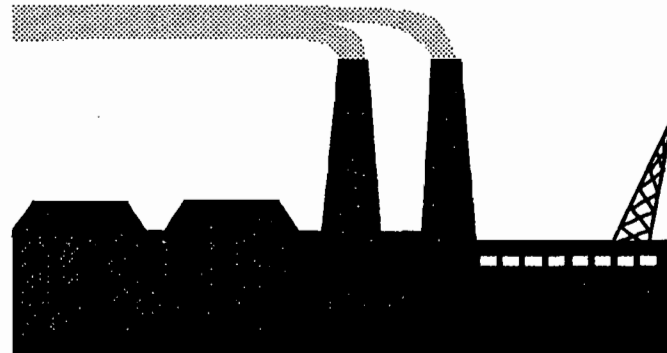


# Title V Permit Application

---



Manatee Plant



Florida Power & Light Company, P.O. Box 088801, North Palm Beach, FL 33408-8801



VIA AIRBORNE EXPRESS

June 10, 1996

Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
State of Florida  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**RECEIVED**

JUN 12 1996

BUREAU OF  
AIR REGULATION

**Re: Submittal of FPL Manatee Plant Title V Application**

Dear Mr. Fancy:

Enclosed, pursuant to DEP Rules 62-210.300(2), F.A.C., and 62-213.420(1)(a)1.a., F.A.C., please find four (4) hard copies of the subject Title V permit application. Due to the recent FDEP recall of the ELSA program, the diskettes containing the electronic application are not included at this time. FPL has worked diligently to prepare an electronic submittal and will submit diskettes containing the electronic application at a later date (when the ELSA program deficiencies have been resolved).

If you have any questions regarding this application, please do not hesitate to contact me at (561) 625-7661.

Very truly yours,

Richard Piper  
Environmental Specialist  
Florida Power & Light Company

cc: DEP South District Office (w/o att)

Florida Power & Light Company, P.O. Box 088801, North Palm Beach, FL 33408-8801



VIA AIRBORNE EXPRESS

June 10, 1996

Clair H. Fancy, P.E., Chief  
Bureau of Air Regulation  
State of Florida  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**RECEIVED**

JUN 12 1996

BUREAU OF  
AIR REGULATION

**Re: Submittal of FPL Manatee Plant Title V Application**

Dear Mr. Fancy:

Enclosed, pursuant to DEP Rules 62-210.300(2), F.A.C., and 62-213.420(1)(a)1.a., F.A.C., please find four (4) hard copies of the subject Title V permit application. Due to the recent FDEP recall of the ELSA program, the diskettes containing the electronic application are not included at this time. FPL has worked diligently to prepare an electronic submittal and will submit diskettes containing the electronic application at a later date (when the ELSA program deficiencies have been resolved).

If you have any questions regarding this application, please do not hesitate to contact me at (561) 625-7661.

Very truly yours,

Richard Piper  
Environmental Specialist  
Florida Power & Light Company

cc: DEP South District Office (w/o att)

# **TABLE OF CONTENTS**

## **MANATEE PLANT TITLE V APPLICATION**

Section 1 Application Information

Section 2 Facility Information

Section 3 Emission Unit Information

(Includes Emission Point, Segment, Pollutant, Visible Emission, Continuous Monitor, and PSD Information)

EU1 - Unit 1 Boiler

EU2 - Unit 2 Boiler

EU3 - Unregulated Emission Units

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

**I. APPLICATION INFORMATION**

This section of the Application for Air Permit form identifies the facility and provides general information on the scope and purpose of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department using ELSA, this section of the Application for Air Permit must also be submitted in hard-copy form.

**Identification of Facility Addressed in This Application**

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and a brief reference to the facility's physical location. If known, also enter the facility identification number.

1. Facility Owner/Company Name: Florida Power & Light Company	
2. Site Name: Manatee Plant	
3. Facility Identification Number : 0810010	
4. Facility Location Information: Facility Street Address: 19050 State Road 62 City: Parrish County: Manatee Zip Code: 34219-9220	
5. Relocatable Facility? (Y/N): N	6. Existing Permitted Facility?(Y/N): Y

**Owner/Authorized Representative or Responsible Official**

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

Name: J. M. Parent

Title : Plant General Manager

2. Owner or Responsible Official Mailing Address:

Organization/Firm: FPL Environmental Services Department

Street Address: 11770 U.S. Highway One

City: North Palm Beach

State: FL

Zip Code: 33408

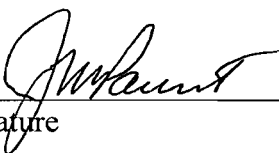
3. Owner or Responsible Official Telephone Numbers:

Telephone: 9417765211

Fax: 9417765219

4. Owner or Responsible Official Statement:

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

  
Signature

5/30/96  
Date

\* Attach letter of authorization if not currently on file.

