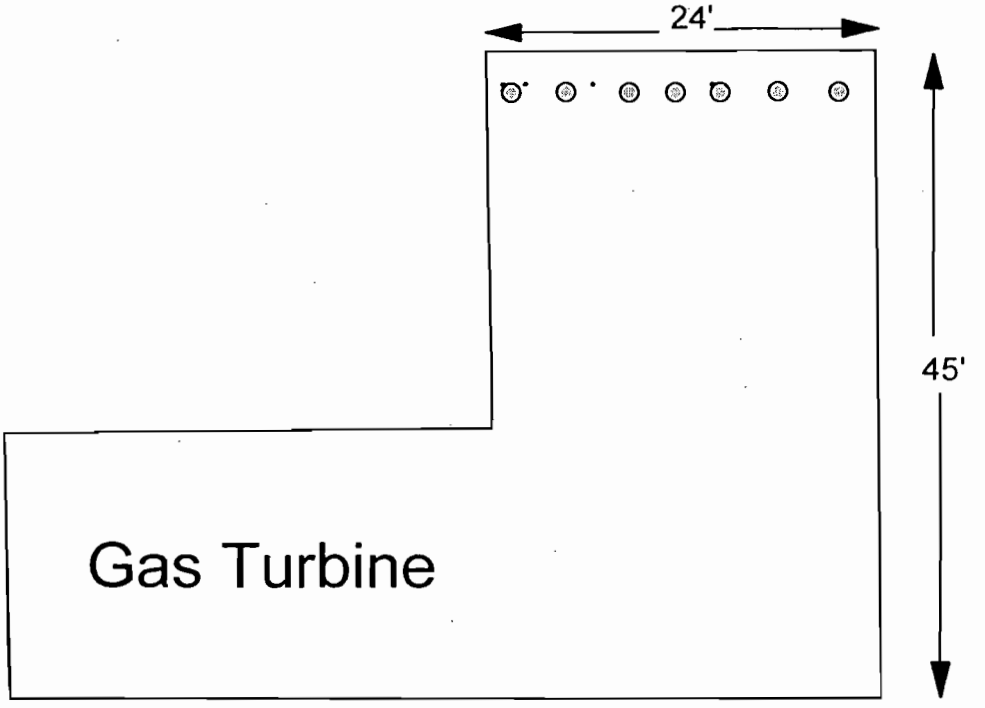
FLORIDA POWER & LIGHT CO,
STACK SAMPLING FACILITIES
SIMPLE-CYCLE GAS TURBINES

Attachment PFLU5_4.bmp

Natural Gas & Distillate Oil Stationary Gas Turbines

Stack Specifications

Sampling Dimensions: 16' x 24'
Sampling Area: 384 sq ft.
sampling port depth: 6.0 inches
No. of ports: 7, 4" diameter



Access to sampling ports is provided by temporary scaffolding erected prior to testing. There are no external probe supports. Internal support is provided by angle iron installed inside the stack. AC power is available at the stack base.

Note: Units 7 and 21 are the only gas turbine units with sampling ports

ATTACHMENT PFLU5_6

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PFLU5_6.doc

Procedures for Startup and Shutdown - Simple-Cycle Gas Turbines

The aircraft gas turbines do not currently employ any hardware for monitoring or control of emissions due to the fact that they are "peaking" units which have a combined annual capacity factor limitation of 10%. Therefore, the only method for determining excess emissions at present is visual (EPA Method 9 Opacity Readings).

All FPL operators undergo extensive training prior to operating FPL generating equipment. This training includes an overview of plant emission limits and best operational practices undertaken in the event excess emissions are encountered.

If excess emissions (e.g. opacity) are exhibited during startup of a gas turbine unit, corrective actions may include fuel switching, changing from automatic to manual operational control or shutting down the unit to investigate the cause of the opacity problem.

ATTACHMENT PFLU5_11

ALTERNATIVE METHODS OF OPERATION

Attachment PFLU5_11.doc

Alternative Methods of Operation

Each of the 12 gas turbines will be operated independently from any other and on either natural gas fuel or light distillate oil. FPL may operate from one to twelve gas turbine units at any time, and in any combination. Bottled methane gas may sometimes be used to assist the startup of units on distillate oil.

Previously issued air operating permit #AO 06-148760 (NOx RACT) has limited the annual heat input to the bank of twelve gas turbines to 7379 x 10^12 Btu, which is approximately equivalent to a 10% capacity factor. This permit is not federally enforceable (see Attachment PFLFS_10).

Each gas turbine may operate from zero to 702 mmBtu per hour, which is equivalent to 8,424 mmBtu/hour for the bank of twelve. Any individual gas turbine may operate up to 8760 hours in any given year, so long as the aggregate heat input for all 12 GT's does not exceed the annual heat input limitation imposed by the NOx RACT permit, and the NOx and VOC emission rates are not exceeded.

