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BUREAU OF AIR REGULATION

TITLE V PERMIT APPLICATION
FLORIDA POWER & LIGHT COMPANY
PORT EVERGLADES PLANT
FT. 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

April 2003
0237560

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4 Copies - FDEP
5 Copies – Florida Power and Light
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: Port Everglades Plant	
3. Facility Identification Number: 0110036	[ ] Unknown
4. Facility Location: Street Address or Other Locator: 8100 Eisenhower Blvd City: Ft. Lauderdale County: Broward Zip Code: 33316	
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: Port Everglades Plant
Street Address: 8100 Eisenhower Blvd.
City: Fort Lauderdale State: Florida Zip Code: 33316

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 4/18/03 Date

* 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: [signature]   Date: 4/23/03

(seal) LEONARD F. KOSKY, NO. 14996, STATE OF FLORIDA, PROFESSIONAL ENGINEER

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
01	Fossil Steam Boiler Unit 1	AF2A	N/A
02	Fossil Steam Boiler Unit 2	AF2A	N/A
03	Fossil Steam Boiler Unit 3	AF2A	N/A
04	Fossil Steam Boiler Unit 4	AF2A	N/A
05	Bank of 12 simple cycle Gas Turbines- Units 1-12	AF2B	N/A
06	Unregulated Emission Sources		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

1. Renewal of existing Title V Permit ✓

2. The Florida Department of Environmental Protection (the "Department"), local environmental authorities and interested citizen groups have been expressing increased concern to FPL over the levels of particulate emissions from the Port Everglades Plant, as well as the need to ensure the Plant's continued compliance with the National Ambient Air Quality Standards and Hazardous Air Pollutant MACT requirements. These concerns have been the subject of negotiations between the Department and FPL over the appropriate air emission controls to be incorporated into FPL's Title V permits for those plants. As a result of the negotiations, the Department and FPL have agreed on new Title V permit conditions requiring lower limits of particulate emissions at the Port Everglades Plant equivalent to New Source Performance Standards. In order to meet the lower particulate limits, FPL will install ESPs (or other equally effective particulate matter control technology) and steam coils on its four fossil-fueled steam boilers at Port Everglades.

The installation of ESPs on the first of the 4 Port Everglades steam boiler units is anticipated to begin in conjunction with the Spring outage of 2005 or sooner absent any unexpected delays in engineering, procurement, or other factors. The remaining units' ESP installations will be completed within the next two years, with the last ESP installed during the Spring outage of 2007. Following the installation of each ESP, a commissioning and optimization period of 180 days is anticipated following each unit's return to service.

The currently installed mechanical dust collectors will be removed from each unit, and steam coils will be added as part of each unit's ESP addition.

The Port Everglades units are anticipated to remain as cycling and load-following units after the installation of the ESPs. Therefore, it is expected that there will be periods coincident with unit start-up and shutdown activities when the ESPs may be marginally effective until reaching the appropriate operating conditions, i.e. temperatures, flows, etc. FPL will strive to minimize the impact of start up/shutdown activities on ambient air quality by using best operating practices during those periods.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17	East (km): 587383		North (km): 2885250
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 26-4-8		Longitude (DD/MM/SS): 80-7-31	
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 fossil-fuel fired steam boiler generating units units, and one bank of 12 simple-cycle 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 13118 City: Ft. Lauderdale	State: Florida	Zip Code: 33316
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. [ ] 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 in rule 62-296.570 F.A.C.

List of Applicable Regulations

See FDEP Title V Core List	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
SO2	A				
NOx	A				
CO	A				
PM	A				
PM10	A				
VOC	A				
H133	A				
SAM	A				
H106	A				
H107	A				
HAP	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID:PPEFS_1.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID:PPEFS_2.bmp [ ] Not Applicable [ ] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: PPEFS 3.bmp [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [X] Attached, Document ID: PPEFS_4.doc [ ] Not Applicable [ ] Waiver Requested
5. Fugitive Emissions Identification: [X] Attached, Document ID: PPEFS_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:PPEFS_7.doc_____ [ ] Not Applicable

9. List of Equipment/Activities Regulated under Title VI:
   [X] Attached, Document ID: PPEFS_8.doc_
   [ ] Equipment/Activities On site but Not Required to be Individually Listed
   [ ] Not Applicable

10. Alternative Methods of Operation:
    [X] Attached, Document ID: PPEFS_9.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

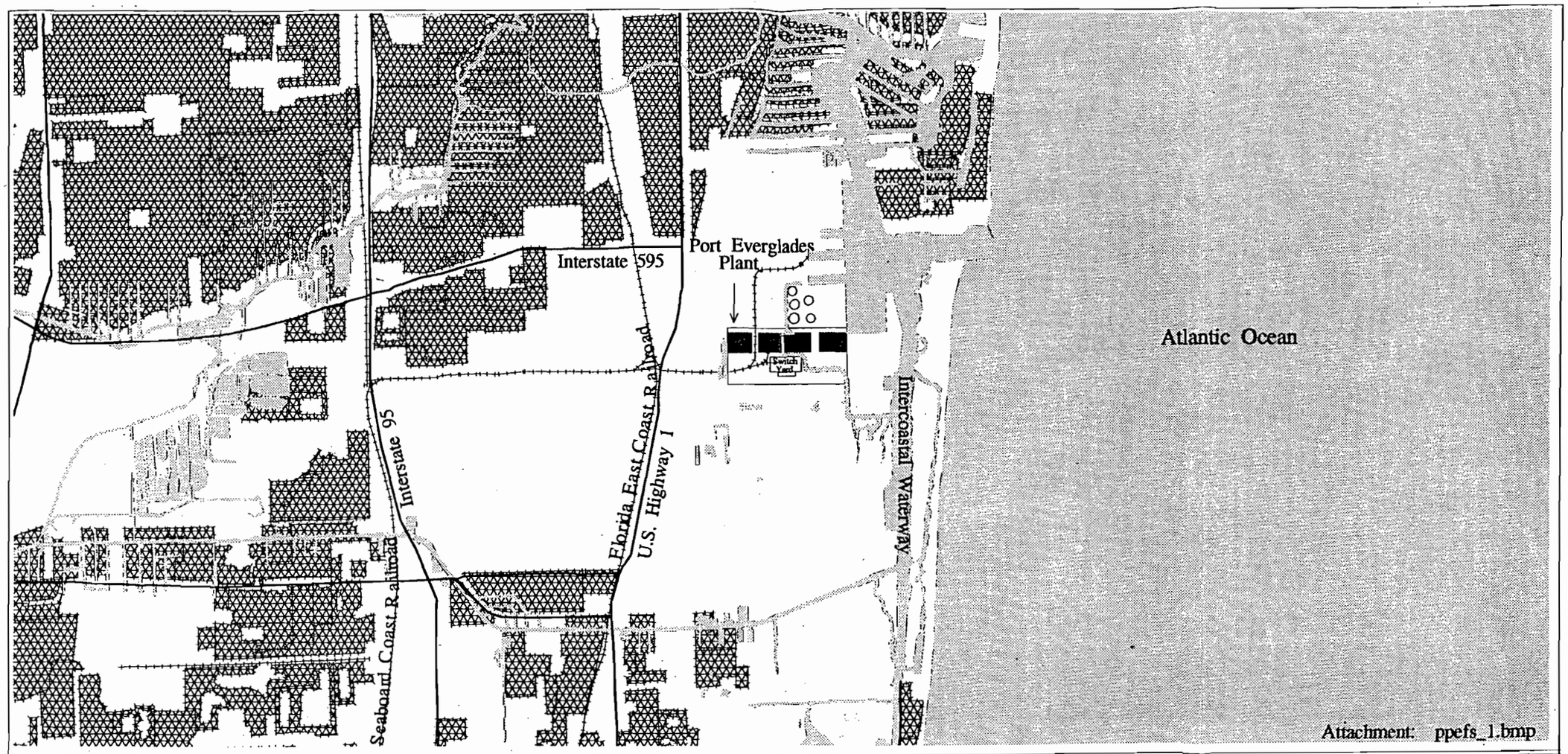
13. Risk Management Plan Verification:
    [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)
    [ ] Plan to be submitted to CEPPO (Date required:_____)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

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

15. Compliance Certification (Hard-copy Required):
    [X] Attached, Document ID: PPEFS_14.doc_ O/C [ ] Not Applicable

ATTACHMENT PPEFS_1.BMP

AREA MAP SHOWING FACILITY LOCATION



Port Everglades Area Map
Broward County

FPL Environmental Affairs

Kilometers
0 1 2 3
Miles
0 1 2

N
W E
S

- Port Everglades Plant
- Water
- Major Roads
- Railroads
- Residential Areas

No expressed or implied warranties including, but not limited to the implied warranties of MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE are made.
The materials contained herein are provided 'as is' and may contain inaccuracies and user is warned to utilize the material's accuracy independently and assumes the risk of any and all loss.

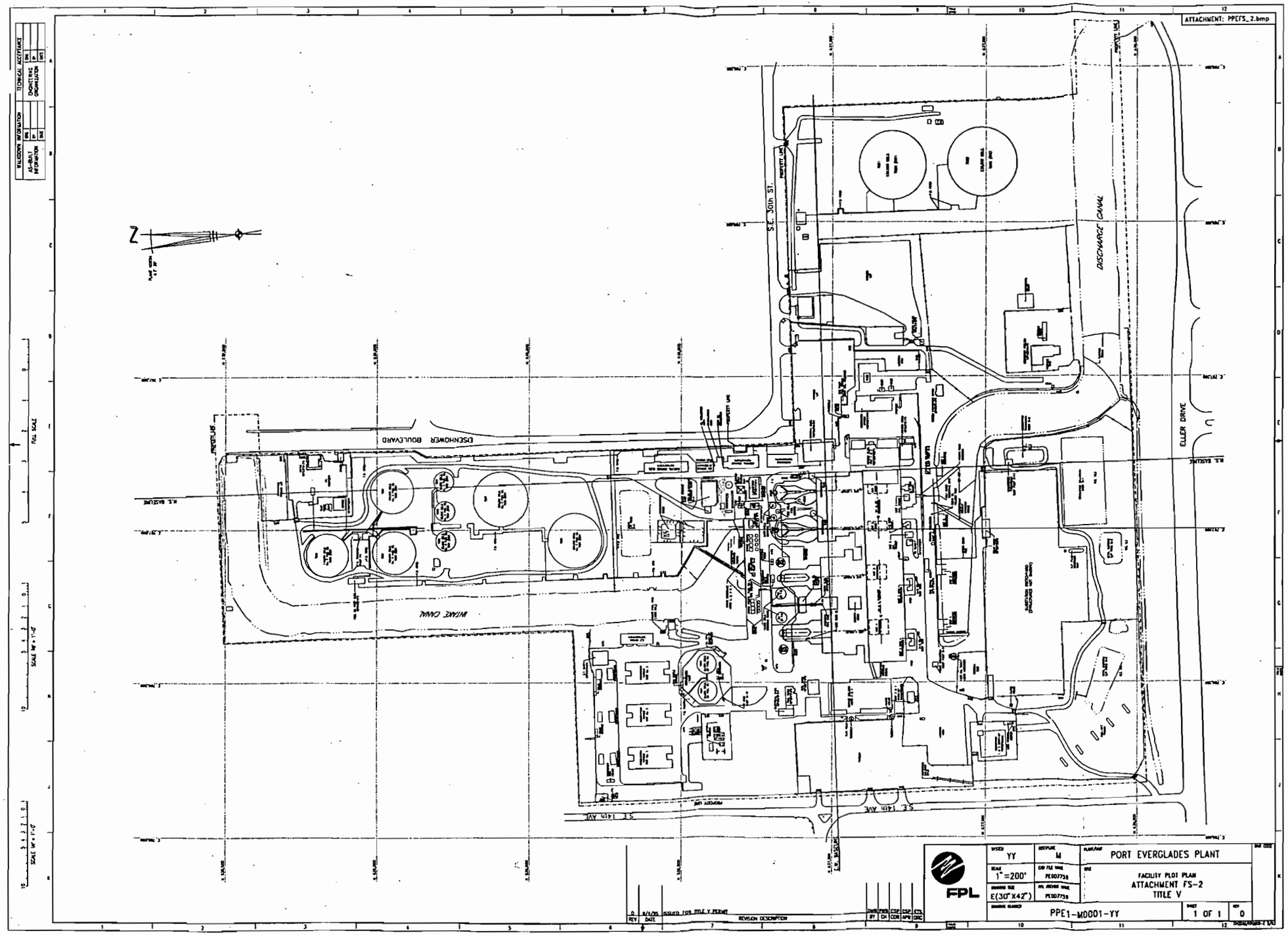
Source: Landuse data provided by South Florida Water Management District (1993)

/export/home/ron/ppe-site.map (5-95)

ATTACHMENT PPEFS_2.BMP

FACILITY PLOT PLAN

Best Available Copy



ATTACHMENT PPEFS 3.BMP

PROCESS FLOW DIAGRAM

ATTACHMENT: PPEFS_3.bmp

TECHNICAL ACCEPTANCE	ORG	BY	DATE
ENGINEERING ORGANIZATION			

WALKDOWN INFORMATION	ORG	BY	DATE
AS-BUILT INFORMATION			

NOTES:

1. ACRONYMS:
   EU-EMISSION UNIT
   GT-GAS TURBINE
   FO-FUEL OIL
2. EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:

EU •
EMISSION UNIT NUMBER

TANK LEGEND:

T - STORAGE TANK (T800,801,802,804,805,806 807,808,901,902,903&904)

M - METERING TANK (M1,2,3&4)

FUEL STORAGE AREA

T800 #6 FUEL OIL STORAGE 110,000 BBL

T802 #6 FUEL OIL STORAGE 150,000 BBL

T801 #6 FUEL OIL STORAGE 150,000 BBL

T806 #6 FUEL OIL 25,000 BBL

T805 #6 FUEL OIL 25,000 BBL

T804 #6 FUEL OIL 25,000 BBL

T807 #6 FUEL OIL STORAGE 200,000 BBL

T808 #6 FUEL OIL STORAGE 200,000 BBL

FROM FUEL UNLOADING DOCK

T901 250,000 BBL DISTILLATE

T902 250,000 BBL DISTILLATE

PROPANE

M4 12,000 BBL METERING

M3 12,000 BBL METERING

M2 3,000 BBL METERING

M1 3,000 BBL METERING

EU4 UNIT 4 BOILER

EU3 UNIT 3 BOILER

EU2 UNIT 2 BOILER

EU1 UNIT 1 BOILER

STEAM

TO GRID (TYP.)

TURB./GEN. NO. 4

TURB./GEN. NO. 3

TURB./GEN. NO. 2

TURB./GEN. NO. 1

STEAM GENERATING UNITS 1, 2, 3 & 4

FROM NATURAL GAS METERING AREA

STACK (TYP.)

EU5 GAS TURBINES

T904 25,000 BBL DISTILLATE

T903 25,000 BBL DISTILLATE

FROM UNLOADING DOCK

SCALE 3/8" = 1'-0"

SCALE 1/4" = 1'-0"

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/4/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT	BAR CODE
YY	M	PORT EVERGLADES-UNIT 1,2,3&4	
SCALE: N/A	CAD FILE NAME: PE007760	TITLE: FACILITY SOURCE FLOW DIAGRAM ATTACHMENT NO. FS-3 TITLE V	
DRAWING SIZE: B(11"X17")	FPL ARCHIVE NAME: PE007760		
DRAWING NUMBER: PPE1-M0101-YY		SHEET: 1 OF 1	REV: 0

GSYM/FPGBDR-B 5/93

ATTACHMENT PPEU1_3.DOC

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Attachment PPEU1_3.doc

Detailed Description of Control Equipment

A. Cyclone Separator – This steam generator (boiler) is supplied with two 104B-GHS #19-684 UOP tubular mechanical dust collectors with side inlet and universal outlet. Each dust collector consists of 695 tubes and four dust collection hoppers. The dust collector has the following efficiency at 2.55 inches of water at peak load:

Particle Range (micron)	Mean Diameter (micron)	Estimated efficiency (percent)
0-5	2.5	30.3
5-10	7.5	66.2
10-20	15	88.6
20-45	32.5	99.1
45+	45	99.5

B. Low NOx Burners – Due to RACT requirements in the southern Florida airshed, the Port Everglades facility installed "Low NOx Burners" which have as their primary purpose the reduction of NOx produced during combustion. The installed burners have reduced NOx production by 9.09% on natural gas fuel, and by 10% on residual oil fuel (in lb/mmBtu, comparing baseline emission rates with permitted NOx RACT emission rates.

C. Electrostatic Precipitators (ESPs) – ESPs identified in this Title V application are described in more detail in a separate construction permit application. The ESPs (or equivalent) will replace the cyclone separators.

ATTACHMENT PPEFS_4.DOC

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Attachment PPEFS_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 particulate matter include:

- fugitive dust from 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.:

- The facility 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. ✓

- Vehicles are restricted to slow speeds on the plant site ✓

ok

ATTACHMENT PPEFS_5.DOC

FUGITIVE EMISSIONS IDENTIFICATION

Attachment PPEFS_5.doc
Fugitive Emission Identification

It should be noted that many fugitive emissions at the plant site have been classified as *"insignificant activities"*, and therefore are not included here. For example, VOC emissions from leaks in the lube oil systems at the facility would be considered fugitive emissions, but have been proposed to be exempted as insignificant, and so appear as such on the ***Insignificant Activities*** list (Attachment PPEFS_7.DOC).

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PPEFS_4.DOC. FPL is not aware of fugitive emissions of sulfur dioxide, nitrogen oxides, carbon monoxide or lead compounds which would exceed the reporting thresholds defined in the permit application instructions.

Fugitive HAPs Emissions

The fugitive HAPs emissions at the Port Everglades facility have been determined to be less than the relevent reporting thresholds and are therefore not included here. Refer to the Insignificant Activities List (Attachment PPEFS_7.DOC).

ATTACHMENT PPEFS_7.DOC

LIST OF PROPOSED INSIGNIFICANT ACTIVITIES

Attachment PPEFS_7.DOC
List of Proposed Insignificant Activities

Following are a detailed listing of insignificant sources for the facility. These are presented in tabular format with the following headings:

Equipment/System - In this column the location of the source is given (e.g., fuel oil system, water treatment system, etc.).

Size/Source - This column presents the size and quantity of the vent or emission release point(s).