### **Scope of Application**

This Application for Air Permit addresses the following emissions unit(s) at the facility (or Title V source). An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

<b>Emission s Unit Id</b>	<b>Description of Emissions Unit</b>	<b>Permit Type</b>
01	Unit 1 Steam Generator (ARMS ID 40MAN41001001)	
02	Unit 2 Steam Generator (ARMS ID 40MAN41001002)	
03	Unregulated Emission Units	

**Purpose of Application and Category**

Enter the Letter that applies and related information (except as otherwise indicated):

**Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 17-213, F.A.C.**

This Application for Air Permit is submitted to obtain (A,B,C,D,E,F): A

- [ A ] Initial air operation permit under Chapter 17-213, F.A.C., for an existing facility which is classified as a Title V source.
- [ B ] Initial air operation permit under Chapter 17-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number:

- [ C ] Air operation permit renewal under Chapter 17-213, F.A.C., for a Title V source.

Operation permit to be renewed:

- [ D ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number:

Operation permit to be revised:

- [ E ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application for such emissions unit(s). Also check appropriate item under Category III.

Operation permit to be revised/corrected:

- [ F ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised:

Reason for Revision:



**Category II: All Air Operation Permit Applications Subject to Processing Under Rule 17-210.300(2)(b), F.A.C.**

This Application for Air Permit is submitted to obtain (A,B,C):

- [ A ] Initial air operation permit under Rule 17-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s):

- [ B ] Renewal air operation permit under Rule 17-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed:

- [ C ] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units addressed herein.

Operation permit to be revised:

Reason for revision:

**Category III: All Air Construction Permit Applications for All Facilities and Emissions Units**

This Application for Air Permit is submitted to obtain (A,B,C):

- [ A ] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any:

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

Current operation permit number(s):

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

**Application Processing Fee**

Check one:

[ N ] Applicable (Y/N)

Attached - Amount: \$

**Construction/Modification Information**

1. Description of Proposed Project or Alterations : N/A
2. Projected or Actual Date of Commencement of Construction (DD-MON-YYYY):
3. Projected Dates of Completion of Construction (DD-MON-YYYY):

**Professional Engineer Certification**

1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14966
2. Professional Engineer Mailing Address:  Organization/Firm: KBN Engineering & Applied Sciences Street Address: 6241 NW 23rd Street City: Gainesville State: FL Zip Code: 326531500
3. Professional Engineer Telephone Numbers: Telephone: (352) 336-5600 Fax: (352) 336-6603

## MANATEE PLANT

### 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 a emission 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 [ ☒ ] 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 emission 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

*Hermand F. Kutz*

Date

*6/5/96*

Attach any exception to certification statement.



### **Application Contact Information**

**1. Name and Title of Application Contact:**

Name: Richard G. Piper

Title: Environmental Specialist

**2. Application Contact Mailing Address:**

Organization/Firm: FPL Environmental Services Department

Street Address: P.O. Box 088801

City: North Palm Beach

State: FL

Zip Code: 33408

**3. Application Contact Telephone Numbers:**

Telephone: 5616257661

Fax: 5616257251

### **Application Comment**

This application is for the Manatee Power Plant which consists of two conventional steam electric generating stations each with a nominal megawatt rating of 863 megawatts, based on information supplied previously to the PSC. Each Unit consists of a Foster-Wheeler oil-fired boiler/steam generator which drives a Westinghouse tandem compound, reheat-type extraction turbine.

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

Information for Facility-Id : 1

#### Facility Location and Type

1. Facility UTM Coordinates:		
Zone: 17	East: 367250	North: 3054150
2. Facility Latitude/Longitude:		
Latitude (DD/MM/SS): 27 - 36 - 21	Longitude (DD/MM/SS): 82 - 20 - 44	
3. Governmental Facility Code: None (non-governmental facility)		
4. Facility Status Code: Active		
5. Facility Major Group SIC Code: 49		
6. Facility SIC(s): 4911		
7. Facility Comment: (limit to 500 characters)		

#### Facility Contact

1. Name and Title of Facility Contact:	
Name : Lynn French	
Title : Environmental Specialist	
2. Facility Contact Mailing Address:	
Organization/Firm: FPL Manatee Plant	
Street Address: 19050 State Road 62	
City: Parrish	State: FL Zip Code: 34219 - 9220
3. Facility Contact Telephone Numbers:	
Telephone: 941 776-5269	Fax: 941 776-5219