ATTACHMENT PPEU5_13

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-003	Bank of 12 Combustion Turbines (Nos. 1 to 12)
-015	Bank of 12 Combustion Turbines (Nos. 13 to 24)

The emissions units are two banks of twelve simple-cycle gas turbine units.
Each bank of CTs has a net capability of 504 MW.

The bank of CTs Nos. 1 to 12 commenced commercial operation in August, 1970; the bank of CTs Nos. 13 to 24 commenced commercial operation in August, 1972.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These emissions units are **not** subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The heat input rate (lower heating value) to each combustion turbine shall not exceed 702 MMBtu per hour.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AO06-230614]

B.2. Permitted Capacity. The total fuel firing rate (lower heating value) for each bank of 12 gas turbines shall not exceed 8,424 MMBtu/hr during fuel oil firing or natural gas firing. Annual heat input (lower heating value) for each bank of 12 gas turbines shall not exceed 7,379 x 10^9 Btu.
[AO06-148762]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

B.3. Methods of Operation - Fuels. The only fuels authorized to be burned in these emissions units are natural gas or light distillate fuel oil.
[Rule 62-213.410, F.A.C.; AO06-230614]

B.4. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.; AO36-223496, Specific Condition No. 8]

B.5. Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.19.**
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.6. Visible Emissions. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.
[Rule 62-296.320(4)(b)1., F.A.C.; and; AO06-230614, Specific Condition No. 6]

B.7. Volatile Organic Compounds (VOCs). VOC emissions from each gas turbine shall not exceed 0.0013 lb/MMBtu when burning No. 2 fuel oil, and 0.0034 lb/MMBtu when burning natural gas. When both fuels are burned at the same time, the allowable emissions shall be prorated.
[AO06-230614, Specific Condition No. 4]

B.8. Volatile Organic Compounds (VOCs). Total VOC emissions from the 24 gas turbines when operating at the permitted capacity shall not exceed 57.3 lbs/hr when the units are burning natural gas, and 21.1 lbs/hr when the units are burning oil. When both fuels are burned at the same time, the allowable emissions shall be prorated.
[AO06-230614, Specific Condition No. 5]

B.9. Nitrogen Oxides. Nitrogen oxides emissions from each gas turbine shall not exceed 0.90 lb/MMBtu and 631 lbs/hr when burning No. 2 fuel oil, and 0.50 lb/MMBtu and 351 lbs/hr when burning natural gas.
[Rule 62-296.570(4)(b)5., F.A.C.; AO06-230614]

Excess Emissions

B.10. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

B.11. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

B.12. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

B.13. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.14. Visible Emissions Testing Required. The owner or operator shall conduct testing for visible emissions, using EPA Method 9, while the combustion turbine is operating at 90-100 percent of its capacity, according to the following schedule.

The owner or operator shall conduct testing for visible emissions while firing fuel oil for each simple-cycle turbine unit upon that turbine's exceeding 400 hours of operation on fuel oil, and every 150 hours of operation on fuel oil thereafter, in any given federal fiscal year (October 1 through September 30). Such tests shall be performed within 15 days of exceeding such operating hours, to allow for prior notification of the tests.

Regardless of the number of hours of operation on fuel oil, at least one compliance test shall be conducted on all twenty-four combustion turbines every five years, coinciding with the term of the operation permit for these turbines. At least one quarter of such tests shall be conducted while burning fuel oil, and at least one quarter of such tests shall be conducted while burning natural gas.
[Rule 62-213.440, F.A.C., applicant agreement with EPA on March 3, 1998, and AC06-179848, Specific Condition No. 23]

B.15. The test method for visible emissions shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.; and, AC06-179848]

B.16. Nitrogen Oxides. Provided operation is no more than 320 hours/year/turbine on oil, NOx emissions for the combustion turbines shall be tested every five (5) years by EPA Method 20 tests as described in 40 CFR 60, Appendix A (July 1, 1996) on any representative unit in each bank of the combustion turbines. Tests shall be conducted both while burning 100% natural gas and 100% light distillate oil.
[Rule 62-296.570, F.A.C. ; Requested by the applicant in letter dated October 1, 1997]

B.17. The test method for nitrogen oxides shall be EPA Method 20, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.
[Rules 62-204.800 & 62-297.401, F.A.C.; AO06-230614]

B.18. The VOC emission factors for the combustion turbines shall be confirmed every five (5) years by EPA Method 25A tests as described in 40 CFR 60, Appendix A (July 1, 1996) on any representative unit in each bank of the combustion turbines. Tests shall be conducted both while burning 100% natural gas and 100% No. 2 fuel oil.
[AO06-230614, Specific Condition No. 9]

B.19. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rule 62-297.310(2), F.A.C.]