Type of Emission - This column presents the variety of pollutant or other substance emitted from the equipment/system.

Rationale - This column presents the reason that the emission source is proposed to be exempted as insignificant (e.g., Item 10 in the "Title V Insignificant Source Summary for the Electric Utility Industry", "no regulated pollutants emitted", etc.).

List of Insignificant Emissions Units and/or Activities (from Existing Title V Permit):
The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-2 10.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-2 10.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities
1. Spent boiler chemical cleaning liquid evaporation
2. Laboratory equipment used exclusively for chemical or physical analysis.
3. Brazing, soldering or welding equipment.
4. Surface coating facilities provided that 6.0 gallons of coatings per day or less are applied.
5. Hydrazine feed line vent
6. Lube oil system
7. Oil/water separators and related equipment
8. Misc. mobile vehicle operation
9. Paint & lube oil building
10. Chemical storage building
11. Hazardous waste storage area
12. Natural gas metering station
13. Internal combustion engine used for transportation (added)
14. Fire and safety equipment (added)

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Steam & Condensate	Condensate Storage Tanks - 6" Vent	Water Vapor, Air, Steam	H_2O not a Pollutant
	Gland Steam Condenser Maintenance Vents		
	Gland Steam Condenser Relief Valve		
	Gland Steam Condenser Vent Fans - 6"		
	Deaerator Vent Condenser - 2" Maintenance Vent		
	Deaerator Heater Relief Valve		
	Heaters Maintenance Vents		
	Heaters Relief Valves		
	Boiler Feed Pumps Inlet Relief Valves		
	Boiler Feed Pumps Outlet-Maintenance Vent		
	Feedwater At Heaters - Relief Valves		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Steam & Condensate (Continued)	Feedwater At Heaters - Maintenance Vent	Water Vapor, Air, Steam	H_2O not a Pollutant
	Condensate Pumps Relief Valves		
	Vacuum Pumps Tank - 6" Maintenance Vent		
	Gland Drain Tank Loop Seal Vent		
	Condensate Recovery Collection Tank Vents		
	Condensate Receiver Flash Tank - Relief Valve	Water Vapor	
	Vent Condenser ¾" Vent		
	Condensate Cooler – ¾" Vent		
	Miscellaneous Aux. Steam Relief Valves		
	Service Building Hot Water Storage Tank - Relief Valve		
Service & Instrument Air	Instrument Air Receivers - Relief Valve	Air	Air not a Pollutant
	Service Air Receivers - Relief Valve		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Service & Instrument Air (Continued)	Service Air Intercooler Relief Valve	Air	Air not a Pollutant
	Service Air Aftercooler Relief Valve		
	Instrument Air Aftercoolers Relief Valves		
	Instrument Air Filters A, B, C & D Relief Valves		
	Instrument Air Dryer System Absorbers A & B Relief Valves		
	Miscellaneous Air Relief Valves		
Boiler Steam & Feed	Phosphate Feed Tanks - 50 Gal.		
	Steam Drum Maintenance Vents	Steam	
	Steam Drum Relief Valves with Silencers		
	Super Heater Outlet Header Relief Valves with Silencers		
	Misc. Steam Line 1" Maintenance Vents		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Boiler Steam & Feed (Continued)	Reheater Outlet Header Relief Valves with Silencer	Steam	
	Reheater Inlet Header Relief Valves with Silencers		
	Steam Air Heater Drain Tank Maintenance Vent - 1"		
	Steam Air Heater Piping Maintenance Vents		
	Ammonium Hydroxide Feed Tank - 350 Gal.		
	Hydrazine Feed Tank - 350 Gal.		
Fuel Oil	Fuel Oil Metering Tanks - 10" Vent (3,000 BBL.)	Fuel Oil Vapors (V.O.C.)	
	Fuel Oil Blowback Tanks - Maintenance Vent		
	Fuel Oil Strainer Vents – ½"		
	Fuel Oil Burner Pumps – ½" Vent		
	Miscellaneous Fuel Oil Maintenance Vents – ¾"		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Fuel Oil (Continued)	Fuel Oil Burner Heaters - □" Maintenance Vent	Fuel Oil Vapors (V.O.C.)	
	Fuel Oil Burner Booster Pump – ¾" Vents		
	Fuel Oil Blowback Tanks - Relief Valves		
	Fuel Additive Storage Tank Vent - 28,000 Gal. (Magnesium Hydroxide)		
Turbine & Lube Oil System	Lube Oil Pump Tank Breather Filter Vent	Lube Oil Vapors (V.O.C.)	
	Lube Oil Filter Unit - Breather Filter		
	Lube Oil Reservoir Vapor Extractor - 6" with Exhaust Hood		
	Generator Loop Seal Tank - Oil Extractor with Exhaust Head		
	Seal Oil Reservoir Maintenance Vent		
	Seal Oil Cooler Maintenance Vent		
	Seal Oil Drain 3" Highpoint Vent		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Turbine & Lube Oil System (Continued)	Gland Steam Controller - 6" Relief Valves	Steam	Steam not a Pollutant
	Lube Oil Coolers – ¾" Vent		
Cooling Water	Boiler Circulation Pumps – ¾" Maintenance Vents	Water	H_2O not a Pollutant
	Closed Cooling Water Surge Tank - 8" Vent		
	Turbine Lube Oil Coolers – ¾" Maintenance Vent		
	Instrument Air Compressor Aftercooler – ¾" Maintenance Vent		
	Service Air Compressors - Inter & After Coolers - Maintenance Vents		
	Vacuum Pump Heat Exchangers 3" - Discharge Continuous Vent		
	Exciter Air Cooler – ½" Maintenance Vents		
	Hydrogen Cooler 1A & 1B – ½" Maintenance Vents		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Cooling Water (Continued)	Hydrogen Seal Oil Coolers ¾" Vents	Water	H_2O not a Pollutant
	Closed Cooling Water Heat Exchangers Inlet Maintenance Vent – ¾"		
	Closed Cooling Water Heat Exchangers Inlet Relief Valves		
	Closed Cooling Water Heat Exchanger ¾" Maintenance Outlet Vent		
	Closed Cooling Water Heat Exchanger Outlet Relief Valve		
	Priming Ejector Separator Silencer with Exhaust Head		
	Separator - 1" High Point Vent		
	Misc. Water Maintenance Vents		

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Water Treatment	Elevated Water Storage Tank Vent (100,000 Gal.)	Water	H_2O not a Pollutant
	City Water Storage Tank Vent (100,000 Gal.)		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 3 & 4 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Main Steam	Platen Inlet Header Maintenance Vent	Steam	Steam not a Pollutant
	Pendant Superheater Outlet Header Relief Valves		
	Reheat Outlet Header Relief Valves with Silencers		
	Reheat Inlet Header Relief Valves with Silencers		
	Main Steam Stop Valves Maintenance Vent		
	Gland Steam Condenser 6" Blower Vent		
	Miscellaneous Steam Maintenance Vent		
Condensate	Misc. Condensate Maintenance Vents	Water Vapor	H_2O not a Pollutant
	Intercondenser Maintenance Vent		
	Aftercondenser Maintenance Vent		
	Gland Steam Condenser Inlet Relief Valve		
	Gland Steam Condenser Outlet Maintenance Valve		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 3 & 4 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Feedwater System	Miscellaneous Maintenance Vents	Water	H_2O not a Pollutant
Extraction System	Miscellaneous Maintenance Vents	Steam	Steam not a Pollutant
Auxiliary Steam System	6" X 10" Relief Valves	Steam	Steam not a Pollutant
	Miscellaneous Maintenance Vents		
Cooling & Circ. Water	Miscellaneous Maintenance - 1" Vents	Water	H_2O not a Pollutant
Closed Cooling Water System	Miscellaneous Maintenance Vents	Water	H_2O not a Pollutant
	Closed Cooling Water Surge Tank - 6" Vent		
	Chemical Feed Tank - 1" Vent		
	Boiler Feed Pump Lube Oil Coolers – ½" Vent		
Condensate Make-Up & Recovery	Condensate Storage Tank - 3" Vent	Water Vapor	H_2O not a Pollutant
	Condensate Recovery Tank - 4" Vents		
	Condensate Recovery Flash Tank - 8" Relief Valve		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 3 & 4 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Condensate Make-Up & Recovery (Continued)	Condensate Recovery Cooler ¾" Maintenance Vent	Water Vapor	H_2O not a Pollutant
Heater Vents & Drains	Heaters - 1" Maintenance Vents	Water Vapors	H_2O not a Pollutant
	Heaters - 5" X 4" Relief Valves		
Service Water	Miscellaneous Maintenance Vents - 2"	Water	H_2O not a Pollutant
Air Evacuation	After Condenser 4" Maintenance Vent	Air	Air not a Pollutant
	Hogging Ejector 10" Exhaust Head		
	Moisture Separator 10" Exhaust Head		
	After Condenser ½" Maintenance Vent		
	Inter Condenser ½" Maintenance Vent		
	Waterbox Priming Vacuum Pumps - 2" Exhausters & ½" High Point Vent		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 3 & 4 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Lube Oil System	Lube Oil Storage Tank - 2" Vent	Lube Oil Vapors (V.O.C.)	Exempted by D.E.P. Assessment Chart Item 31
	Lube Oil Reservoir Oil Mist Eliminator		
	Generator Loop Seal Tank - 4" Exhaust Head Vent		
	Lube Oil Coolers – ½" Vents Maintenance		
	Lube Oil Filter Tank - Filter Vent		
	Generator Cooling Oil Storage Tank Vent		
	Oil Filter – ½" Maintenance Vent		
	Stand-By Vacuum Pump – ½" Vent		
	Boiler Feed Pump Lube Oil Reservoir Vapor Extractor - 2"		
Caustic Wash System	Caustic Wash Storage Tank		
	Caustic Mixing Tank		
Chemical Feed System	Phosphate Storage Tank		
	Ammonium Hydroxide Storage Tank		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

UNITS 3 & 4 BOILER/STEAM GENERATOR POWER BLOCK			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Chemical Feed System (Continued)	Amerzine Storage Tank		
	Phosphate Feed Line Maintenance Vent – ½"		
	Amerzine Feed Line – ½" Maintenance Vent		
Fire Protection System	Miscellaneous Maintenance Vents	Water	H_2O not a Pollutant
Fuel Oil System	Fuel Oil Metering Tanks - Vent (12,000 BBL.)		
	Fuel Oil Blowback Tanks - Maintenance Vent		
	Fuel Oil Blowback Tanks - Relief Valve		
	Miscellaneous Maintenance Vents		
	Fuel Oil Additive Storage Tank Vent - 4,500 Gal.		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

STORAGE TANKS - FUEL OIL TERMINAL			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Fuel Oil	F.O. Storage Tank #801 - Vents (150,000 BBL.)	(V.O.C.'s)	
	F.O. Storage Tank #802 - Vents (150,000 BBL.)		
	F.O. Storage Tank #804 - Vents (25,000 BBL.)		
	F.O. Storage Tank #805 - Vents (25,000 BBL.)		
	F.O. Storage Tank #806 - Vents (25,000 BBL.)		
	F.O. Storage Tank #807 - Vents (200,000 BBL.)		
	F.O. Storage Tank #808 - Vents (200,000 BBL.)		
	F.O. Storage Tank #901 - Vents (238,000 BBL.)	Fuel Oil Vapors (V.O.C.'s)	
	F.O. Storage Tank #902 - Vents (238,000 BBL.)		
	Lightoil Storage Tank #903 - Vents (24,000 BBL.)		
	Lightoil Storage Tank #904 - Vents (24,000 BBL.)		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Miscellaneous Building H.V.A.C. (Cooling/Heating)	G.T. Area Office Stores Building Control Building Service Buildings Fitness Building Switchyard Building C.E.M. Buildings Switchgear Room Water Treatment/Lab Elevators System Protection Office F.O. Terminal Office Relay Rooms Unit 3 & 4 Tool Room Gas Metering Office	Continuous	Exempted by D.E.P. Assessment Chart Item 17
Sanitary Vents/Stacks	Stores Building Control Building Recreation Pavilion Service Buildings G.T. Area Offices Port-A-Johns F.O. Terminal Office	Continuous	Exempted by D.E.P. Assessment Chart Item 23

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Miscellaneous Buildings Vent/Exhaust Systems	Unit 3 & 4 Tool Room Service Buildings Chemical Lab Chemical Storage Bldg. Switchyard Control Battery Rooms Paint & Lube Oil Bldg. Dry Storage Bldg. Electrical Bldg. Warehouses Boiler Feed Pump Bldg. Control Bldg. Chlorination Bldg. Gas Metering Office Elevators G.T. Buildings	Continuous	Exempted by D.E.P. Assessment Chart Items 18 & 22
Kitchen Vent/Exhaust Systems	Control Room Service Bldg. Recreation Pavilion	Air, Kitchen Vapors	Exempted by D.E.P. Assessment Chart Item 22
C.E.M. Equipment	Monitoring Gases	Nitrogen, Sulfur Dioxide, CO_s	Exempted by D.E.P. Assessment Chart Item 15

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Hydrogen Storage	Bulk Liquid Hydrogen Tank 2" Vent - (1,500 Gal.)	Hydrogen Vapors	Vapors less than 1 tpy
Gas Bottle Storage	Nitrogen, CO_2, Hydrogen, Oxygen, Acetylene, Argon	Various Gases	Gases Non-Regulated Substances
Oily Waste Water	Sumps	Water Vapor with Small Amounts of V.O.C.	Fuel Oil Vapors less than 1 tpy
Filling Station	2000 Gallon Unleaded Fuel Tank 2" Vent	V.O.C.	Vapors Exempted by E.P.A. Tanks 2 Program
Hazardous Waste Storage Area	Sealed Drums & Containers	Paint & Oil V.O.C.'s	Exempted by D.E.P. Assessment Chart Item 38
Natural Gas	Gas Metering Station	Methane gas Vapors	Methane Vapors less than 1 tpy
Ignition Gas (Liquid Propane)	Propane Storage Tank	Minute Releases of Methane Gas Vapors	Methane Vapors much less than 1 tpy
Water Treatment	Chemical Storage Area		Exempted by D.E.P. Assessment Chart Item
Waste Water Treatment	Storm Water Sumps	Mostly Water Vapors	Exempted by D.E.P. Assessment Chart Item 28
	Oil/Water Separator Tank Vent		
	Waste Neutralization Basin		
	Storm Water Basin		
	Ash Disposal Basin		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Home Heating and Comfort Heating with a gross maximum heat output of less than one million BTU/hour	Various	Air	Exempted by Rule 62-210.300(3) F.A.C.
Internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight	Various	V.O.C.'s Exhaust Emissions	Exempted by Rule 62-210.300(3) F.A.C.
Vacuum Pumps used in laboratory operations	Various	Air	Exempted by Rule 62-210.300(3) F.A.C.
Equipment used for steam cleaning	Various	Air, Steam	Exempted by Rule 62-210.300(3) F.A.C.
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	Various	Air, Particulates	Exempted by Rule 62-210.300(3) F.A.C.

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Equipment used exclusively for space heating, other than boilers	Various	Air	Exempted by Rule 62-210.300(3) F.A.C.
Laboratory equipment used exclusively for chemical or physical analysis	Various	Various	Exempted by Rule 62-210.300(3) F.A.C.
Brazing, soldering or welding equipment	Various	Metal Fumes, Particulate	Exempted by Rule 62-210.300(3) F.A.C.
Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents	Various	Air	Exempted by Rule 62-210.300(3) F.A.C.
Fire & Safety Equipment	Various	CO_2, Halon, Dry Chemical	Exempted by Rule 62-210.300(3) F.A.C.
Surface coating facilities in ozone attainment area (provided that 6.0 gallons of coatings per day are applied)	Various	V.O.C.'s	Exempted by Rule 62-210.300(3) F.A.C.

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Degreasing units using heavier-than-air vapors exclusively, except any such unit using or emitting any substance classified as a hazardous air pollutant	Various	V.O.C.'s	Exempted by Rule 62-210.300(3) F.A.C.
Miscellaneous Activities	Plant Grounds Maintenance		Exempted by D.E.P. Chart Item 8
	Routine Maintenance/Repair Activities	Air, Various Vapors	Exempted by D.E.P. Chart Item 10
	Non-Halogenated Solvent Cleaning Operations	Vapors	Exempted by D.E.P. Chart Item 13
	Internal Combustion Engines which drive Compressors, Generators, Water Pumps or other auxiliary equipment	Propane, Gasoline or Diesel Fuel Combustion Products	Exempted by D.E.P. Chart Item 16
	Transformers, Switches and Switchgear, Processing & Venting		Exempted by D.E.P. Chart Item 19
	Electrically Heated Equipment used for Heat Treating, Tracing, Drying, Soaking, Case Hardening or Surface Conditioning		Exempted by D.E.P. Chart Item 24

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
Miscellaneous Activities (Continued)	Air Compressors and Centrifuges used for Compressing Air		Exempted by D.E.P. Chart Item 34
	Storage of Product in Sealed Containers		Exempted by D.E.P. Chart Item 41
	Painting of Plant Equipment	Paint Fumes	Presumptive Exempted by D.E.P. Chart Item 23
	Solvent Cleaning Operations (Parts Washers)	Mineral Spirits & Diesel Fuel (V.O.C.'s)	
Miscellaneous Mobile Vehicle Operation	Cars, Light Trucks, Heavy Duty Trucks, Back Hoes, Tractors, Forklifts, Cranes, Etc.	Combustion Emissions	Exempted by D.E.P. Rule F.D.E.P. 62-210.300(3)
Miscellaneous Mobile Equipment Operation	Compressors, Chain Saws, Small Generators, (<100KW) Welding Machines, Electric Saws & Drills, Etc.		Exempted by D.E.P. Chart Item 16
Gas Turbine Area - Miscellaneous	Waste Fuel Tank - 10" & 2" Vent (1,200 Gal.)	V.O.C. Fuel Oil Vapors	Fuel Vapors less than 1 tpy
	Misc. Gas Maintenance and Relief Valves	Methane Vapors	Methane Vapors less than 1 tpy
	Sonic Caustic Parts Washer		

INSIGNIFICANT ACTIVITIES LIST
PORT EVERGLADES PLANT
EXEMPT/PRESUMPTIVELY EXEMPT SOURCES

GENERAL SITE			
Equipment/Source	**Size/Source**	**Type of Emission**	**Rationale**
F.O. Terminal Miscellaneous	10,000 Gal. Oil Slop Tank	V.O.C.	
	8,000 Gal. Oil Slop Tank		
Switchyard Miscellaneous	Mineral Oil Storage Tank 2" Vent (27,000 Gal.)	Mineral Oil Vapors V.O.C.	
	Propane Fueled Generator (12.5KW) with 1½" Exhaust		
	250 Lb. Propane Storage Tanks (2) for Generator	Propane	Vapors less than 1 tpy

ATTACHMENT PPEFS_8.DOC

EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

Attachment PPEFS_8.doc

Equipment/Activities Regulated Under Title Vi

The Port Everglades facility currently has only one piece of equipment containing more than 50 pounds of CFC's (see below). However, there are many refrigerators and air conditioners at the plant site that contain smaller quantities of CFC's.