### **Facility Regulatory Classifications**

1. Small Business Stationary Source? (Yes/No/Unknown)(Y/N/U) : N
2. Title V Source? (Yes/No) (Y/N) : Y
3. Synthetic Non-Title V Source? (Yes/No) (Y/N) : N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)? (Yes/No) (Y/N) : Y
5. Synthetic Minor Source of Pollutants Other than HAPs? (Yes/No) (Y/N) : N
6. Major Source of HAPs? (Yes/No/Possible) (Y/N/P) : Y
7. Synthetic Minor Source of HAPs? (Yes/No) (Y/N) : N
8. One or More Emissions Units Subject to NSPS? (Yes/No) (Y/N) : N
9. One or More Emissions Units Subject to NESHAP? (Yes/No) (Y/N) : Y
10. Title V Source by EPA Designation? (Yes/No) (Y/N) : N
11. Facility Regulatory Classifications Comment (limit to 200 characters):

## B. FACILITY REGULATIONS

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

Not Applicable

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

Information for Facility-Id : 1

40 CFR 61.05	F.A.C. 62-210.300(3)(a)22.	F.A.C. 62-213.205(1)(i)	F.A.C. 62-256.500
40 CFR 61.12(b)	F.A.C. 62-210.300(3)(a)23.	F.A.C. 62-213.205(1)(j)	F.A.C. 62-256.600
40 CFR 61.145	F.A.C. 62-210.300(3)(a)24.	F.A.C. 62-213.205(4)	F.A.C. 62-256.700
40 CFR 61.148	F.A.C. 62-210.300(3)(a)4.	F.A.C. 62-213.205(5)	F.A.C. 62-257.300
40 CFR 61.150	F.A.C. 62-210.300(3)(a)5.	F.A.C. 62-213.400	F.A.C. 62-257.301
40 CFR 61.19	F.A.C. 62-210.300(3)(a)7.	F.A.C. 62-213.410	F.A.C. 62-257.350
F.A.C. 62-204.800(8)(b)8.	F.A.C. 62-210.300(3)(a)8.	F.A.C. 62-213.420(1)(b)2.	F.A.C. 62-257.400
(state only)	F.A.C. 62-210.300(3)(a)9.	F.A.C. 62-213.420(1)(b)3.	F.A.C. 62-257.401
F.A.C. 62-204.800(8)(d)	F.A.C. 62-210.300(3)(b)	F.A.C. 62-213.430(3)	F.A.C. 62-257.900
(state only)	F.A.C. 62-210.370(3)	F.A.C. 62-213.460	F.A.C. 62-296.320(2)
F.A.C. 62-210.300(2)	F.A.C. 62-210.900(5)	F.A.C. 62-256.300(1)	(state only)
(except (b))	F.A.C. 62-213.205(1)(a)	F.A.C. 62-256.300(2)	F.A.C. 62-296.320(3)(b)
F.A.C. 62-210.300(3)(a)10.	F.A.C. 62-213.205(1)(b)	F.A.C. 62-256.300(3)	(state only)
F.A.C. 62-210.300(3)(a)11.	F.A.C. 62-213.205(1)(c)	F.A.C. 62-256.300(4)	F.A.C. 62-296.320(4)(b)
F.A.C. 62-210.300(3)(a)12.	F.A.C. 62-213.205(1)(e)	F.A.C. 62-256.300(7)	F.A.C. 62-296.320(4)(c)
F.A.C. 62-210.300(3)(a)15.	F.A.C. 62-213.205(1)(f)	F.A.C. 62-256.300(8)	F.A.C. 62-297.310(7)(a)10.
F.A.C. 62-210.300(3)(a)16.	F.A.C. 62-213.205(1)(g)	F.A.C. 62-256.300(9)	F.A.C. 62-4.030
F.A.C. 62-210.300(3)(a)17.			F.A.C. 62-4.040(1)(a)
F.A.C. 62-210.300(3)(a)20.			F.A.C. 62-4.040(1)(b)
F.A.C. 62-210.300(3)(a)21.			F.A.C. 62-4.100
			F.A.C. 62-4.130