B.20. Applicable Test Procedures.
(a) Required Sampling Time.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
[Rule 62-297.310(4)(a)2.c., F.A.C.]

B.21. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

B.22. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuels; or

b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or

c. only liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

Recordkeeping and Reporting Requirements

B.23. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

B.24. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
[Rule 62-297.310(8), F.A.C.]

B.25. The permittee shall keep records of the type and quantity of fuel, gallons per hour of oil and million cubic feet per hour of natural gas used by each bank of combustion turbines for at least five (5) years. Usage shall be determined on the basis of time of operation versus total fuel consumption for each bank.
[AC06-179848, Specific Condition No. 21]

B.26. A written quarterly report shall be submitted to the Department of all opacity exceedances of emissions limitations specified in Rules 62-210.700 and 62-296.310, F.A.C. The report shall state the cause, period of noncompliance, and steps taken for corrective action and/or prevention of recurrence. If the opacity level cannot be determined for any reason, the report shall state the cause, duration, and action taken. All recorded data shall be maintained on file for not less than five (5) years and made available to the Department upon request.
[AO06-230614, Specific condition No. 17]

B.27. The emissions units are also subject to the conditions contained in **Subsection E. Common Conditions.**

Subsection E. Common Conditions.

E.U. ID No.	Brief Description
-035	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
-036	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
-037	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5A)
-038	Combined-Cycle Combustion Turbine with Heat Recovery Steam Generator (CT 5B)
-003	Bank of 12 Combustion Turbines (Nos. 1 to 12)
-015	Bank of 12 Combustion Turbines (Nos. 13 to 24)

The following conditions apply to the emissions units listed above:

Test Methods and Procedures

E.1. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

E.2. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the

period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter Comparison check	2% 5%

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

E.3. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J 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.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (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.

2. 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fuel oil storage tanks, dump tanks, gasoline tank, diesel tank, and solvent usage.

4. Emissions Unit Identification Number: ID: 027,028,029,030,032,033,039 [ ] No ID [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 08/01/70	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [N]

9. Emissions Unit Comment: (Limit to 500 Characters): These emission units regulated by Title V permit No. AC06-179848.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:			mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	8760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): See Attachment PFLU27_13.			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

See Title V Core List previously attached	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? Attachment FS-2	2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: P	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: 0 feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 580.289 North (km): 2883.596		
14. Emission Point Comment (limit to 200 characters): Tank locations are identified in Attachment PFLFS_2.		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment __1___ of __1___

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): See Attachment PFLU27_13.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

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

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour 10.083 tons/year	4. Synthetically Limited? [Y]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [X] 3 ___0___ to ___99.92___ tons/year	
6. Emission Factor: Reference: AC 06-179848	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ____1__ of ____1__

1. Basis for Allowable Emissions Code: Require or assumed by permittee for other reasons	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 10.083 tons/year	4. Equivalent Allowable Emissions: 10.083 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): VOC emissions are restricted in permit No. AC 06-179848	

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: 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):	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): This emission unit is not required to install continuous monitors.	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [X] 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:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
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
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

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

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

13. Identification of Additional Applicable Requirements
[X] Attached, Document ID: PFLU27_3.doc_ [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part 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:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable

ATTACHMENT PFLU27_13

IDENTIFICATION OF ADDITIONAL APPLICABLE REQUIREMENTS

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-027	Fuel Oil Storage Tank #2 (80,000 bbl, Light Distillate Fuel Oil)
-028	Fuel Oil Storage Tank #3 (150,000 bbl, Light Distillate Oil)
-029	Fuel Oil Storage Tank #5 (75,000 bbl, Light Distillate Oil)
-032	Unleaded Fuel Tank (4,000 gallon, Gasoline)
-033	Diesel Fuel Tank (1,000 gallon)
-030	2 Fuel Oil Dump Tanks (2,500 gallon and 110 gallon)

GT Site 1
GT Site 2

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.1. The maximum volatile organic compounds (VOC) emissions and volume of organic liquids handled by the tanks shall not exceed the following:

E.U. ID No.	Organic Liquid	Annual Throughput Limit (Gallons)	VOC Emissions Limit (Tons/Year)
-027	Jet A fuel/No. 2 distillate fuel oil*	54,260,842	2.33
-028	Jet A fuel	106,079,730	4.46
-029	Jet A fuel/No. 2 distillate fuel oil	54,260,842	2.29
-032	Gasoline	10,000	0.106
-033	Diesel fuel	5,000	0.001
-030	No. 2 fuel oil	300,000 ✓	0.003