Service Building Air Conditioner (A & B)	120 lbs CFC's

ATTACHMENT PPEFS_9.DOC

ALTERNATIVE METHODS OF OPERATION

Attachment PPEFS_9.doc

Alternative Methods of Operation

There are no known methods of operation at the current time at Port Everglades plant which would simultaneously affect emissions at more than one emissions unit but would not constitute emissions trading.

ATTACHMENT PPEFS_14

COMPLIANCE CERTIFICATION

PPEFS_14

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: **PORT EVERGLADES PLANT** Facility ID No. **0110036-001-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. OK

____ **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.

Nancy M Kierspe 4-7-03
(Signature of Acid Rain Source Designated Representative) *(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 Addressed in This Section (limit to 60 characters): Port Everglades Boiler Unit 1

4. Emissions Unit Identification Number: 001 [ ] No ID
ID: [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 05/01/60	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]

9. Emissions Unit Comment: (Limit to 500 Characters) : The generator nameplate rating given reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

Emissions Unit Control Equipment

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

A. Low NOx Burners
B. Multiple Cyclones w/ Fly Ash Reinjection
C. Staged Combustion
D. Electrostatic Precipitators (Proposed ca. 2005 & 2006) *

CM Plan 2.

2. Control Device or Method Code(s): A = 024, B = 077, C = 025, D = 011

Emissions Unit Details

1. Package Unit:
   Manufacturer: Combustion Engineering / Westinghouse
   Model Number:
2. Generator Nameplate Rating: 225 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:		2400	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 firing. Maximum heat input while firing residual oil is 2300 mmbtu/hr. Compliance method for heat input is fuel sampling and analysis.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

FDEP Title V Core List, Attachment PPEU1_C	

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? Unit 1 boiler	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: Emissions Unit 1, Port Everglades Unit 1 boiler		
5. Discharge Type Code: V	6. Stack Height: 343 feet	7. Exit Diameter: 14 feet
8. Exit Temperature: 289 °F	9. Actual Volumetric Flow Rate: 813928.9 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): 587.4 North (km): 2885.2		
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above from initial Title V application. Flow rates vary depending on operating conditions.		

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

Segment Description and Rate: Segment ___1__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas burned in Unit 1 boiler		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Millions of cubic feet	
4. Maximum Hourly Rate: 2.29	5. Maximum Annual Rate: 20022.86	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): The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___2__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): No. 6 oil burned in Unit 1 boiler		
2. Source Classification Code (SCC): 1-01-004-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 15.24	5. Maximum Annual Rate: 133472.56	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___3__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 boiler burning No. 2 fuel oil		
2. Source Classification Code (SCC): 1-01-005-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 16.9	5. Maximum Annual Rate: 148147.1	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___4__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Propane burned in Unit 1 boiler		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Millions of cubic feet	
4. Maximum Hourly Rate: 2.4	5. Maximum Annual Rate: 21024	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters): The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___5__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): On-specification used oil burned in Unit 1 boiler		
2. Source Classification Code (SCC): 1-01-013-02	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 22.43	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations. Maximum Annual Rate is for Emission Units 001 through 004.		

Segment Description and Rate: Segment ___6__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 boiler co-firing all possible combinations of natural gas, residual oil, on-specification used oil, #2 fuel oil, and propane.		
2. Source Classification Code (SCC): 1-01	3. SCC Units: Millions of cubic feet	
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): The unit is currently permitted to burn a variable combination of above fuels in a ratio that will result in a max. SO_2 emission of 2.75 lb/mmbtu.		

Segment Description and Rate: Segment ___7__ of __7___

2. Segment Description (Process/Fuel Type) (limit to 500 characters): Boiler chemical cleaning waste evaporated in Unit 1 boiler. This process may be undertaken while firing natural gas or residual oil.		
2. Source Classification Code (SCC): 1-01-013-01	3. SCC Units: Thousand gallons	
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Items 6, 7, 8, & 9 do not apply. This activity to be undertaken on a periodic basis in accordance with DARM guidance, and EPA waste rules (40 CFR 279.72).		

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	024	NA	EL
CO	NA	NA	NS
PM	011 (Future)	077 (Existing)	EL
PM10	011 (Future)	077 (Existing)	EL
VOC	NA	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
HAP	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: SO_2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6325 lb/hour 27703.5 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 2.75 lb/mmbtu Reference: DEP Rule 62-296.405 (1)(c)1.j.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmbtu* 2300 mmbtu/hr = 6325 lb/hr (6325 lb/hr* 8760 hr/yr) / 2000 lb/ton = 27703.5 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1__ of ___1__

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.75 lb/mmbtu	4. Equivalent Allowable Emissions: 6325 lb/hour 27703.5 tons/year
5. Method of Compliance (limit to 60 characters): Fuel sampling & analysis	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 2.75 lb/mmbtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405 (1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 828 lb/hour 3626.64 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 2.75 lb/mmbtu Reference: DEP Rule 62-296.570 (4)(b)1	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.36 lb/mmbtu* 2300 mmbtu/hr = 828lb/hr (oil) (828 lb/hr* 8760 hr/yr) / 2000 lb/ton = 3626.64 tons/ yr (oil)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.20 on natural gas fuel.	

Allowable Emissions Allowable Emissions ___1__ of ___2__

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.36 lb/mmbtu	4. Equivalent Allowable Emissions: 828 lb/hour 3626.64 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.36 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570 (4)(b)1.]. Equivalent allowable emissions are given for liquid fuel firing.	

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 ____2__

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.2 lb/mmbtu	4. Equivalent Allowable Emissions: 480 lb/hour 2102.4 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.2 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570 (4)(b)1.]. Equivalent allowable emissions are given for liquid fuel firing.	

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

Pollutant Detail Information

1. Pollutant Emitted: Particulate Matter - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: 287.5 lb/hour 1259.25 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.125 lb/mmbtu Reference: DEP Rule 62-296.405 (1)(b) and 62-210.700(3)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmbtu* 2300 mmbtu/hr = 287.5 lb/hr (287.5 lb/hr* 8760 hr/yr) / 2000 lb/ton = 1259.25 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The particulate matter emission limit for 3 hrs/24hrs at 0.3 lb/mmbtu and 21 hrs/24hrs at 0.1 lb/mmbtu is equivalent to an average of 0.125 lb/mmbtu.	

Allowable Emissions Allowable Emissions ___1___ of ___4___

1. Basis for Allowable Emissions Code: Emissions limit required by law	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 230 lb/hour 881.45 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.1 lb/mmbtu is the current regulatory limit on PM [Rule 62-296.405(1)(b)]. Equivalent emissions are given for liquid fuel firing.	

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

Pollutant Detail Information

1. Pollutant Emitted: Particulate Matter - 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):	

Potential/Fugitive Emissions

Allowable Emissions Allowable Emissions ___2___ of ___4

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lb/mmbtu	4. Equivalent Allowable Emissions: 690 lb/hour 377.8 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are given for liquid fuel firing.	

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

Pollutant Detail Information

1. Pollutant Emitted: Particulate Matter - 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 ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: May 31, 2006
3. Requested Allowable Emissions and Units: 0.03 lb/mmbtu	4. Equivalent Allowable Emissions: 69 lb/hour 302.2 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce steady-state PM emissions of its fossil fueled steam boilers in Broward County to 0.03 lb/mmbtu. Equivalent allowable emissions are given for liquid fuel firing.	

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

Pollutant Detail Information

1. Pollutant Emitted: Particulate Matter - 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 ___4___ of ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: May 31, 2006
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 230 lb/hour 125.9 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce PM emissions of its fossil fueled steam boilers in Broward County. Equivalent allowable emissions are given for liquid fuel firing and soot blowing.	

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

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-296.405(1)(a) and (1)(e)1., F.A.C. Visible emissions limited to 40% opacity, except for allowed excess emissions. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___2___ of ___5___

1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(3), F.A.C. limits sootblowing & load changing to 60% opacity for up to 3hrs/24 hrs, with <4, six-minute periods of up to 100% opacity if unit has an operational CEM.	

Visible Emissions Limitation: Visible Emissions Limitation ___3___ of ___5___

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) and (2), F.A.C. allow up to 100% opacity, for an unlimited time during start-up, shutdown, and up to 2hrs/24hrs for malfunctions.	

Visible Emissions Limitation: Visible Emissions Limitation ___4___ of ___5___

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions 6-minute average of its fossil fueled steam boilers in Broward County to 20%. This limit becomes effective May 31, 2006. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___5___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions of its fossil fueled steam boilers in Broward County, and limits sootblowing & load changing to 40% opacity for up to 3hrs/24 hrs, with 4, six-minute periods of up to 100% opacity if unit has an operational COM. This limit becomes effective May 31, 2006.	

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

Continuous Monitoring System: Continuous Monitor __1___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TEI Model Number: 42c	Serial Number: 42c-77131-385
5. Installation Date: 02/04/03	6. Performance Specification Test Date: 02/19/03
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __2___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): CO_2
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Milton Roy Model Number: 3300	Serial Number: N312496T
5. Installation Date: 07/09/94	6. Performance Specification Test Date: 09/08/94
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __3___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): Visible Emissions (opacity)
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Phoenix Instruments, Inc. Model Number: OPAC 20/20	Serial Number: OPAC - 1079
5. Installation Date: 12/04/00	6. Performance Specification Test Date: 12/20/00
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: PPEU1_.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: PPEU1_2.doc [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: PPEU1_3.doc [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: PPEU1_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: PPEU1_ 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: PPEU1_ 10.doc [ ] Not Applicable

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

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

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: PPEU1_14.doc [ ] 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: PPEU1_15.doc

[ ] 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 PPEU1_C

EMISSION UNIT INFORMATION

40 C.F.R. 279.72
40 C.F.R. 72.20(a)
40 C.F.R. 72.20(b)
40 C.F.R. 72.20(c)
40 C.F.R. 72.21(a)
40 C.F.R. 72.21(b)
40 C.F.R. 72.21(d)
40 C.F.R. 72.22(a)
40 C.F.R. 72.22(c)
40 C.F.R. 72.23
40 C.F.R. 72.24(a)
40 C.F.R. 72.30(a)
40 C.F.R. 72.30(b)(2)
40 C.F.R. 72.30(c)
40 C.F.R. 72.30(d)
40 C.F.R. 72.32
40 C.F.R. 72.33(b)
40 C.F.R. 72.33(c)
40 C.F.R. 72.33(d)
40 C.F.R. 72.40(a)
40 C.F.R. 72.40(b)
40 C.F.R. 72.40(c)
40 C.F.R. 72.40(d)
40 C.F.R. 72.51
40 C.F.R. 72.90
40 C.F.R. 72.9(a)(1)(iii)
40 C.F.R. 72.9(a)(1)(i)
40 C.F.R. 72.9(a)(2)
40 C.F.R. 72.9(b)
40 C.F.R. 72.9(c)(1)(iii)
40 C.F.R. 72.9(c)(2)
40 C.F.R. 72.9(c)(4)
40 C.F.R. 72.9(c)(5)
40 C.F.R. 72.9(d)
40 C.F.R. 72.9(e)
40 C.F.R. 72.9(f)
40 C.F.R. 72.9(g)(4)
40 C.F.R. 73.33
40 C.F.R. 73.35
40 C.F.R. 75 Appendix A-1
40 C.F.R. 75 Appendix A-2
40 C.F.R. 75 Appendix A-3
40 C.F.R. 75 Appendix A-4
40 C.F.R. 75 Appendix A-5
40 C.F.R. 75 Appendix A-6
40 C.F.R. 75 Appendix B
40 C.F.R. 75 Appendix C-1
40 C.F.R. 75 Appendix C-2
40 C.F.R. 75 Appendix D
40 C.F.R. 75 Appendix F

40 C.F.R. 75 Appendix G-2
40 C.F.R. 75 Appendix G-4
40 C.F.R. 75 Appendix H
40 C.F.R. 75.10(a)(1)
40 C.F.R. 75.10(a)(2)
40 C.F.R. 75.10(a)(3)(i)
40 C.F.R. 75.10(a)(4)
40 C.F.R. 75.10(b)
40 C.F.R. 75.10(c)
40 C.F.R. 75.10(d)
40 C.F.R. 75.10(f)
40 C.F.R. 75.10(g)
40 C.F.R. 75.11(b)(1)
40 C.F.R. 75.11(c)(3)
40 C.F.R. 75.11(d)
40 C.F.R. 75.12(a)
40 C.F.R. 75.12(b)
40 C.F.R. 75.13(a)
40 C.F.R. 75.13(b)
40 C.F.R. 75.14(a)
40 C.F.R. 75.20(a)(5)
40 C.F.R. 75.20(b)
40 C.F.R. 75.20(c)
40 C.F.R. 75.20(d)
40 C.F.R. 75.20(f)
40 C.F.R. 75.20(g)
40 C.F.R. 75.21(a)
40 C.F.R. 75.21(b)
40 C.F.R. 75.21(c)
40 C.F.R. 75.21(d)
40 C.F.R. 75.21(e)
40 C.F.R. 75.21(f)
40 C.F.R. 75.22
40 C.F.R. 75.24
40 C.F.R. 75.30(a)(1)
40 C.F.R. 75.30(a)(2)
40 C.F.R. 75.30(a)(3)
40 C.F.R. 75.31
40 C.F.R. 75.32
40 C.F.R. 75.33
40 C.F.R. 75.35
40 C.F.R. 75.36
40 C.F.R. 75.4(a)(4)(ii)
40 C.F.R. 75.5
40 C.F.R. 75.51(c)
40 C.F.R. 75.53(a)
40 C.F.R. 75.53(b)
40 C.F.R. 75.53(c)
40 C.F.R. 75.53(d)(1)
40 C.F.R. 75.54

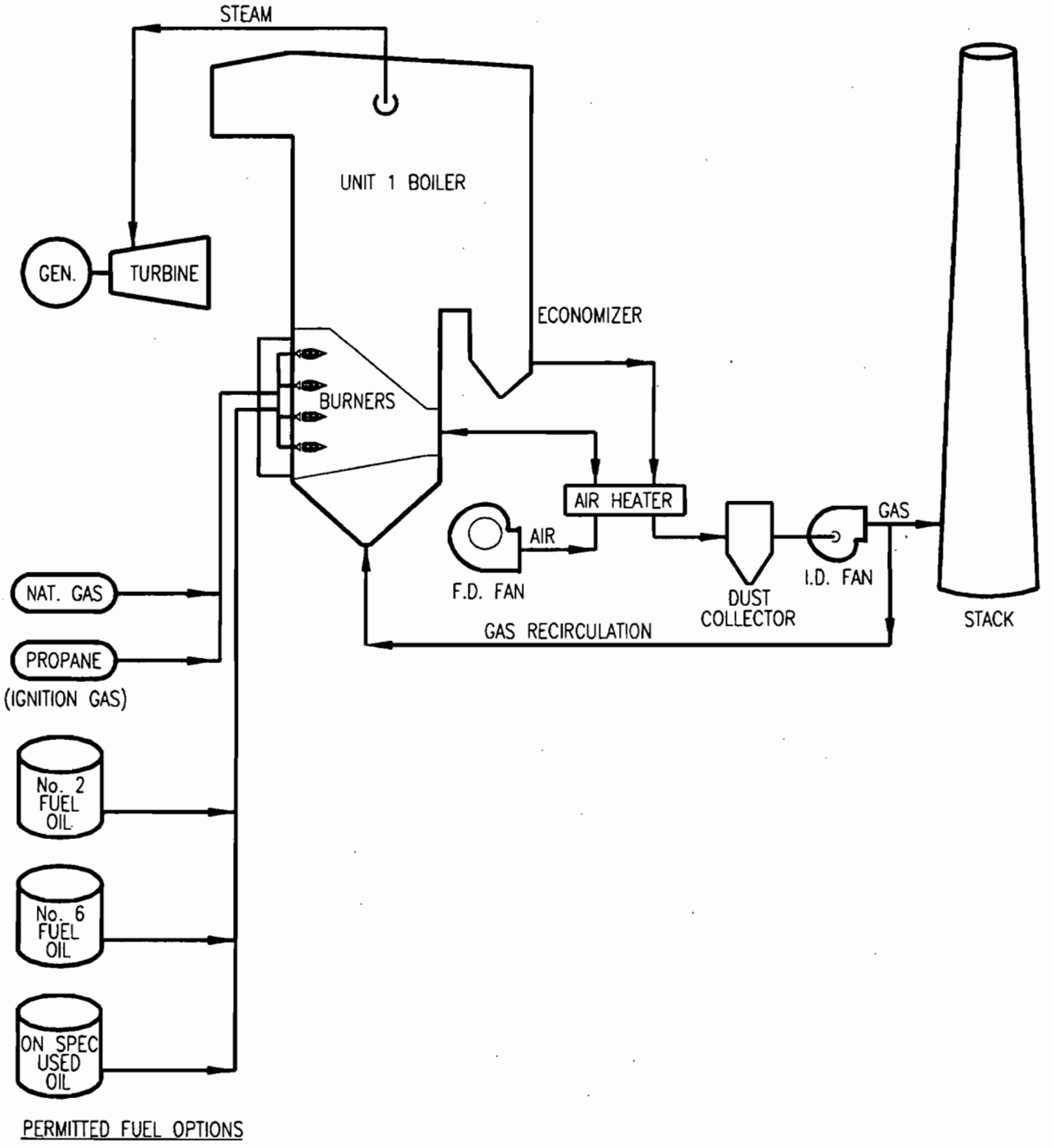
40 C.F.R. 75.55(c)
40 C.F.R. 75.55(e)
40 C.F.R. 75.56
40 C.F.R. 75.60(a)
40 C.F.R. 75.60(b)
40 C.F.R. 75.60(c)(3)
40 C.F.R. 75.61(a)(1)
40 C.F.R. 75.61(a)(5)
40 C.F.R. 75.61(b)
40 C.F.R. 75.62
40 C.F.R. 75.63
40 C.F.R. 75.64(a)
40 C.F.R. 75.64(b)
40 C.F.R. 75.64(c)
40 C.F.R. 75.64(d)
40 C.F.R. 75.65
40 C.F.R. 75.66(a)
40 C.F.R. 75.66(b)
40 C.F.R. 75.66(c)
40 C.F.R. 75.66(d)
40 C.F.R. 75.66(g)
40 C.F.R. 75.66(h)
40 C.F.R. 76.13
40 C.F.R. 77.3
40 C.F.R. 77.5(b)
40 C.F.R. 77.6
Broward DNRP Ch 27-173(a) (state only)
Broward DNRP Ch 27-173(c) (state only)
Broward DNRP Ch 27-173(d) (state only)
Broward DNRP Ch 27-173(e) (state only)
Broward DNRP Ch 27-173(f) (state only)
Broward DNRP Ch 27-173(g) (state only)
Broward DNRP Ch 27-173(h) (state only)
Broward DNRP Ch 27-174 (state only)
Broward DNRP Ch 27-176 (state only)
Broward DNRP Ch 27-177 (state only)
Broward DNRP Ch 27-179 (state only)
Broward DNRP Ch 27-180 (state only)
Broward DNRP Ch 27-181 (state only)
Broward DNRP Ch 27-184 (state only)
Broward DNRP Ch 27-188 (state only)
Broward DNRP Ch 27-189 (state only)
F.A.C. 62-204.800(12) (state only)
F.A.C. 62-204.800(13) (state only)
F.A.C. 62-204.800(14) (state only)
F.A.C. 62-210.650
F.A.C. 62-210.700 (1)
F.A.C. 62-210.700 (2)
F.A.C. 62-210.700 (3)
F.A.C. 62-210.700 (4)