### C. FACILITY POLLUTANTS

**Facility Pollutant Information :**

1. Pollutant Emitted:	2. Pollutant Classification
SO2	A
NOX	A
CO	A
VOC	A
PM	A
PM10	A
H133	A
SAM	A
H106	A
H107	A
HAP	A

## E. FACILITY SUPPLEMENTAL INFORMATION

### **Supplemental Requirements for All Applications For Facility :1**

1. Area Map Showing Facility Location: PMTFS-1.bmp (Enter the Attached Document ID, NA - Not Applicable or Waiver Requested)
2. Facility Plot Plan: PMTFS-2.bmp (Enter the Attached Document ID, NA - Not Applicable or Waiver Requested)
3. Process Flow Diagram(s): PMTFS-3.bmp (Enter the Attached Document ID, NA - Not Applicable or Waiver Requested)
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: PMTFS-4.txt (Enter the Attached Document ID, NA - Not Applicable or Waiver Requested)
5. Fugitive Emissions Identification : PMTFS-5.txt (Enter the Attached Document ID, NA - Not Applicable or Waiver Requested)
6. Supplemental Information for Construction Permit Application: NA (Enter the Attached Document ID, NA - Not Applicable)

### **Additional Supplemental Requirements for Category I Applications Only**

7. List of Proposed Exempt Activities: PMTFS-7.txt (Enter the Attached Document ID, NA - Not Applicable)
8. List of Equipment/Activities Regulated under Title VI: PMTFS-8.txt (Enter the Attached Document ID, Equipment/Activities Onsite but not Required to be Individually Listed, NA - Not Applicable)
9. Alternative Methods of Operation: PMTFS-9.txt (Enter the Attached Document ID, NA - Not Applicable)
10. Alternative Modes of Operation (Emissions Trading): NA (Enter the Attached Document ID, NA - Not Applicable)
11. Identification of Additional Applicable Requirements: PMTFS_11.txt (Enter the Attached Document ID, NA - Not Applicable)
12. Compliance Assurance Monitoring Plan: NA (Enter the Attached Document ID, NA - Not Applicable)

13. Risk Management Plan Verification: PLANNED

Plan Submitted to Implementing Agency - Verification Attached(Attached Document ID)

Plan to be Submitted to Implementing Agency by Required Date

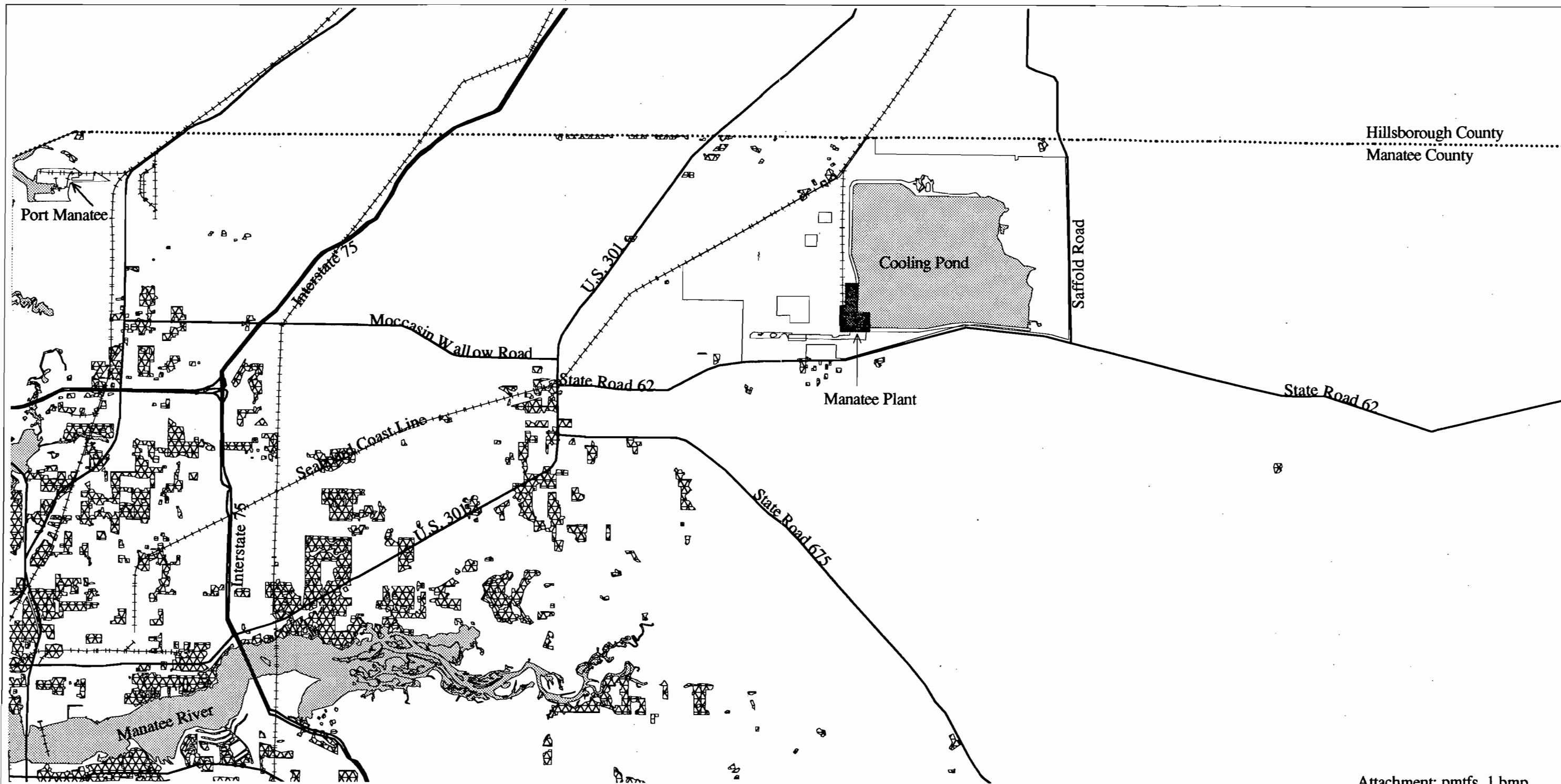
Not Applicable (NA)