* If tank E.U. No. -027 is used to supply Jet A fuel to the two banks of combustion turbines, the total Jet A fuel handled by both tanks E.U. -027 and E.U. -028 shall not exceed 106,079,730 gallons per year, and the sum of the VOC emissions from both tanks E.U. -027 and E.U. -028 shall not exceed 6.79 tons per year.
[Rule 62-296.320(1)(a), F.A.C.; AC06-179848; AO06-230614, Specific Condition No. 1]

Recordkeeping and Reporting Requirements

C.2. The VOC emissions in tons per year, by specific tank, for all the units identified in specific condition **C.1.**, shall be calculated for Annual Operating Report for Air Pollutant Emitting Facility purposes by the procedures described in AP-42, Section 4.3, Storage of Organic Liquids. Actual throughput and representative meteorological data shall be used for these calculations. [Rule 62-210.370(3), F.A.C.; AO06-230614, Specific Condition No. 3]

C.3. The permittee shall keep records of the following for at least five (5) years:

a. The amount of light distillate fuel oil obtained for the facility.

b. The amount of No. 2 fuel oil obtained for the facility.

c. The throughput, by specific tank, for all the units identified in specific condition **C.1.** [AO06-230614, Specific Condition No. 2]

Subsection D. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-039	Site Solvent Usage

The following conditions apply to the emissions unit(s) listed above:

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.1. Volatile Organic Compounds (VOCs). Not more than 250 gallons/year, or 0.893 tons/year, VOC loss of solvent during any 12 month period shall be allowed for maintenance of this facility.
[AC06-179848, Specific condition No. 24]

Monitoring of Operations

D.2. The use of solvents for maintenance purposes shall be tracked and controlled during the calendar year. The VOC emissions from solvents shall be calculated by the following method: The solvent volume loss shall be equal to the total solvent purchased/in stock minus the solvent volume reclaimed/disposed of offsite. The solvent volume loss shall then be multiplied by the emission factor (mass VOC/unit of the solvent) to arrive at a tons per year value. The total solvent tons per year emission value shall be added to all other VOC sources to ensure compliance with specific condition **7, Section II. Facility-wide Conditions.**
[AO06-230614, Specific Condition No. 10]

Recordkeeping and Reporting Requirements

D.3. The permittee shall keep records of the type and quantity of solvents, in gallons per year, used during maintenance throughout this facility for a minimum of five (5) years.

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J 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.

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (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.

2. 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Unregulated Emission Units – Facility-wide VOCs, black-start auxiliary boiler and propane tank.

4. Emissions Unit Identification Number: [X] No ID
ID: [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [N]

9. Emissions Unit Comment: (Limit to 500 Characters): This emission unit covers all unregulated sources at the Lauderdale Plant site, including the auxiliary boiler which is used to provide steam to the turbine shaft seals during a cold start of the plant. The auxiliary boiler is fired with propane and will be limited to an annual fuel usage of one million gallons pursuant to Rule 62-210.300(3)(a)2. F.A.C. Note: The emergency diesel generator is no longer at the Lauderdale Plant site.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):
2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:		
Manufacturer: Thermogenics	Model Number: HOG 350 NB	
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:		15.5	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
	hours/day		days/week
	weeks/year	8760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): The various sources included in this emission unit section may operate up to 8760 hours per year, except the auxiliary boiler. The auxiliary boiler is limited to no greater than one million gallons of propane pursuant to Rule 62-210.300(3)(a)2. F.A.C.			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

The applicable regulations for the auxiliary boiler are listed below:

62-210.700(1)
62-210.700(4)
62-210.700(6)
62-296.406(1)

The auxiliary boiler is also subject to record-keeping requirements of NSPS 40 CFR Part 60, Subpart Dc.

There are no emission-limiting standards applicable to the use of propane.

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): auxiliary boiler.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 6 feet	7. Exit Diameter: 2.0 feet
8. Exit Temperature: 400 °F	9. Actual Volumetric Flow Rate: 3,200 acfm	10. 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): Much of the information on this page is intentionally left blank, due to the large number of sources and the resultant variability in the data. The stack is for the auxiliary boiler. See Attachment PFLFS_2 for location.		

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ____1__

1. Visible Emissions Subtype: Visible Emissions General Standard	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
4. Visible Emissions Comment (limit to 200 characters): The auxiliary boiler is subject to the general VE limitation in Rule 62-296.406(1) of 20% opacity, except one 6-minute period per hour not greater than 27% or one 2-minute period per hour not greater than 40%. Rule 62-210.700(1) allows excess emissions for 2 hours per 24-hour period for startup, shutdown, and malfunction.	

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): This emission unit is not required to install continuous monitors.	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [X] 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:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
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
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

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

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

13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID:_____ [X] Not Applicable

14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID:_____ [X] Not Applicable

15. Acid Rain Part 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:_____

[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:_____

[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____

[X] Not Applicable