F.A.C. 62-210.700 (6)
F.A.C. 62-214.300
F.A.C. 62-214.330
F.A.C. 62-214.350 (2)
F.A.C. 62-214.350 (3)
F.A.C. 62-214.350 (5)
F.A.C. 62-214.350 (6)
F.A.C. 62-214.370 (1)
F.A.C. 62-214.370 (3)
F.A.C. 62-214.370 (4)
F.A.C. 62-214.370 (7)
F.A.C. 62-214.430
F.A.C. 62-296.405(1)(a) paragraph 2
F.A.C. 62-296.405(1)(b)
F.A.C. 62-296.405(1)(c)1.j.
F.A.C. 62-296.405(1)(e)(1)
F.A.C. 62-296.405(1)(e)(2)
F.A.C. 62-296.405(1)(e)(3)
F.A.C. 62-296.405(1)(f)1.a.(i)
F.A.C. 62-296.405(1)(f)1.b.
F.A.C. 62-296.500(2)(a)1.
F.A.C. 62-296.500(2)(c)
F.A.C. 62-296.570(4)(a)3.
F.A.C. 62-296.570(4)(a)4.
F.A.C. 62-296.570(4)(b)1.
F.A.C. 62-296.570(4)(c)
F.A.C. 62-297.310(1)
F.A.C. 62-297.310(2)(b)
F.A.C. 62-297.310(3)
F.A.C. 62-297.310(4)(a)1.
F.A.C. 62-297.310(4)(a)2.c.
F.A.C. 62-297.310(4)(b)
F.A.C. 62-297.310(4)(c)
F.A.C. 62-297.310(4)(d)
F.A.C. 62-297.310(4)(e)
F.A.C. 62-297.310(5)
F.A.C. 62-297.310(6)(a)
F.A.C. 62-297.310(6)(c)
F.A.C. 62-297.310(6)(d)
F.A.C. 62-297.310(6)(e)
F.A.C. 62-297.310(6)(f)
F.A.C. 62-297.310(6)(g)
F.A.C. 62-297.310(7)(a)1.
F.A.C. 62-297.310(7)(a)2.
F.A.C. 62-297.310(7)(a)3.
F.A.C. 62-297.310(7)(a)4.
F.A.C. 62-297.310(7)(a)5.
F.A.C. 62-297.310(7)(a)9.
F.A.C. 62-297.310(7)(c)
F.A.C. 62-297.310(8)
Table 62-297.310-1

ATTACHMENT PPEU1_.BMP_

PROCESS FLOW DIAGRAM

ATTACHMENT: PPEEU1_1.bmp



PERMITTED FUEL OPTIONS

TECHNICAL ACCEPTANCE | ENGINEERING ORGANIZATION | ORG | BY | DATE

WALKDOWN INFORMATION | AS-BUILT INFORMATION | ORG | BY | DATE

BAR CODE

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/3/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	PORT EVERGLADES PLANT
SCALE: N/A	CAD FILE NAME: PE007761	TITLE: EMISSION UNIT PROCESS FLOW DIAGRAM STEAM GENERATOR/BOILER ATTACHMENT NO. EU1
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: PE007761	

DRAWING NUMBER	SHEET	REV
PPE1-M0102-YY	1 OF 1	0

FPGSYM/FPGBOR-A 9/90

ATTACHMENT PPEU1_2.DOC

FUEL ANALYSIS OR SPECIFICATIONS

Attachment PPEU1_2.doc

Fuel Analysis
Natural Gas Analysis (typical)[2]

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 grain / ccf
% 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.

(1) Data from laboratory analysis

(2) 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 PPEU1_2.doc

Fuel Analysis
No.6 Oil Analysis (typical)[4]

Parameter	Typical value	Specifications
API gravity (@ 60° F)	6 - 12	none
Heat content(MBtu/bbl)	6,310 - 6420	6,340[1]
% Sulfur	1.0	2.5 max[3]
% Nitrogen	0.2 - 0.5[2]	none
% Ash	0.06 - 0.09[2]	0.10 max[1]

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

(2) Data taken from laboratory analysis.

(3) Maximum permitted from current air operation permit.

(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 PPEU1_2.doc

Fuel Analysis
No. 2 Distillate oil (typical)[3]

Parameter	Typical value		Specifications
API gravity (@ 60 F)	35.0[2]		30 - 40[1]
Heat content (MBtu/bbl)	5,700 - 5,800[2]	none	
% sulfur	0.3 - 0.5[1]		0.5 maximum[1]
% nitrogen	no specification	none	
% ash	<0.01[2]		0.01[1]

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(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 PPEU1_2.doc

Fuel Analysis
Propane (typical)[1]

Emission unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as No.6 residual oil. The propane fuel is supplied by a commercial vendor and is stored in small tanks located at the bottom of the boiler area. The chemical formula for propane is C_3H_8 .

Parameter	Typical value	Specifications
Specific gravity (@ 60 F)	0.51[1]	none
Heat content (MBtu/bbl)	600 - 1,000	none
% sulfur	0.0031	none
% nitrogen	no specification	none
% ash	no specification	none

Footnotes:

(1) 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 PPEU1_2.doc

Fuel Analysis
On Specification Used Oil

The boiler may occasionally burn used oil during normal operation. All used oil fired in the unit meets the specifications mandated by 40 CFR 279.11. Used oil fired by this boiler is typically derived from plant maintenance activities, and may include used lube oils, transformer oils, etc. that meet the analytical specifications. Criteria for used oil follows:

Parameter		Typical value		Specifications
API gravity (@ 60 F)		30.0[1]		none
Heat content (MBtu/bbl)	6,000[1]		none	
% sulfur		0.3[1]		none
% nitrogen		negligible		none
% ash		0.01[1]		0.01

Footnotes:
(1) 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 PPEU1_4.BMP_

DESCRIPTION OF STACK SAMPLING FACILITIES

PPEU1_1.BMP

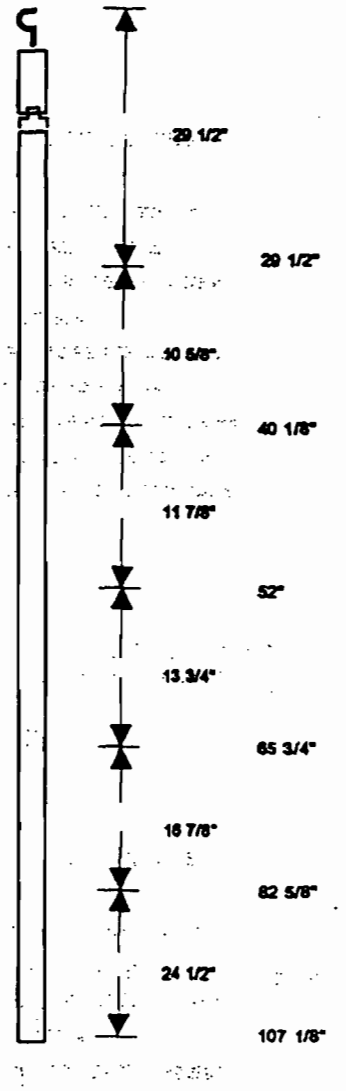
FLORIDA POWER & LIGHT CO.
STACK SAMPLING FACILITIES
PORT EVERGLADES

FOSSIL FUEL STEAM GENERATORS
UNITS 1 & 2

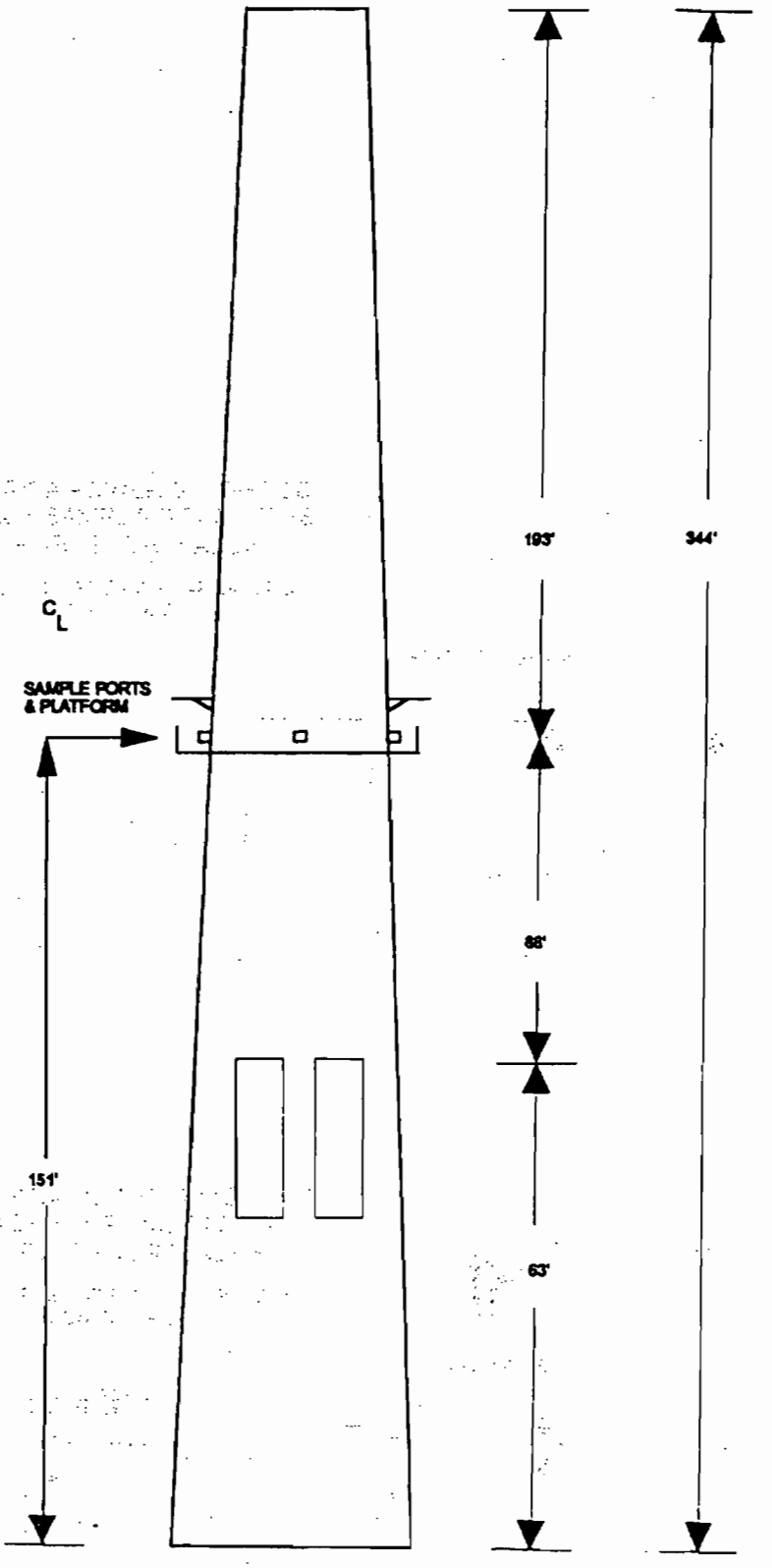
STACK SPECIFICATIONS

SAMPLING DIAMETER: 226.1 in.
SAMPLING AREA: 283.8 sq. ft.
SAMPLING PORT DEPTH: 24 6/8 in.
No. OF PORTS: 4
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

PARTICULATE SAMPLING PROBE DIAGRAM



STACK DIAGRAM



Access to the sampling ports is provided by a ladder. Channel iron with a trolley system is above each port for probe support. AC power is available on the platform and at the base of thestack.

FILE: PE1-2TLV.PRE
08/17/95

ATTACHMENT PPEU1_6.DOC

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PPEU1_6.doc

Startup & Shutdown Procedures - Minimizing Excess Emissions

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

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

Excess emissions may be detected during all modes of boiler operation by any one of several continuous emissions monitors. Continuous emission monitors are currently in place for NO_x, SO_2 and opacity. An audible and visual alarm are activated whenever permitted values for any of the above parameters are approached.

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

- proper excess air adjustments
- recognizing and removal of faulty burners
- fuel oil temperature adjustments
- proper and timely operation of boiler cleaning devices
- removal of the unit from system-dispatch mode
- reduction of unit megawatt load
- stopping and restarting of boiler cleaning devices
- lowering load rate
- pressure rate changes

Best Operational Practices to prevent excess emissions, and knowledge of the appropriate countermeasures to take if an excess emissions condition exists, are taught during routine operator training.

ATTACHMENT PPEU1_10.DOC

ALTERNATIVE MEHTHODS OF OPERATION

Attachment PPEU1_10.doc
Alternative Methods of Operation

Operation at Various Capacities and Heat Input Rates
The Port Everglades Unit 1 and 2 boilers may each be operated up to 8760 hours per year at heat input rates from zero to 2,300 MMBtu per hour on No.#6 oil, and from zero to 2,400 MMBtu per hour on natural gas. When a blend of fuel oil and natural gas are burned, the heat input is prorated based upon the percent heat input of each fuel.

Different Fuel Types
The units may be fired with a variable combination of No. 6 residual fuel oil, natural gas, or No. 2 fuel oil. The units may occasionally utilize propane fuel to light off (start up) the boiler, then switch to another fuel, such as No.6 residual oil. The unit may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11. The quantity of on-specification used oil shall not exceed 1,500,000 gallons per year for Units 1 through 4.

Current emissions limitations are as follows:

Pollutant	Emission Limit
Particulate matter-steady state	0.1 lb/MMBtu
Particulate matter-soot blowing	0.3 lb/MMBtu
Sulfur dioxide	2.75 lb/MMBtu
Nitrogen oxides	0.2 lb/mmBtu (natural gas, 30-day rolling average) 0.36 lb/mmBtu (residual oil, 30-day rolling average)

Oil and Gas Co-firing
These emission units may co-fire natural gas with residual oil. When combusting both fuels simultaneously, the percentage of natural gas will be adjusted to ensure that the applicable SO2 emission limit and visible emission limits are complied with.

Soot blowing
The units may blow soot for up to 24 hours per day, so long as excess emissions are limited to 60% opacity for 3 hours in 24 hours with not more than four 6-minute periods of up to 100% opacity.

Utilization of Additives
When residual oil is fired, additives such as Magnesium hydroxide $Mg(OH)_2$ are added to the boiler on a continuous basis. This material is typically added to the fuel oil just prior to its being fed into the furnace, but it may also be injected into the boiler via the I.K. soot blower lances and through manual hand lances on a batch basis, rather than continuously. The dosage rate is based on the quantity of fuel burned and the amount of ash in the fuel. FPL reserves the right to use other additives if they are suitable.

Off-Stoichiometric Combustion
This technique involves operating selected burners at fuel-rich mixture ratios. The proportion of fuel burned at peak temperatures in the presence of excess air is reduced and results in reduced NOx emissions. At Port Everglades, the method for performing off-stoichiometric combustion is to terminate the fuel flow to selected burners and utilize these burners as excess air ports. The other burners are then operated at a fuel-rich mixture ratio. This is also known as a bias-firing scheme.

Attachment PPEU1_10.doc
Alternative Methods of Operation

Evaporation of Spent Boiler Chemical Cleaning Chemicals

On a periodic basis, as part of routine maintenance, the inside of the steam generator tubes (boiler tubes) at Port Everglades Units 1 and 2 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

After the second stage treatment, two or more rinses are performed, in order to wash the cleaning solution from the inside of the boiler tubes. The solutions and rinsewaters are collected in large mobile tanks ("frac tanks") pursuant to guidance issued by the Department. Upon completion of the cleaning process and prior to disposal of the spent cleaning solution and rinses, representative sampling of the liquids collected in the "frac tanks" is conducted as per 40 CFR 261, Appendix I, to determine the hazardous waste status of the accumulated wastewater, using Toxicity Characteristic Leaching Procedure (TCLP) analysis for metals.

If the wastewater is determined to be hazardous, it will be managed as such in accordance with 40 CFR 262.34, 40 CFR 265 Subpart I, and 40 CFR 268 with respect to generators accumulating and treating waste in containers and tanks. An appropriate waste analysis plan will be developed to determine and document the pre- and post-treatment characteristics of the wastewater. Hazardous waste may also be transported to an approved offsite hazardous waste facility for the appropriate disposal.

If the spent cleaning solution and rises are determined to be non-hazardous, they are then disposed of by evaporation in the units boiler. Introduction into the boiler will occur at a rate that will not cause an exceedence of the opacity limit of the unit in which evaporation is occurring (in this case, 40 percent opacity).