14. Compliance Report and Plan: PMTFS-13.txt

(Enter the Attached Document ID, NA - Not Applicable)

15. Compliance Statement (Hard-copy Required): PMTFS-14.txt

(Enter the Attached Document ID, NA - Not Applicable)



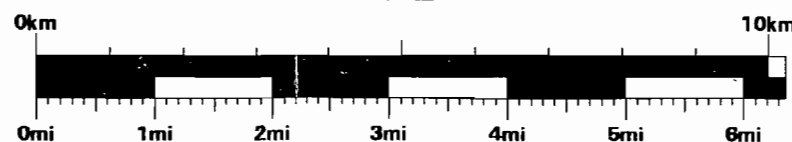
Attachment: pmtfs\_1.bmp

# Manatee Plant Area Map Manatee County

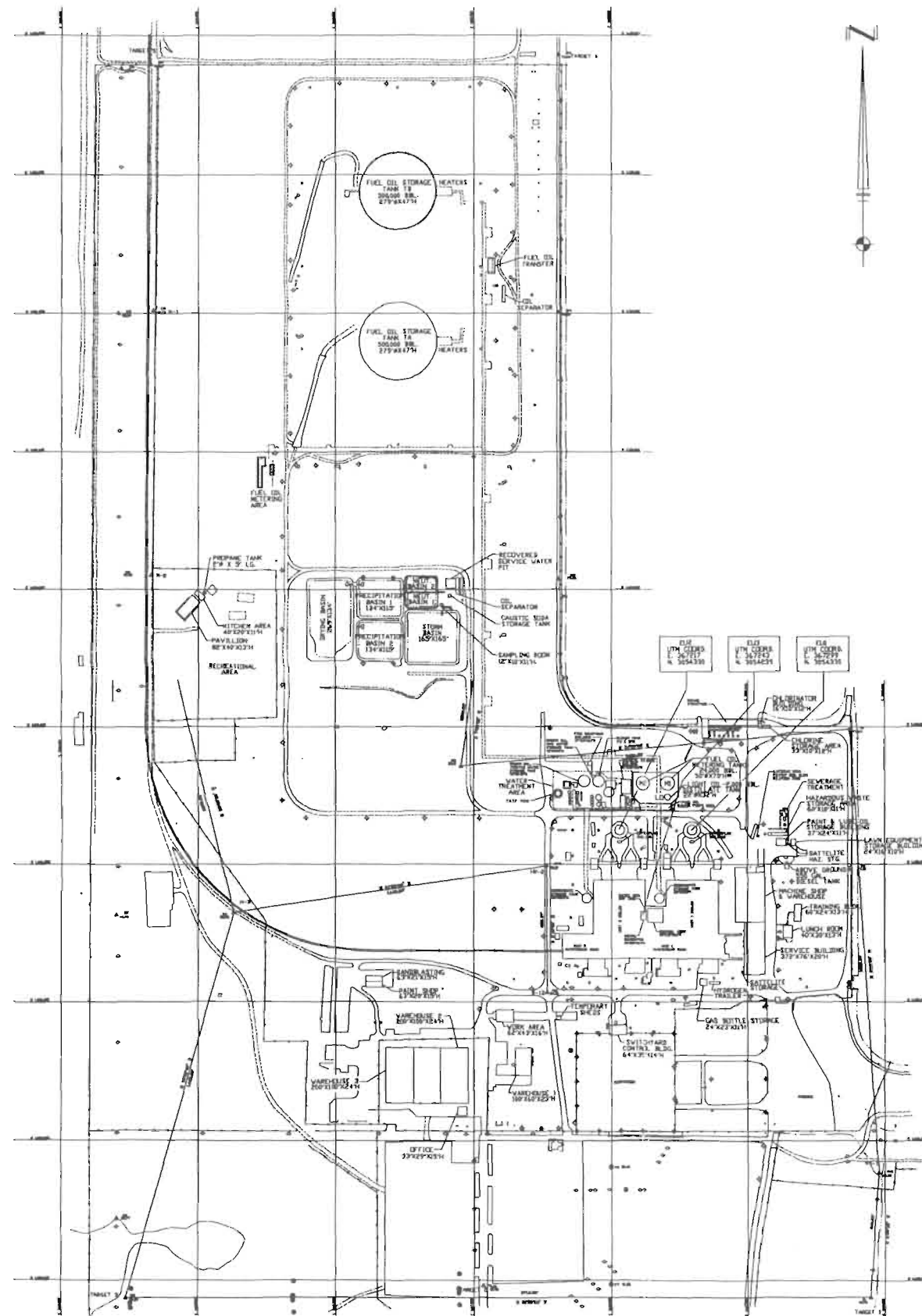
Source: Landuse data provided by Southwest Florida Water Mgmt District (1993)  
No expressed or implied warranties including, but not limited to the implied warranties of  
MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE are made.  
The materials contained herein are provided 'as is' and may contain inaccuracies and user is  
warned to utilize the material's accuracy independently and assumes the risk of any and all loss.