ATTACHMENT PPEU1_14.DOC

COMPLIANCE ASSURANCE MONITORING PLAN

Attachment PPEU1_14.doc

Justification for the mechanical Dust Collectors installed within FPL's Fossil Steam Boilers to be excluded from the CAM rule

Based on the January 8, 1998 USEPA letter on Compliance Assurance Monitoring Rule Implementation Question and Answers, the mechanical Dust Collectors installed within FPL's Fossil Steam Boilers are excluded because:

- The mechanical Dust Collector is inherent process equipment contained entirely within the flue gas ductwork.
- The mechanical Dust Collector is a passive method of particle separation from the flue gas stream.
- The mechanical Dust Collector is a device to recover unburned carbon and ash from the flue gas stream.
- The mechanical Dust Collector has no moving parts, no control inputs, nor any controllable parameters.

Based on the characteristics above, the justification to exclude the mechanical Dust Collectors from the CAM rule is appropriate.

ESP
CAM Plan 7.

ATTACHMENT PPEU1_15

ACID RAIN PART APPLICATION

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 **PORT EVERGLADES Plant**	State **FL**	ORIS Code **617**

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.

		Compliance Plan			
a	b	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
PPE1	Yes	**NO**	**N/A**	**N/A**
PPE2	Yes	**NO**	**N/A**	**N/A**
PPE3	Yes	**NO**	**N/A**	**N/A**
PPE4	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)
PORT EVERGLADES 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)
PORT EVERGLADES 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)

[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 Addressed in This Section (limit to 60 characters): Port Everglades Boiler Unit 2

4. Emissions Unit Identification Number: 002 [ ] No ID
ID: [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 04/01/61	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]

9. Emissions Unit Comment: (Limit to 500 Characters) The generator nameplate rating given reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

Emissions Unit Control Equipment

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

   A. Low NOx Burners
   B. Multiple Cyclones w/ Fly Ash Reinjection
   C. Staged Combustion
   D. Electrostatic Precipitators (Proposed ca. 2005 & 2006)

2. Control Device or Method Code(s): A = 024, B = 077, C = 025, D = 011

Emissions Unit Details

1. Package Unit:
   Manufacturer: Combustion Engineering / Westinghouse
   Model Number:
2. Generator Nameplate Rating: 225 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:		2400	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

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

The maximum heat input given above reflects natural gas firing. Maximum heat input for residual oil 2300 mmbtu/hr.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

FDEP Title V Core List, Attachment PPEU1-C	

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? EU 2	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Emission Unit 2 – Port Everglades Unit 2 Boiler		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 343 feet	7. Exit Diameter: 14 feet
8. Exit Temperature: 289 °F	9. Actual Volumetric Flow Rate: 813928.9 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): 587.4 North (km): 2885.2		
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above from initial Title V application. Flow rates vary depending on operating conditions.		

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

Segment Description and Rate: Segment ___1__ of __7___

2. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas burned in Unit 2 Boiler		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 2.29	5. Maximum Annual Rate: 20022.86	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): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations		

Segment Description and Rate: Segment ___2__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Number 6 fuel oil burned in Unit 2 Boiler		
2. Source Classification Code (SCC): 1-01-004-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 15.24	5. Maximum Annual Rate: 133472.56	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations		

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

Segment Description and Rate: Segment ___3__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 boiler burning No. 2 fuel oil		
2. Source Classification Code (SCC): 1-01-005-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 16.9	5. Maximum Annual Rate: 148147.1	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___4__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Propane burned in Unit 2		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 2.4	5. Maximum Annual Rate: 21024	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

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

Segment Description and Rate: Segment ___5__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): On-Specification used oil burned in Unit 2 boiler		
2. Source Classification Code (SCC): 1-01-013-02	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 22.43	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations. Maximum annual rate for EUs 001 through 004.		

Segment Description and Rate: Segment ___6__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 boiler firing all possible combinations of natural gas, residual oil, on-specification used oil, #2 fuel oil, and propane		
2. Source Classification Code (SCC): 1-01	3. SCC Units: Million cubic feet	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The existing Title V permit allows Unit 2 to burn a mixture of the above fuels in a ration that will result in a max. SO2 emission rate of 2.75 lb/mmbtu.		

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

Segment Description and Rate: Segment ___7__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Boiler chemical cleaning waste evaporated in Unit 2. This process may be undertaken while firing natural gas or residual fuel oil.		
2. Source Classification Code (SCC): 1-01-013-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Items 6, 7, 8, & 9 do not apply. This activity to be undertaken on a periodic basis in accordance with DARM guidance and EPA waste rules (40 CFR 279.72).		

Segment Description and Rate: Segment _____ of _____

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

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	025	NA	EL
CO	NA	NA	NS
PM	011 (Future)	077 (Existing)	EL
PM10	011 (Future)	077 (Existing)	NS
VOC	NA	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
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: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6325 lb/hour 27703.5 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 2.75 Reference: DEP Rule 62-296.405(1)(c)1.j.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmbtu*2300 mmbtu/hr = 6325 lb/hr (6325 lb/hr * 8760 hr/yr) / 2000 lb/ton = 27703.5 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1__ of ___1__

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.75 lb/mmbtu	4. Equivalent Allowable Emissions: 6325 lb/hour 27703.5 tons/year
5. Method of Compliance (limit to 60 characters): Fuel sampling & analysis	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 2.75 lb/mmbtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.].	

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: 828 lb/hour 3626.64 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.36 lb/mmbtu Reference: DEP Rule 62-296.570(4)(b)1.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.36 lb/mmbtu * 2300 mmbtu/hr = 828.0 lb/hr (828 lb/hr * 8760 hr/yr) / 2000 lb/ton = 3626.64 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.20 lb/mmbtu on natural gas fuel.	

Allowable Emissions Allowable Emissions ___1__ of ___2___

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.36 lb/mmbtu	4. Equivalent Allowable Emissions: 828 lb/hour 3626.64 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.36 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570(40(b)1.]. 30-day rolling average – Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 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: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.2 lb/mmbtu	4. Equivalent Allowable Emissions: 480 lb/hour 2102.4 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.2 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570(40(b)1.]. 30-day rolling average – Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas fuel firing.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: 287.5 lb/hour 1259.25 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.125 lb/mmbtu Reference: DEP Rule 62-296.405(1)(b) and 62-210.700(3)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmbtu * 2300 mmbtu/hr = 287.5 lb/hr. (287.5 lb/hr * 8760 hr/ yr) /2000 lb/ton = 1259.25 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The particulate matter emission limit for 3 hrs/24 hrs at 0.3 lb/mmbtu and 21 hrs/24 hrs at 0.1 lb/mmbtu is equivalent to an average of 0.125 lb/mmbtu.	

Allowable Emissions Allowable Emissions ___1___ of ___4___

1. Basis for Allowable Emissions Code: Emissions limit required by law	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 230 lb/hour 881.45 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.1 lb/mmbtu is the current regulatory limit on PM [Rule 62-296.405(1)(b)]. Equivalent emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lb/mmbtu	4. Equivalent Allowable Emissions: 690 lb/hour 377.8 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: Oct. 31, 2005
3. Requested Allowable Emissions and Units: 0.03 lb/mmbtu	4. Equivalent Allowable Emissions: 69 lb/hour 302.2 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce steady-state PM emissions of its fossil fueled steam boilers in Broward County to 0.03 lb/mmbtu. Equivalent allowable emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___ of ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: Oct. 31, 2005
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 230 lb/hour 125.9 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce PM emissions of its fossil fueled steam boilers in Broward County. Equivalent allowable emissions are given for liquid fuel firing and sootblowing.	

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

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-296.405(1)(a) and (1)(e)1., F.A.C. Visible emissions limited to 40% opacity, except for allowed excess emissions. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___2___ of ___5___

1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(3), F.A.C. limits sootblowing & load changing to 60% opacity for up to 3hrs/24 hrs, with <4, six-minute periods of up to 100% opacity if unit has an operational CEM.	

Visible Emissions Limitation: Visible Emissions Limitation __3__ of __5__

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) and (2), F.A.C. allow up to 100% opacity, for an unlimited time during start-up, shutdown, and up to 2hrs/24hrs for malfunctions.	

Visible Emissions Limitation: Visible Emissions Limitation __4__ of __5__

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions 6-minute average of its fossil fueled steam boilers in Broward County to 20%. This limit becomes effective Oct. 31, 2005. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___5___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions of its fossil fueled steam boilers in Broward County, and limits sootblowing & load changing to 40% opacity for up to 3hrs/24 hrs, with 4, six-minute periods of up to 100% opacity if unit has an operational COM. This limit becomes effective Oct. 31, 2005	

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

Continuous Monitoring System: Continuous Monitor __1___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TEI Model Number: 42C	Serial Number: 42C-77130-385
5. Installation Date: 02/14/03	6. Performance Specification Test Date: 03/05/03
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __2___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): CO_2
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Milton Roy Model Number: 3300	Serial Number: N3K4404T
5. Installation Date: 07/09/94	6. Performance Specification Test Date: 09/08/94
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __3__ of __3__

1. Parameter Code: VE	2. Pollutant(s): Opacity
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Phoenix Instruments, Inc. Model Number: OPAC 20/20	Serial Number: OPAC - 1080
5. Installation Date: 12/04/00	6. Performance Specification Test Date: 12/18/00
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: PPEU1_.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: PPEU1_2.doc [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: PPEU1_3.doc [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: PPEU1_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: PPEU1_ 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: PPEU1_ 10.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: PPEU1_12.doc [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: PPEU1_14.doc [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: PPEU1_15.doc

[ ] 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

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 Addressed in This Section (limit to 60 characters): Port Everglades Boiler Unit 3

4. Emissions Unit Identification Number: 003 [ ] No ID
ID: [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 06/01/64	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]

9. Emissions Unit Comment: (Limit to 500 Characters) The generator nameplate rating given reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

Emissions Unit Control Equipment

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

   A. Low NOx Burners
   B. Multiple Cyclones w/ Fly Ash Reinjection
   C. Staged Combustion
   D. Electrostatic Precipitators (Proposed ca. 2005 & 2006)

2. Control Device or Method Code(s): A = 024, B = 077, C = 025, D = 011

Emissions Unit Details

1. Package Unit:
   Manufacturer: Foster Wheeler / General Electric Model Number:

2. Generator Nameplate Rating: 402 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:	4180	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):

The maximum heat input given above reflects natural gas firing. Maximum heat input for residual oil 4000 mmbtu/hr.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

FDEP Title V Core List, Attachment PPEU1-C	

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? EU 3	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Emission Unit 3 – Port Everglades Unit 3 Boiler		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 343 feet	7. Exit Diameter: 18.1 feet
8. Exit Temperature: 287 °F	9. Actual Volumetric Flow Rate: 1263180.6 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): 587.4 North (km): 2885.2		
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above from initial Title V application. Flow rates vary depending on operating conditions.		

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

Segment Description and Rate: Segment ___1__ of __7___

2. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas burned in Unit 3 Boiler		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 3.98	5. Maximum Annual Rate: 34,873	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): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___2__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Number 6 fuel oil burned in Unit 3 Boiler		
2. Source Classification Code (SCC): 1-01-004-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 26.3	5. Maximum Annual Rate: 230,526	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

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

Segment Description and Rate: Segment ___3__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 3 boiler burning No. 2 fuel oil		
2. Source Classification Code (SCC): 1-01-005-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 29.41	5. Maximum Annual Rate: 257,647	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___4__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Propane burned in Unit 3		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 4.18	5. Maximum Annual Rate: 36,617	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

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

Segment Description and Rate: Segment ___5__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): On-Specification used oil burned in Unit 3 boiler		
2. Source Classification Code (SCC): 1-01-013-02	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 29.41	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations. Maximum Annual Rate is for EUs 001 through 004.		

Segment Description and Rate: Segment ___6__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 3 boiler firing all possible combinations of natural gas, residual oil, on-specification used oil, #2 fuel oil, and propane		
2. Source Classification Code (SCC): 1-01	3. SCC Units: Million cubic feet	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The existing Title V permit allows Unit 3 to burn a mixture of the above fuels in a ration that will result in a max. SO2 emission rate of 2.75 lb/mmbtu.		

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

Segment Description and Rate: Segment ___7__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Boiler chemical cleaning waste evaporated in Unit 3. This process may be undertaken while firing natural gas or residual fuel oil.		
2. Source Classification Code (SCC): 1-01-013-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Items 6, 7, 8, & 9 do not apply. This activity to be undertaken on a periodic basis in accordance with DARM guidance and EPA waste rules (40 CFR 279.72).		

Segment Description and Rate: Segment _____ of _____

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

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	025	NA	EL
CO	NA	NA	NS
PM	011 (Future)	077 (Existing)	EL
PM10	011 (Future)	077 (Existing)	NS
VOC	NA	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
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: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 11000 lb/hour 48180 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 2.75 Reference: DEP Rule 62-296.405(1)(c)1.j.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmbtu*4000 mmbtu/hr = 11000 lb/hr (1100 lb/hr * 8760 hr/yr) / 2000 lb/ton = 48180 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1__ of ___1__

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.75 lb/mmbtu	4. Equivalent Allowable Emissions: 11000 lb/hour 48180 tons/year
5. Method of Compliance (limit to 60 characters): Fuel sampling & analysis	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 2.75 lb/mmbtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 2120 lb/hour 9285.6 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.53 lb/mmbtu Reference: DEP Rule 62-296.570(4)(b)2.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.5 lb/mmbtu * 4000 mmbtu/hr = 2120 lb/hr (2120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9285.6 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.40 lb/mmbtu on natural gas fuel.	

Allowable Emissions Allowable Emissions ___1__ of ___2___

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.53 lb/mmbtu	4. Equivalent Allowable Emissions: 2120 lb/hour 9285.6 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.53 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570(40(b)2.]. 30-day rolling average – Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 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: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.4 lb/mmbtu	4. Equivalent Allowable Emissions: 1610 lb/hour 7051.8 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.4 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570(40(b)2.]. 30-day rolling average – Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas fuel firing.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: 500 lb/hour 2,190 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.125 lb/MMBtu Reference: DEP Rule 62.296.405 (1)(b) and 62.210.700(3)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/MMBtu * 4,000 MMBtu/hr = 500 lb/hr (500 lb/hr * 8,760 hr/yr)/2000 lb/ton = 2,190 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The particulate matter emission limit for 3 hr/24hr at 0.3 lb/MMBtu and 21 hr/24hr at 0.1 lb/MMBtu is equivalent to an average of 0.125 lb/MMBtu.	

Allowable Emissions Allowable Emissions ___1___ of ___4___

1. Basis for Allowable Emissions Code: Emissions limit required by law	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 400 lb/hour 1752 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.1 lb/mmbtu is the current regulatory limit on PM [Rule 62-296.405(1)(b)]. Equivalent emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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):	

Potential/Fugitive Emissions

Allowable Emissions Allowable Emissions ___2___ of ___4___

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lb/mmbtu	4. Equivalent Allowable Emissions: 1200 lb/hour 657 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: Oct. 31, 2007
3. Requested Allowable Emissions and Units: 0.03 lb/mmbtu	4. Equivalent Allowable Emissions: 120 lb/hour 525.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce steady-state PM emissions of its fossil fueled steam boilers in Broward County to 0.03 lb/mmbtu. Equivalent allowable emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___ of ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: Oct. 31, 2007
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 400 lb/hour 219 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce PM emissions of its fossil fueled steam boilers in Broward County. Equivalent allowable emissions are given for liquid fuel firing and sootblowing.	

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

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-296.405(1)(a) and (1)(e)1., F.A.C. Visible emissions limited to 40% opacity, except for allowed excess emissions. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___2___ of ___5___

1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(3), F.A.C. limits sootblowing & load changing to 60% opacity for up to 3hrs/24 hrs, with <4, six-minute periods of up to 100% opacity if unit has an operational CEM.	

Visible Emissions Limitation: Visible Emissions Limitation ___3___ of ___5___

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) and (2), F.A.C. allow up to 100% opacity, for an unlimited time during start-up, shutdown, and up to 2hrs/24hrs for malfunctions.	

Visible Emissions Limitation: Visible Emissions Limitation ___4___ of ___5___

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions 6-minute average of its fossil fueled steam boilers in Broward County to 20%. This limit becomes effective Oct. 31, 2007. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___5___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions of its fossil fueled steam boilers in Broward County, and limits sootblowing & load changing to 40% opacity for up to 3hrs/24 hrs, with 4, six-minute periods of up to 100% opacity if unit has an operational COM. This limit becomes effective Oct. 31, 2007.	

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

Continuous Monitoring System: Continuous Monitor __1___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TEI Model Number: 42C	Serial Number: 42C-77126-385
5. Installation Date: 01/22/03	6. Performance Specification Test Date: 01/29/03
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __2___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): CO_2
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Milton Roy Model Number: 3300	Serial Number: N3L2495T
5. Installation Date: 07/08/94	6. Performance Specification Test Date: 08/26/94
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __3___ of ___3__

1. Parameter Code: VE	2. Pollutant(s): Opacity
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Phoenix Instruments, Inc. Model Number: OPAC 20/20	Serial Number: OPAC - 1081
5. Installation Date: 11/19/00	6. Performance Specification Test Date: 12/03/00
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: PPEU3_.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: PPEU3_2.doc [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: PPEU3_3.doc & PPEFSESP_.doc [ ] Not Applicable
4. Description of Stack Sampling Facilities [X] Attached, Document ID: PPEU3_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: PPEU3_ 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: PPEU3_ 10.doc [ ] Not Applicable

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

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

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: PPEU1_14.doc [ ] 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: PPEU1_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 _

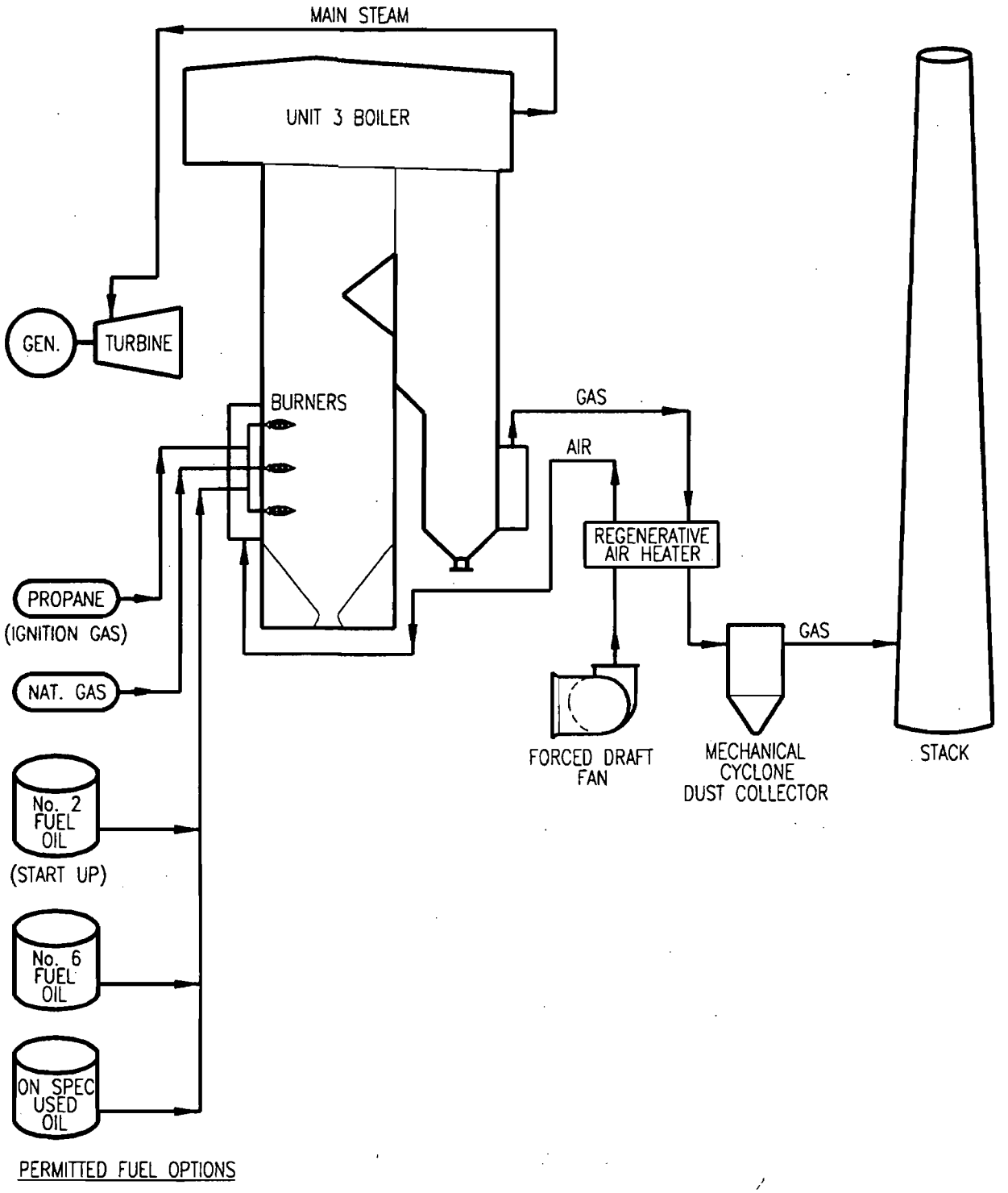
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:_____N/A__

[ ] Not Applicable

ATTACHMENT PPEU3_.BMP_

PROCESS FLOW DIAGRAM

ATTACHMENT: PPEEU3_1.bmp



PERMITTED FUEL OPTIONS

TECHNICAL ACCEPTANCE | ORG | BY | DATE | ENGINEERING ORGANIZATION

WALKDOWN INFORMATION | ORG | BY | DATE | AS-BUILT INFORMATION

BAR CODE

REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG
0	8/7/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	PORT EVERGLADES PLANT
SCALE: N/A	CAD FILE NAME: PE007763	TITLE: EMISSION UNIT PROCESS FLOW DIAGRAM STEAM GENERATOR/BOILER ATTACHMENT NO. EU3
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: PE007763	

DRAWING NUMBER: PPE1-M0104-YY

SHEET: 1 OF 1 | REV: 0

FPGSYM/FPGBDR-A 9/90

ATTACHMENT PPEU3_2.DOC

FUEL ANALYSIS OR SPECIFICATIONS

Attachment PPEU3_2.doc

Fuel Analysis
Natural Gas Analysis (typical)[2]

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 grain / ccf
% 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.

(1) Data from laboratory analysis

(2) 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 PPEU3_2.doc

Fuel Analysis
No.6 Oil Analysis (typical)[4]

Parameter	Typical value	Specifications
API gravity (@ 60° F)	6 - 12	none
Heat content(MBtu/bbl)	6,310 - 6420	6,340[1]
% Sulfur	1.0	2.5 max[3]
% Nitrogen	0.2 - 0.5[2]	none
% Ash	0.06 - 0.09[2]	0.10 max[1]

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(3) Maximum permitted from current air operation permit.

(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 PPEU3_2.doc

Fuel Analysis
No. 2 Distillate oil (typical)[3]

Parameter	Typical value	Specifications
API gravity (@ 60 F)	35.0[2]	30 - 40[1]
Heat content (MBtu/bbl)	5,700 - 5,800[2]	none
% sulfur	0.3 - 0.5[1]	0.5 maximum[1]
% nitrogen	no specification	none
% ash	<0.01[2]	0.01[1]

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(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 PPEU3_2.doc

Fuel Analysis
Propane (typical)[1]

Emission unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as No.6 residual oil. The propane fuel is supplied by a commercial vendor and is stored in small tanks located at the bottom of the boiler area. The chemical formula for propane is C_3H_8 .

Parameter	Typical value	Specifications
Specific gravity (@ 60 F)	0.51[1]	none
Heat content (MBtu/bbl)	600 - 1,000	none
% sulfur	0.0031	none
% nitrogen	no specification	none
% ash	no specification	none

Footnotes:

(1) 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 PPEU3_2.doc

Fuel Analysis
On Specification Used Oil

The boiler may occasionally burn used oil during normal operation. All used oil fired in the unit meets the specifications mandated by 40 CFR 279.11. Used oil fired by this boiler is typically derived from plant maintenance activities, and may include used lube oils, transformer oils, etc. that meet the analytical specifications. Criteria for used oil follows:

Parameter	Typical value	Specifications
API gravity (@ 60 F)	30.0[1]	none
Heat content (MBtu/bbl)	6,000[1]	none
% sulfur	0.3[1]	none
% nitrogen	negligible	none
% ash	0.01[1]	0.01

Footnotes:
(1) 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 PPEU3_3.DOC

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

Attachment PPEU3_3.doc

Detailed Description of Control Equipment

A. Cyclone Separator – This steam generator (boiler) is supplied with two 104B-GHS #19-684 UOP tubular mechanical dust collectors with side inlet and universal outlet. Each dust collector consists of 695 tubes and four dust collection hoppers. The dust collector has the following efficiency at 2.55 inches of water at peak load:

Particle Range (micron)	Mean Diameter (micron)	Estimated efficiency (percent)
0-5	2.5	30.3
5-10	7.5	66.2
10-20	15	88.6
20-45	32.5	99.1
45+	45	99.5

B. Low NOx Burners – Due to RACT requirements in the southern Florida airshed, the Port Everglades facility installed "Low NOx Burners" which have as their primary purpose the reduction of NOx produced during combustion. The installed burners have reduced NOx production by 23% on natural gas fuel, and by 28% on residual oil fuel (in lb/mmBtu, comparing baseline emission rates with permitted NOx RACT emission rates.

C. Electrostatic Precipitators (ESPs) – ESPs identified in this Title V application are described in more detail in a separate construction permit application. The ESPs (or equivalent) will replace the cyclone separators.

ATTACHMENT PPEU3_4.BMP_

DESCRIPTION OF STACK SAMPLING FACILITIES

PPEU3_1.BMP

FLORIDA POWER & LIGHT CO.
STACK SAMPLING FACILITIES
PORT EVERGLADES

FOSSIL FUEL STEAM GENERATORS
UNITS 3 & 4

STACK SPECIFICATIONS

SAMPLING DIAMETER: 251.4 in.

SAMPLING AREA: 344.8 sq. ft.

SAMPLING PORT DEPTH: 71.9 in.

No. OF PORTS: 4

No. OF POINTS PER TRAVERSE: 6

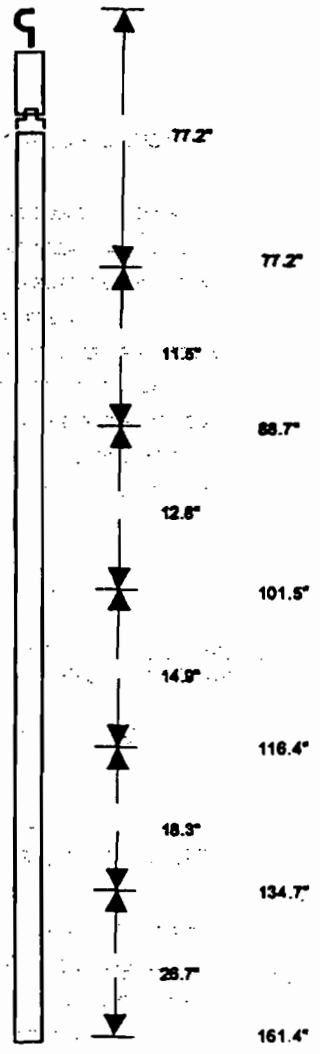
TOTAL No. OF POINTS : 24

SAMPLING TIME PER POINT: 2.5 min.

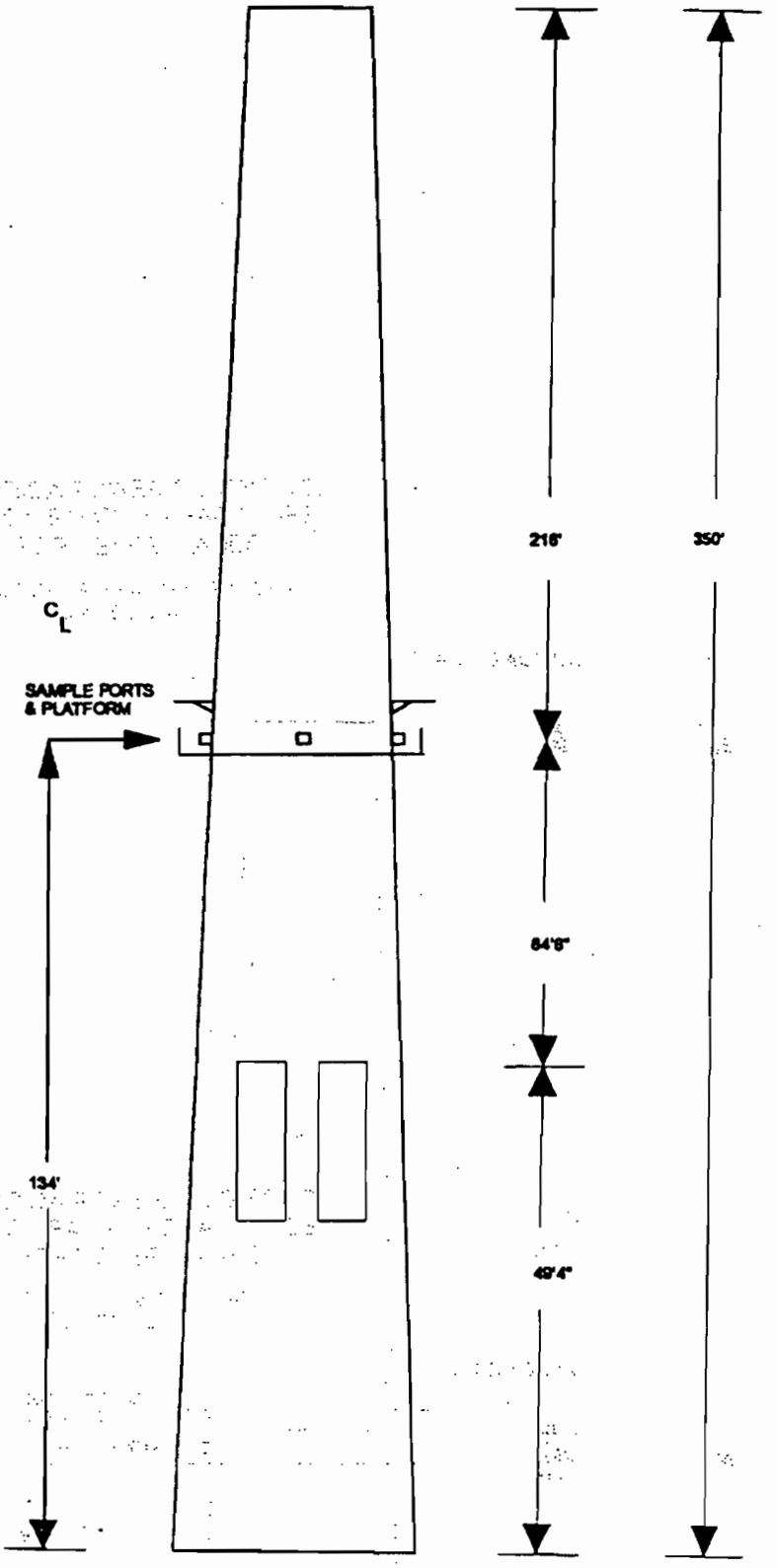
TOTAL SAMPLING TIME: 60.0 min.

NOTE: DRAWING IS NOT TO SCALE

PARTICULATE SAMPLING PROBE DIAGRAM



STACK DIAGRAM



Access to the sampling ports is provided by a ladder. Channel iron with a trolley system is above each port for probe support. AC power is available on the platform and at the base of thestack.

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08/18/95

ATTACHMENT PPEU3_6.DOC

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PPEU3_6.doc

Startup & Shutdown Procedures - Minimizing Excess Emissions

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

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

Excess emissions may be detected during all modes of boiler operation by any one of several continuous emissions monitors. Continuous emission monitors are currently in place for NO_x, SO_2 and opacity. An audible and visual alarm are activated whenever permitted values for any of the above parameters are approached.

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

- proper excess air adjustments
- recognizing and removal of faulty burners
- fuel oil temperature adjustments
- proper and timely operation of boiler cleaning devices
- removal of the unit from system-dispatch mode
- reduction of unit megawatt load
- stopping and restarting of boiler cleaning devices
- lowering load rate
- pressure rate changes

Best Operational Practices to prevent excess emissions, and knowledge of the appropriate countermeasures to take if an excess emissions condition exists, are taught during routine operator training.

ATTACHMENT PPEU3_10.DOC

ALTERNATIVE METHODS OF OPERATION

Attachment PPEU3_10.doc

Alternative Methods of Operation

Operation at Various Capacities and Heat Input Rates

The Port Everglades Units 3 and 4 boilers currently may each be operated up to 8760 hours per year at heat input rates from zero to 3,850 MMBtu per hour on No.#6 oil, and from zero to 4,025 MMBtu per hour on natural gas. *FPL has included a heat input value of 4,000 mmBtu per hour for this emission unit for firing distillate oil, and 4,180 mmBtu per hour for firing natural gas. There are 6 identical boiler units in the FPL system with the same design. The 4,000 / 4,180 mmBtu values are representative of each of the 6 units.* When a blend of fuel oil and natural gas are burned, the heat input is prorated based upon the percent heat input of each fuel.

Different Fuel Types

The units may be fired with a variable combination of No. 6 residual fuel oil, natural gas, or No. 2 fuel oil. The unit may occasionally utilize propane fuel to light off (start up) the boiler, then switch to another fuel, such as No.6 residual oil. The units may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11. The quantity of on-specification used oil shall not exceed 1,500,000 gallons per year for Units 1 through 4.

Current emissions limitations are as follows:

Pollutant	Emission Limit
Particulate matter-steady state	0.1 lb/MMBtu
Particulate matter-soot blowing	0.3 lb/MMBtu
Sulfur dioxide	2.75 lb/MMBtu
Nitrogen oxides	0.4 lb/mmBtu (natural gas, 30-day rolling average)
	0.53 lb/mmBtu (residual oil, 30-day rolling average)

Oil and Gas Co-firing

These emission units may co-fire natural gas with residual oil. When combusting both fuels simultaneously, the percentage of natural gas will be adjusted to ensure that the applicable SO2 emission limit and visible emission limits are complied with.

Soot blowing

The units may blow soot for up to 24 hours per day, so long as excess emissions are limited to 60% opacity for 3 hours in 24 hours with no more than four 6-minute periods of up to 100% opacity.

Utilization of Additives

Additives such as Magnesium hydroxide $Mg(OH)_2$ are added to the boiler periodically at various loads. When magnesium hydroxide is used, it is injected into the boiler via the I.K. soot blower lances and through manual hand lances on a batch basis, rather than continuously. The dosage rate is based on the quantity of fuel burned and the amount of ash in the fuel. FPL reserves the right to use other additives if they are suitable.

Off-Stoichiometric Combustion

This technique involves operating selected burners at fuel-rich mixture ratios. The proportion of fuel burned at peak temperatures in the presence of excess air is reduced and results in reduced NOx emissions. At Port Everglades, the method for performing off-stoichiometric combustion is to terminate the fuel flow to selected burners and utilize these burners as excess air ports. The other burners are then operated at a fuel-rich mixture ratio. This is also known as a bias-firing scheme.

Attachment PPEU3_10.doc

Alternative Methods of Operation

Evaporation of Spent Boiler Chemical Cleaning Chemicals

On a periodic basis, as part of routine maintenance, the inside of the steam generator tubes (boiler tubes) at Port Everglades Unit 3 and 4 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

After the second stage treatment, three or more rinses are performed, in order to wash the cleaning solution from the inside of the boiler tubes. The solutions and rinsewaters are collected in large mobile tanks ("frac tanks") pursuant to guidance issued by the Department. Upon completion of the cleaning process and prior to disposal of the spent cleaning solution and rinses, representative sampling of the liquids collected in the "frac tanks" is conducted as per 40 CFR 261, Appendix I, to determine the hazardous waste status of the accumulated wastewater, using Toxicity Characteristic Leaching Procedure (TCLP) analysis.

If the wastewater is determined to be hazardous, it will be managed as such in accordance with 40 CFR 262.34, 40 CFR 265 Subpart I, and 40 CFR 268 with respect to generators accumulating and treating waste in containers and tanks. An appropriate waste analysis plan will be developed to determine and document the pre- and post-treatment characteristics of the wastewater. Hazardous waste may also be transported to an approved offsite hazardous waste facility for the appropriate disposal.