Environmental  
**FPL** Affairs



- Manatee Plant
- Water
- Residential Areas
- Major Roads
- Railroads

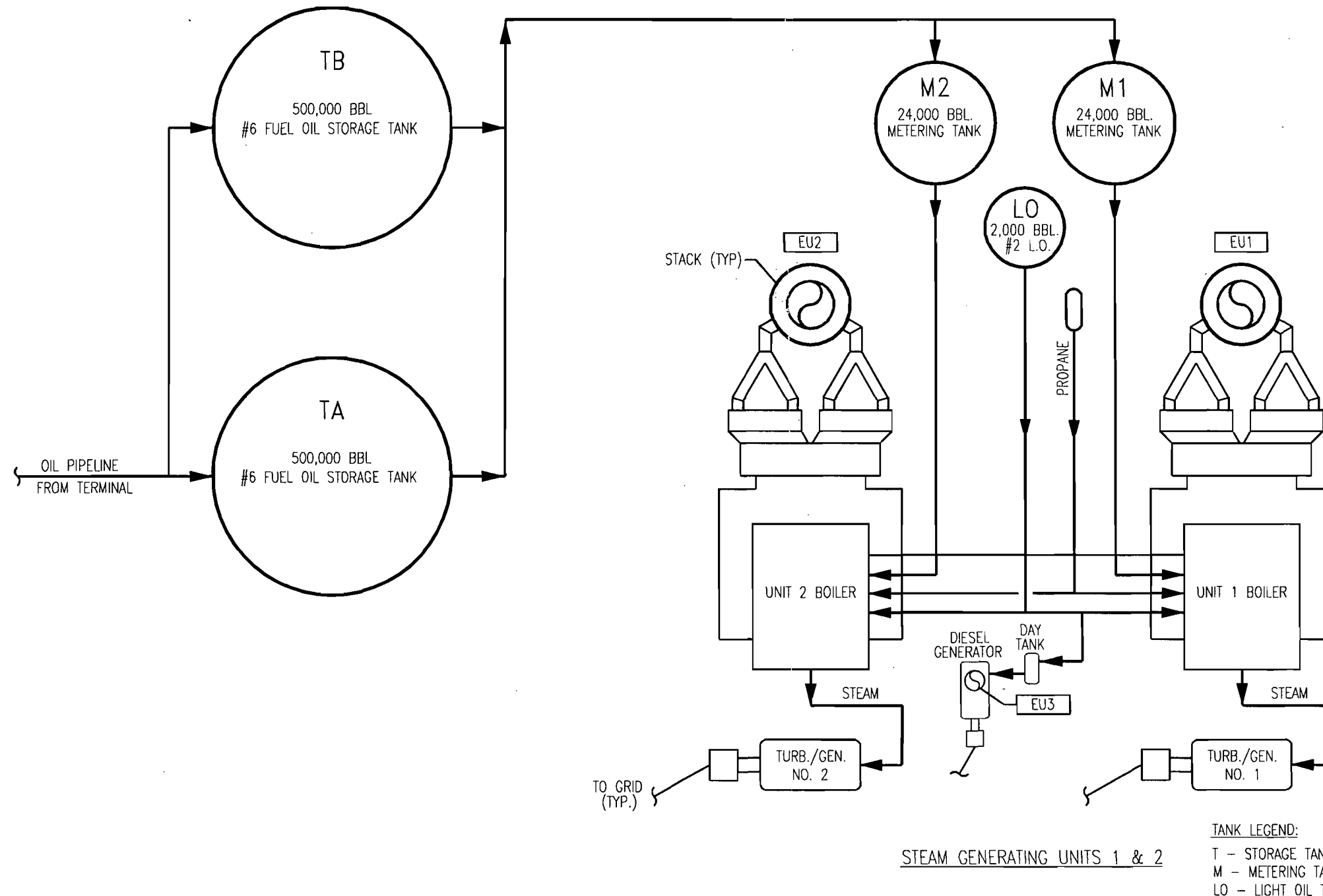


 <b>FPL</b>	SYSTEM	DESCRIPTION	PLANT/UNIT	MANATEE PLANT-UNIT 1 & 2		
	YY	N/A	TITLE	FACILITY PLOT PLAN		
	SCALE 1=100	CAD FILE NAME M002593	ATTACHMENT FS-2			
	DRAWING SIZE E(30"x42")	FILE NUMBER NAME M002593	TITLE V			
	DRAWING NUMBER	PMT1-M0038-YY		SHEET	1 OF 1	REV 0


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

SCALE 3/8" = 1'-0"

SCALE 1/4" = 1'-0"



- NOTES:
- ACRONYMS:  
EU-EMISSION UNIT  
DG-DIESEL GENERATOR  
FO-FUEL OIL
  - EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:  
EU \* -

 <b>FPL</b>	SYSTEM	YY	DISCIPLINE	M	PLANT/UNIT		MANATEE PLANT-UNIT 1 & 2		BAR CODE	
	SCALE	N/A	CAD FILE NAME	MT002594	TITLE FACILITY SOURCE FLOW DIAGRAM ATTACHMENT NO. FS-3 TITLE V					
	DRAWING SIZE	B(11"X17")	FPL ARCHIVE NAME	MT002594						
	DRAWING NUMBER					SHEET		REV		
	PMT1-M0103-YY					1 OF 1		0		

Attachment PMTFS 4.txt

**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 primary roads, primary parking areas and equipment yards
- Landscaping and planting of vegetation

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

- Use of hoods, fans and filters to contain and capture sand in the the sandblast facility. The facility also constructs temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.
- Maintenance of paved areas as needed
- Regular mowing of grass and care of vegetation
- Limiting access to plant property by unnecessary vehicles.
- Bagged chemical products are stored in concrete block buildings until they are used. Spills of powdered chemical products are cleaned up as soon as practical.

**Attachment PMTFS\_5.txt**  
**Fugitive Emission Identification**

***Criteria and Precursor Air Pollutants***

Fugitive particulate emissions are addressed in Attachment PMTFS\_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***

FPL is not aware of fugitive emissions of HAP pollutants which would exceed the reporting thresholds defined in the permit application instructions.



Attachment PMTFS\_8.txt

EQUIPMENT/ACTIVITIES REGULATED UNDER TITLE VI

The Manatee facility currently has no equipment containing CFC's greater than 50 pounds.