If the spent cleaning solution and rises are determined to be non-hazardous, they are then disposal by evaporation in the units boiler. Introduction into the boiler will occur at a rate that will not cause an exceedence of the opacity limit of the unit in which evaporation is occurring (in this case, 40 percent opacity).

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 Addressed in This Section (limit to 60 characters): Port Everglades Boiler Unit 4

4. Emissions Unit Identification Number: 004 [ ] No ID
ID: [ ] ID Unknown

5. Emissions Unit Status Code: A	6. Initial Startup Date: 04/01/65	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]

9. Emissions Unit Comment: (Limit to 500 Characters) The generator nameplate rating given reflects information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the stated value, and may vary seasonally, or with changes in unit efficiency, and with fluctuations in system load demand.

Emissions Unit Control Equipment

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

A. Low NOx Burners
B. Multiple Cyclones w/ Fly Ash Reinjection
C. Staged Combustion
D. Electrostatic Precipitators (Proposed ca. 2005 & 2006)

2. Control Device or Method Code(s): A = 024, B = 011, C = 077, D = 011

Emissions Unit Details

1. Package Unit:
Manufacturer: Foster Wheeler / General Electric Model Number:

2. Generator Nameplate Rating: 402 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:		4180	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

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

The maximum heat input given above reflects natural gas firing. Maximum heat input for residual oil 4000 mmbtu/hr.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

FDEP Title V Core List, Attachment PPEU1-C	

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? EU 4	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Emission Unit 4 – Port Everglades Unit 4 Boiler		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 343 feet	7. Exit Diameter: 18.1 feet
8. Exit Temperature: 287 °F	9. Actual Volumetric Flow Rate: 1263180.6 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): 587.4 North (km): 2885.2		
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above from the initial Title V application. Flow rates vary depending on operating conditions.		

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

Segment Description and Rate: Segment ___1__ of __7___

2. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas burned in Unit 4 Boiler		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 3.98	5. Maximum Annual Rate: 34,873	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): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___2__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Number 6 fuel oil burned in Unit 4 Boiler		
2. Source Classification Code (SCC): 1-01-004-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 26.3	5. Maximum Annual Rate: 230,526	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

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

Segment Description and Rate: Segment ___3__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 4 boiler burning No. 2 fuel oil		
2. Source Classification Code (SCC): 1-01-005-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 29.41	5. Maximum Annual Rate: 257,647	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

Segment Description and Rate: Segment ___4__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Propane burned in Unit 4		
2. Source Classification Code (SCC): 1-01-006-01	3. SCC Units: Million cubic feet burned	
4. Maximum Hourly Rate: 4.18	5. Maximum Annual Rate: 36,617	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations.		

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

Segment Description and Rate: Segment ___5__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): On-Specification used oil burned in Unit 4 boiler		
2. Source Classification Code (SCC): 1-01-013-02	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 29.41	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): This unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane, or on-specification used oil from FPL operations. Maximum Annual Rate is for EUs 001 through 004.		

Segment Description and Rate: Segment ___6__ of ___7__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 4 boiler firing all possible combinations of natural gas, residual oil, on-specification used oil, #2 fuel oil, and propane		
2. Source Classification Code (SCC): 1-01	3. SCC Units: Million cubic feet	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): The existing Title V permit allows Unit 4 to burn a mixture of the above fuels in a ration that will result in a max. SO2 emission rate of 2.75 lb/mmbtu.		

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

Segment Description and Rate: Segment ___7__ of __7___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Boiler chemical cleaning waste evaporated in Unit 4. This process may be undertaken while firing natural gas or residual fuel oil.		
2. Source Classification Code (SCC): 1-01-013-01	3. SCC Units: Thousand gallons burned	
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Items 6, 7, 8, & 9 do not apply. This activity to be undertaken on a periodic basis in accordance with DARM guidance and EPA waste rules (40 CFR 279.72).		

Segment Description and Rate: Segment _____ of _____

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

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	025	NA	EL
CO	NA	NA	NS
PM	011 (Future)	077 (Existing)	EL
PM10	011 (Future)	077 (Existing)	NS
VOC	NA	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
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: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 11000 lb/hour 48180 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 2.75 Reference: DEP Rule 62-296.405(1)(c)1.j.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmbtu*4000 mmbtu/hr = 11000 lb/hr (1100 lb/hr * 8760 hr/yr) / 2000 lb/ton = 48180 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions ___1__ of ___1__

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.75 lb/mmbtu	4. Equivalent Allowable Emissions: 11000 lb/hour 48180 tons/year
5. Method of Compliance (limit to 60 characters): Fuel sampling & analysis	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 2.75 lb/mmbtu is the current regulatory limit on sulfur dioxide emissions [Rule 62-296.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 2120 lb/hour 9285.6 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.53 lb/mmbtu Reference: DEP Rule 62-296.570(4)(b)2.	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.5 lb/mmbtu * 4000 mmbtu/hr = 2120 lb/hr (2120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9285.6 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Information provided is for oil firing. Facility uses a 30-day rolling average for NOx compliance. Limit = 0.40 lb/mmbtu on natural gas fuel.	

Allowable Emissions Allowable Emissions ___1__ of ___2___

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.53 lb/mmbtu	4. Equivalent Allowable Emissions: 2120 lb/hour 9285.6 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.53 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570(40(b)2.]. 30-day rolling average – Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.	

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: 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: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.4 lb/mmbtu	4. Equivalent Allowable Emissions: 1610 lb/hour 7051.8 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.4 lb/mmbtu is the current regulatory limit on NOx emissions [Rule 62-296.570(40(b)2.]. 30-day rolling average – Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas fuel firing.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM - Total	2. Total Percent Efficiency of Control:
3. Potential Emissions: 500 lb/hour 2190 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: 0.125 lb/mmbtu Reference: DEP Rule 62-296.405(1)(b) and 62-210.700(3)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmbtu * 4000 mmbtu/hr = 500 lb/hr. (500 lb/hr * 8760 hr/ yr) /2000 lb/ton = 2190 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The particulate matter emission limit for 3 hrs/24 hrs at 0.3 lb/mmbtu and 21 hrs/24 hrs at 0.1 lb/mmbtu is equivalent to an average of 0.125 lb/mmbtu.	

Allowable Emissions Allowable Emissions ___1___ of ___4___

1. Basis for Allowable Emissions Code: Emissions limit required by law	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 400 lb/hour 1752 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.1 lb/mmbtu is the current regulatory limit on PM [Rule 62-296.405(1)(b)]. Equivalent emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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):	

Potential/Fugitive Emissions

Allowable Emissions Allowable Emissions ___2___ of ___4___

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lb/mmbtu	4. Equivalent Allowable Emissions: 1200 lb/hour 657 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Data is for sootblowing conditions firing fuel oil, worst case [Rule 62-210.700(3)]. Equivalent allowable emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: May 31, 2007
3. Requested Allowable Emissions and Units: 0.03 lb/mmbtu	4. Equivalent Allowable Emissions: 120 lb/hour 525.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce steady-state PM emissions of its fossil fueled steam boilers in Broward County to 0.03 lb/mmbtu. Equivalent allowable emissions are given for liquid fuel firing.	

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

Potential/Fugitive Emissions

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 ___4___ of ___4___

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions: May 31, 2007
3. Requested Allowable Emissions and Units: 0.1 lb/mmbtu	4. Equivalent Allowable Emissions: 400 lb/hour 219 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce PM emissions of its fossil fueled steam boilers in Broward County. Equivalent allowable emissions are given for liquid fuel firing and sootblowing.	

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

Visible Emissions Limitation: Visible Emissions Limitation ___1___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-296.405(1)(a) and (1)(e)1., F.A.C. Visible emissions limited to 40% opacity, except for allowed excess emissions. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___2___ of ___5___

1. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 60 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(3), F.A.C. limits sootblowing & load changing to 60% opacity for up to 3hrs/24 hrs, with <4, six-minute periods of up to 100% opacity if unit has an operational CEM.	

Visible Emissions Limitation: Visible Emissions Limitation ___3___ of ___5___

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) and (2), F.A.C. allow up to 100% opacity, for an unlimited time during start-up, shutdown, and up to 2hrs/24hrs for malfunctions.	

Visible Emissions Limitation: Visible Emissions Limitation ___4___ of ___5___

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions 6-minute average of its fossil fueled steam boilers in Broward County to 20%. This limit becomes effective May 31, 2007. Compliance testing is performed annually using EPA Method 9.	

Visible Emissions Limitation: Visible Emissions Limitation ___5___ of ___5___

1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [ ] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 24 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Based on its negotiations with the Department, applicant agrees to reduce visible emissions of its fossil fueled steam boilers in Broward County, and limits sootblowing & load changing to 40% opacity for up to 3hrs/24 hrs, with 4, six-minute periods of up to 100% opacity if unit has an operational COM. This limit becomes effective May 31, 2007.	

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

Continuous Monitoring System: Continuous Monitor __1___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: TECO Model Number: 42	Serial Number: 42-45529-274K
5. Installation Date: 07/08/94	6. Performance Specification Test Date: 08/26/94
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __2___ of ___3__

1. Parameter Code: EM	2. Pollutant(s): CO_2
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Milton Roy Model Number: 3300	Serial Number: N3L2495T
5. Installation Date: 07/08/94	6. Performance Specification Test Date: 08/26/94
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Continuous Monitoring System: Continuous Monitor __3___ of ___3__

1. Parameter Code: VE	2. Pollutant(s): Opacity
3. CMS Requirement:	[X] Rule [ ] Other
4. Monitor Information: Manufacturer: Phoenix Instruments, Inc. Model Number: OPAC 20/20	Serial Number: OPAC - 1082
5. Installation Date: 12/19/00	6. Performance Specification Test Date: 01/12/00
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: PPEU3_.bmp_ [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: PPEU3_2.doc [ ] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [X] Attached, Document ID: PPEU3_3.doc [ ] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [X] Attached, Document ID: PPEU3_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:_____ [ ] Not Applicable
6. Procedures for Startup and Shutdown [X] Attached, Document ID: PPEU3_ 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: PPEU3_ 10.doc [ ] Not Applicable

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

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

14. Compliance Assurance Monitoring Plan
[X] Attached, Document ID: PPEU1_14.doc [ ] 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: PPEU1_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

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: Lauderdale GT Site –1, Gas Turbines Units 1 through 12

4. Emissions Unit Identification Number: 005 [ ] 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) 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 output for these machines.
Commercial Start-up dates for each GT:

GT 1	05/01/71	GT 7	06/21/71
GT 2	05/06/71	GT 8	06/30/71
GT 3	05/13/71	GT 9	07/14/71
GT 4	05/21/71	GT 10	07/23/71
GT 5	06/04/71	GT 11	08/17/71
GT 6	06/11/71	GT 12	08/28/71

Emissions Unit Control Equipment

2. 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

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

This EU has a combined max. heat input rate of 8424 mmbtu/hr.

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

FDEP Title V Core List, Attachment PPEU5_C	

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, GT4, GT 5, GT 6, GT 7, GT 8, GT 9, GT 10, GT 11, GT 12	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): This 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: The 12 simple-cycle gas turbines share a common APIS ID number: 50BRO06003605		
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.		

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		
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 is equal to a 10% capacity factor.		

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		
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 is equal to a 10% capacity factor. The GTs 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.	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 * 876 hr/yr) / 2000 lb/ton = 3316.5 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions calculated at 40 degrees F for a maximum of 876 hours of operation. 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: 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: 28.64 lb/hour 12.54 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:	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.0034 lb/mmbtu*8424 mmbtu/hr = 28.6416 lb/hr for one bank of 12 GTs (28.6416 lb/hr * 876 hr/yr) / 2000 lb/ton = 12.54 tons/ yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions calculated at 40 degrees F for a maximum of 876 hours of operation for all 12 GTs while firing natural gas fuel.	

Allowable Emissions Allowable Emissions ____1__ of ____2__

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: 1.053 lb/hour 4.612 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 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: VOC	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 __2___

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): Emissions given above are for each gas turbine operating on natural gas.	

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: Pursuant to Rule 62-297.340(1)(h), F.A.C., at least one visible emissions compliance test shall be conducted on all	
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): This emission unit is not required to install continuous monitors because it is 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: PFLU5_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: PFLU5_4.bmp [ ] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [X] Previously submitted, Date:_____ [ ] 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_ 10.doc [ ] 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:__ 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 PPEU5_C

EMISSION UNIT INFORMATION

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

Emissions Unit ID 5

F.A.C. 62-210.700 (1) F.A.C. 62-210.700 (4) F.A.C. 62-210.700 (5) F.A.C. 62-210.700 (6) F.A.C. 62-296.320(4)(b)	F.A.C. 62-296.570(2) F.A.C. 62-296.570(3) F.A.C. 62-296.570(4)(a) F.A.C. 62-296.570(4)(b)5. F.A.C. 62-296.570(4)(c)	F.A.C. 62-297.310(2)(a) F.A.C. 62-297.310(4)(a)2. F.A.C. 62-297.310(5) F.A.C. 62-297.310(7)(a)1. F.A.C. 62-297.310(7)(a)3.	F.A.C. 62-297.310(7)(a)4.a. F.A.C. 62-297.310(7)(a)8. F.A.C. 62-297.310(7)(a)9. F.A.C. 62-297.310(8) F.A.C. 62 - 297.310

ATTACHMENT PPEU5_1.BMP_

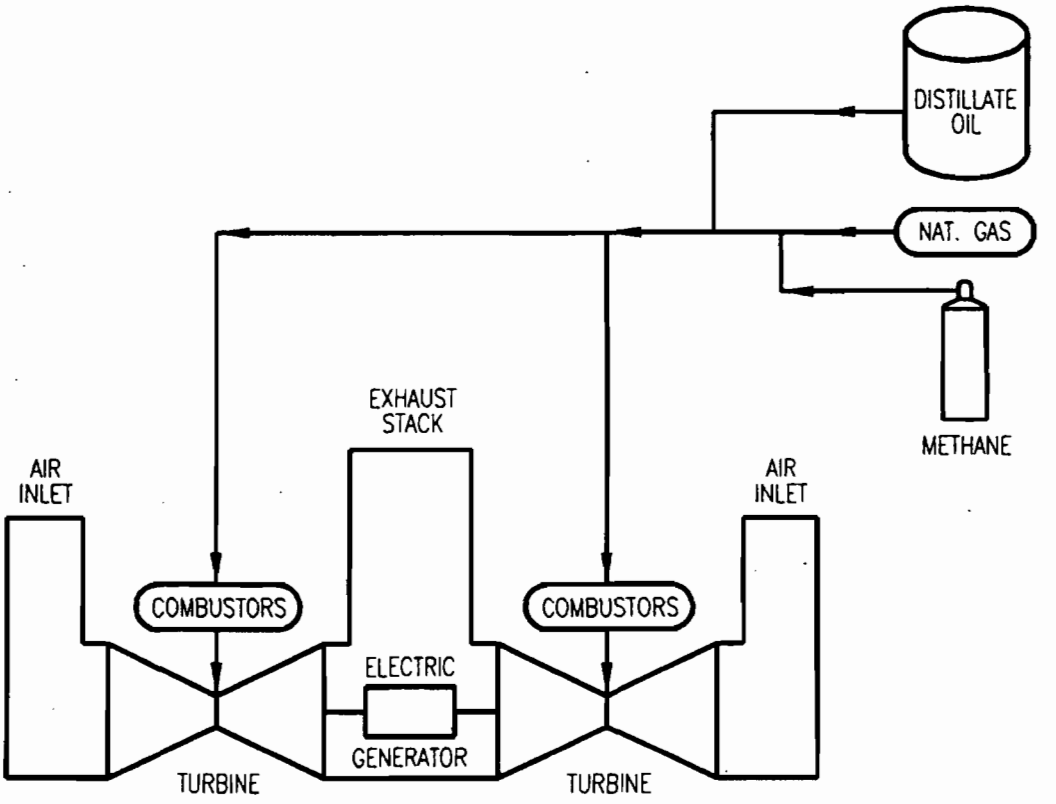
PROCESS FLOW DIAGRAM

ATTACHMENT: PPEEU5_1.bmp

WALKDOWN INFORMATION | AS-BUILT INFORMATION | ORG | BY | DATE

TECHNICAL ACCEPTANCE | ENGINEERING ORGANIZATION | ORG | BY | DATE

BAR CODE



GAS TURBINE ARRANGEMENT

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/14/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM	DISCIPLINE	PLANT/UNIT
YY	M	PORT EVERGLADES PLANT
SCALE: N/A	CAD FILE NAME: PE007765	TITLE: EMISSION UNIT FLOW DIAGRAM UNITS 1 THRU 12 ATTACHMENT NO. EU5
DRAWING SIZE: A (8.5X11)	FPL ARCHIVE NAME: PE007765	

DRAWING NUMBER: PPE1-M0106-YY

SHEET: 1 OF 1 | REV: 0

FPGSYM/FPGBDR-A 9/90

ATTACHMENT PPEU5_2.DOC

FUEL ANALYSIS OR SPECIFICATIONS

{PRIVATE }

Attachment PPEU5_2.doc

Fuel Analysis
Natural Gas Analysis (typical)[2]

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 grain / ccf
% 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.