**Attachment PMTFS\_9.txt**  
**Alternative Methods of Operation**

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

**Attachment FS\_13.txt**  
**Manatee Plant**  
**Compliance Report and Plan**

The facility and emissions units identified in this application are in compliance with the Applicable Requirements identified in Sections II.B. and III.D. of the application form and attachments referenced in Section III.L. 12 (if included). Compliance is certified as of the date this application is submitted to the Florida Department of Environmental Regulation as required in Rule 62-213.420(1)(a) F.A.C.

**Attachment PMTFS\_14.txt  
Manatee Plant  
Compliance Statement**

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

  
\_\_\_\_\_  
Signature, Responsible Official

5/20/96  
Date

Proposed Schedule for submittal of periodic compliance statements to the Department:

FPL will submit an annual compliance statement to the Department's Southeast District Office concurrently with the submittal of the Annual Operating Report for this facility.

### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID : / Emission Unit # : 1

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

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

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Units? 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 a unregulated emissions unit.

2. Single Process, Group Processes, or Fugitive Only?

Enter The Number (1-3): 1

- [ 1 ] 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).
- [ 2 ] 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.
- [ 3 ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unit 1 Steam Generator
2. Emissions Unit Identification Number: 001 (No Corresponding ID or Unknown)
3. Emission Unit Status Code: (A or C) : A
4. Acid Rain Unit? (Y/N): Y
5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters): The generator nameplate rating given on page 4 is reflective of the information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the value given, or may vary seasonally, with changes in unit efficiency, or due to fluctuations in system load demand.