(1) Data from laboratory analysis

(2) 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 PPEU5_2.doc

Fuel Analysis
No. 2 Distillate oil (typical)[3]

Parameter	Typical value	Specifications
API gravity (@ 60 F)	35.0[2]	30 - 40[1]
Heat content (MBtu/bbl)	5,700 - 5,800[2]	none
% sulfur	0.3 - 0.5[1]	0.5 maximum[1]
% nitrogen	no specification	none
% ash	<0.01[2]	0.01[1]

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(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 PPEU5_4.BMP_

DESCRIPTION OF STACK SAMPLING FACILITIES

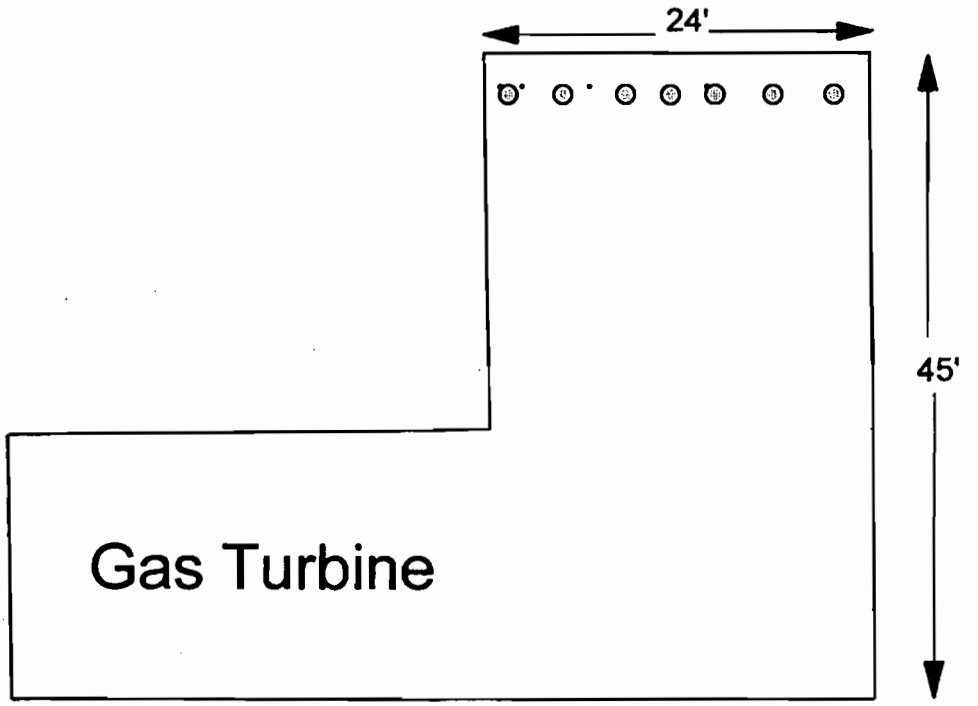
FLORIDA POWER & LIGHT CO, STACK SAMPLING FACILITIES SIMPLE-CYCLE GAS TURBINES

Attachment PPEU5_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



Note that Unit 6 is the only stack with sampling ports.

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.

ATTACHMENT PPEU5_6.DOC

PROCEDURES FOR STARTUP AND SHUTDOWN

Attachment PPEU5_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 PPEU5_10.DOC

ALTERNATIVE MEHTHODS OF OPERATION

Attachment PPEU5_10.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. The gas turbines will typically operate at the base load setting.

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.

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

4. Emissions Unit Identification Number: [ ] No ID
ID: 017, 018 [ ] 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 above ground fuel oil storage tanks at the Port Everglades Plant site. Note: EU 019, listed in the current Title V permit as a propane fueled generator, no longer is located at the facility.

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): The various sources included in this emission unit section may operate up to 8760 hours per year.			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

FDEP Title V Core List, Attachment PPEU6_C	

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): Above ground fuel oil storage tanks, miscellaneous internal combustion engines, and portable equipment.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: See Attachment PPE_FW		
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: °F	9. Actual Volumetric Flow Rate: 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): Above ground fuel storage tanks have small vents (several inches) found at the top of each tank where breathing and working losses of VOCs take place. Internal combustion engines, and portable equipment have small stacks associated with exhaust gases.		

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

Segment Description and Rate: Segment __1___ of __12___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #1M – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713761048
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 0.79 lbs VOC / yr (per initial Title V application) Working loss = 60.97 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.03 TPY, using estimated activity factor given above.		

Segment Description and Rate: Segment ___2__ of ___12__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #808 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 714002473
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 53.56 lbs VOC / yr (per initial Title V application) Working loss = 193.47 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.12 TPY, using estimated activity factor given above		

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

Segment Description and Rate: Segment ___3__ of __12___

1. Segment Description (Process/Fuel Type) (limit to 500 characters):): Above-ground tank #2M – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713761048
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 0.79 lbs VOC / yr (per initial Title V application) Working loss = 60.97 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.03 TPY, using estimated activity factor given above		

Segment Description and Rate: Segment ___4__ of ___12__

1. Segment Description (Process/Fuel Type) (limit to 500 characters):): Above-ground tank #3M – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713767216
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 2.66 lbs VOC / yr (per initial Title V application) Working loss = 65.9 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.03 TPY, using estimated activity factor given above		

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

Segment Description and Rate: Segment ___5__ of __12___

1. Segment Description (Process/Fuel Type) (limit to 500 characters):): Above-ground tank #4M – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713767216
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 2.66 lbs VOC / yr (per initial Title V application) Working loss = 65.9 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.03 TPY, using estimated activity factor given above		

Segment Description and Rate: Segment __6___ of ___12__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #807 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 714002473
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 53.56 lbs VOC / yr (per initial Title V application) Working loss = 193.47 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.12 TPY, using estimated activity factor given above		

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

Segment Description and Rate: Segment ___7__ of ___12__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #800 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 714026875
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 26.73 lbs VOC / yr (per initial Title V application) Working loss = 127.44 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.08 TPY, using estimated activity factor given above		

Segment Description and Rate: Segment ___8__ of __12___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #801 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713934632
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 37.25 lbs VOC / yr (per initial Title V application) Working loss = 154.82 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.1 TPY, using estimated activity factor given above		

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

Segment Description and Rate: Segment ___9__ of ___12__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #802 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713289704
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 37.25 lbs VOC / yr (per initial Title V application) Working loss = 154.77 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.1 TPY, using estimated activity factor given above		

Segment Description and Rate: Segment __10___ of ___12__

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #804 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713720471
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 6.33 lbs VOC / yr (per initial Title V application) Working loss = 74.81 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.04 TPY, using estimated activity factor given above		

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

Segment Description and Rate: Segment ___11__ of __12___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #805 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713720471
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 6.33 lbs VOC / yr (per initial Title V application) Working loss = 74.81 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.04 TPY, using estimated activity factor given above		

Segment Description and Rate: Segment ___12__ of __12___

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Above-ground tank #806 – Working and breathing loss		
2. Source Classification Code (SCC): 4-03-010-21	3. SCC Units: Thousand gallons transferred or handled	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 713720471
7. Maximum % Sulfur: 2.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 6.33 lbs VOC / yr (per initial Title V application) Working loss = 74.81 lbs VOC / yr (per initial Title V application) Total estimated losses = 0.04 TPY, using estimated activity factor given above		

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	
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 ___1__ of ___1__

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

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

Emissions Unit ID 6

F.A.C. 62-210.400(2) F.A.C. 62-210.700(1)	F.A.C. 62-210.700(4) F.A.C. 62-210.700(5)	F.A.C. 62-210.700(6) F.A.C. 62-213.400	F.A.C. 62-296.310(2)(a) F.A.C. 62 - 210.650 F.A.C. 62 - 213.410 F.A.C. 62 - 213.460

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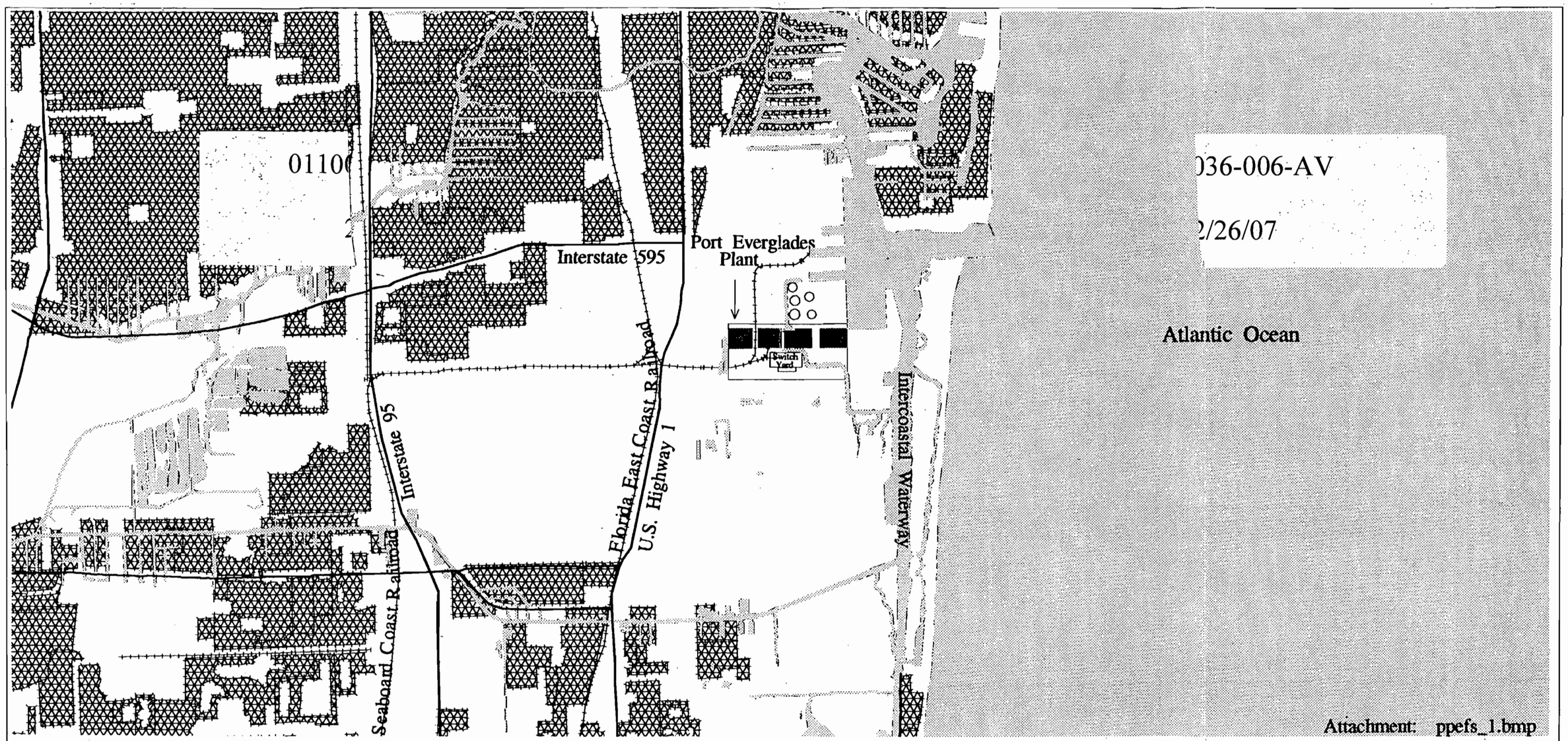


036-006-AV

2/26/07

Attachment: ppefs_1.bmp

Port Everglades Area Map
Broward County

FPL Environmental Affairs

Kilometers
0 1 2 3
Miles
0 1 2

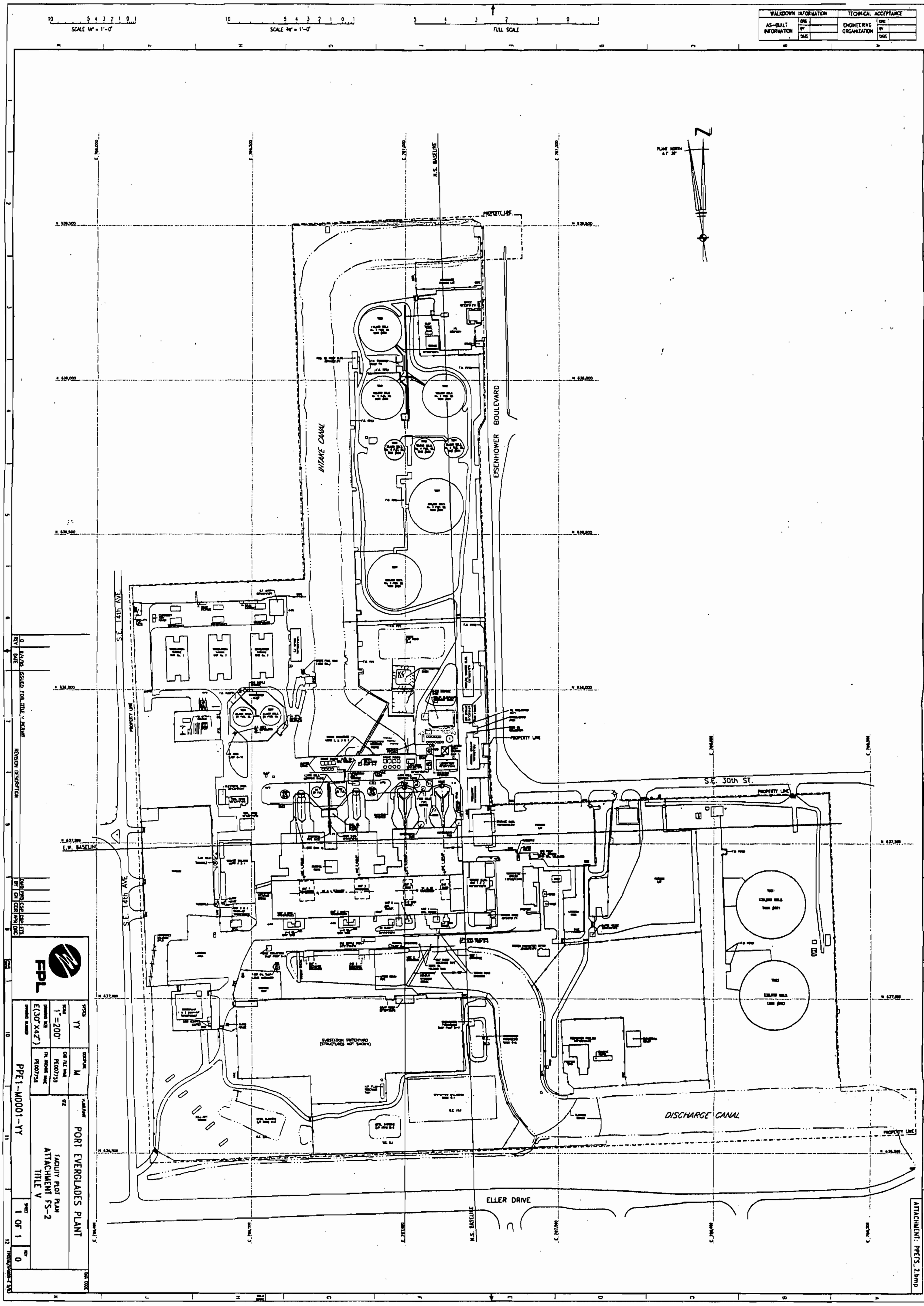
N W E S

- Port Everglades Plant
- Water
- Major Roads
- Railroads
- Residential Areas

No expressed or implied warranties including, but not limited to the implied warranties of MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE are made. The materials contained herein are provided 'as is' and may contain inaccuracies and user is warned to utilize the material's accuracy independently and assumes the risk of any and all loss.

Source: Landuse data provided by South Florida Water Management District (1993)

/export/home/ron/ppe-site.map (5-95)



SCALE 1/4" = 1'-0"
SCALE 1/8" = 1'-0"
FULL SCALE
WALKDOWN INFORMATION
TECHNICAL ACCEPTANCE
AS-BUILT INFORMATION
ENGINEERING ORGANIZATION
PLANT NORTH
PROPERTY LINE
N.S. BASELINE
E.W. BASELINE
INTAKE CANAL
EISENHOWER BOULEVARD
S.E. 14th AVE.
S.E. 30th ST.
SUBSTATION SWITCHYARD (STRUCTURES NOT SHOWN)
DISCHARGE CANAL
ELLER DRIVE
ISSUED FOR TITLE V PERMIT
REVISION DESCRIPTION
FPL
YY
1"=200'
E(30"X42")
M
PE00735
PORT EVERGLADES PLANT
FACILITY PLOT PLAN
ATTACHMENT FS-2
TITLE V
PPE1-M0001-YY
1 OF 1
0
ATTACHMENT: PPEFS_2.bmp

ATTACHMENT: PPEFS_3.bmp

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

SCALE 3/8" = 1'-0"

SCALE 1/4" = 1'-0"

NOTES:

1. ACRONYMS:
   EU-EMISSION UNIT
   GT-GAS TURBINE
   FO-FUEL OIL
2. EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:

EU *
EMISSION UNIT NUMBER

TANK LEGEND:

T - STORAGE TANK (T800,801,802,804,805,806 807,808,901,902,903&904)

M - METERING TANK (M1,2,3&4)

FUEL STORAGE AREA

T800 #6 FUEL OIL STORAGE 110,000 BBL

T802 #6 FUEL OIL STORAGE 150,000 BBL

T801 #6 FUEL OIL STORAGE 150,000 BBL

#6 FUEL OIL 25,000 BBL

#6 FUEL OIL 25,000 BBL

#6 FUEL OIL 25,000 BBL

T806

T805

T804

T807 #6 FUEL OIL STORAGE 200,000 BBL

T808 #6 FUEL OIL STORAGE 200,000 BBL

FROM FUEL UNLOADING DOCK

T901 250,000 BBL DISTILLATE

T902 250,000 BBL DISTILLATE

PROPANE

M4 12,000 BBL METERING

M3 12,000 BBL METERING

PROPANE

M2 3,000 BBL METERING

M1 3,000 BBL METERING

EU4

EU3

EU2

EU1

UNIT 4 BOILER

UNIT 3 BOILER

UNIT 2 BOILER

UNIT 1 BOILER

STEAM

STEAM

STEAM

STEAM

TO GRID (TYP.)

TURB./GEN. NO. 4

TURB./GEN. NO. 3

TURB./GEN. NO. 2

TURB./GEN. NO. 1

STEAM GENERATING UNITS 1, 2, 3 & 4

FROM NATURAL GAS METERING AREA

STACK (TYP.)

EU5

GAS TURBINES

T904 25,000 BBL DISTILLATE

T903 25,000 BBL DISTILLATE

FROM UNLOADING DOCK

REV	DATE	REVISION DESCRIPTION	PWB BY	PWB CH	CSP COR	CSP APR	ETS ORG
0	8/4/95	ISSUED FOR TITLE V PERMIT					

FPL

SYSTEM: YY	DISCIPLINE: M	PLANT/UNIT: PORT EVERGLADES-UNIT 1,2,3&4	BAR CODE
SCALE: N/A	CAD FILE NAME: PE007760	TITLE: FACILITY SOURCE FLOW DIAGRAM ATTACHMENT NO. FS-3 TITLE V	
DRAWING SIZE: B(11"X17")	FPL ARCHIVE NAME: PE007760		
DRAWING NUMBER: PPE1-M0101-YY		SHEET: 1 OF 1	REV: 0

CSYM/FPGBDR-B 5/93