**Emissions Unit Control Equipment**

**A. Control Equipment # : 1**

1. Description (limit to 200 characters): Multiple Cyclone w/Fly Ash Reinjection
2. Control Device or Method Code: Multiple Cyclone w/Fly Ash Reinjection

**B. Control Equipment # : 2**

1. Description (limit to 200 characters):  
Flue Gas Recirculation

2. Control Device or Method Code: Flue Gas Recirculation

**C. Control Equipment # : 3**

1. Description (limit to 200 characters):  
Staged Combustion (includes overfire air, and burners out of service)

2. Control Device or Method Code: Staged Combustion

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

### **Emissions Unit Details**

1. Initial Startup Date (DD-MON-YYYY):	10/13/76
2. Long-term Reserve Shutdown Date (DD-MON-YYYY):	
3. Package Unit:	
Manufacturer: Foster-Wheeler	Model Number: NA
4. Generator Nameplate Rating:	863 MW
5. Incinerator Information:	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

### Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: 8650 mmBtu/hr
2. Maximum Incineration Rate: lbs/hr tons/day
3. Maximum Process or Throughput Rate: Units:
4. Maximum Production Rate: Units:
5. Operating Capacity Comment (limit to 200 characters): The maximum heat input rate given above is for residual oil firing.

### Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/yr	8760 hours/yr



**D. EMISSIONS UNIT REGULATIONS**  
**(Regulated Emissions Units Only)**

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

Not Applicable

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

Emissions Unit ID 1

40 C.F.R. 279.72	40 C.F.R. 75 Appendix B	40 C.F.R. 75.35	F.A.C. 62-214.300
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.36	F.A.C. 62-214.330
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.4(a)(4)(ii)	F.A.C. 62-214.350 (2)
40 C.F.R. 72.20(c)	40 C.F.R. 75 Appendix D	40 C.F.R. 75.5	F.A.C. 62-214.350 (3)
40 C.F.R. 72.21(a)	40 C.F.R. 75 Appendix F	40 C.F.R. 75.51(c)	F.A.C. 62-214.350 (5)
40 C.F.R. 72.21(b)	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(a)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.53(b)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(a)	40 C.F.R. 75 Appendix H	40 C.F.R. 75.53(c)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.22(c)	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.53(d)(1)	F.A.C. 62-214.370 (4)
40 C.F.R. 72.23	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.54	F.A.C. 62-214.370 (7)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(3)(i)	40 C.F.R. 75.55(c)	F.A.C. 62-214.430
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.55(e)	F.A.C. 62-214.430
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.10(b)	40 C.F.R. 75.56	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.30(c)	40 C.F.R. 75.10(c)	40 C.F.R. 75.60(a)	paragraph 2
40 C.F.R. 72.30(d)	40 C.F.R. 75.10(d)	40 C.F.R. 75.60(b)	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.32	40 C.F.R. 75.10(f)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-296.405(1)(c)1.g.
40 C.F.R. 72.33(b)	40 C.F.R. 75.10(g)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-296.405(1)(d)2.
40 C.F.R. 72.33(c)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(a)(5)	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.33(d)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.61(b)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.40(a)	40 C.F.R. 75.11(d)	40 C.F.R. 75.62	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.40(b)	40 C.F.R. 75.12(a)	40 C.F.R. 75.63	F.A.C.
40 C.F.R. 72.40(c)	40 C.F.R. 75.12(b)	40 C.F.R. 75.64(a)	62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.40(d)	40 C.F.R. 75.13(a)	40 C.F.R. 75.64(b)	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.51	40 C.F.R. 75.13(b)	40 C.F.R. 75.64(c)	F.A.C. 62-296.700(2)(b)
40 C.F.R. 72.90	40 C.F.R. 75.14(a)	40 C.F.R. 75.64(d)	F.A.C. 62-297.310(1)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.65	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(a)	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.20(c)	40 C.F.R. 75.66(b)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(b)	40 C.F.R. 75.20(d)	40 C.F.R. 75.66(c)	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.20(f)	40 C.F.R. 75.66(d)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.20(g)	40 C.F.R. 75.66(g)	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(a)	40 C.F.R. 75.66(h)	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.21(b)	40 C.F.R. 76.13	F.A.C. 62-297.310(4)(e)
40 C.F.R. 72.9(d)	40 C.F.R. 75.21(c)	40 C.F.R. 77.3	F.A.C. 62-297.310(5)
40 C.F.R. 72.9(e)	40 C.F.R. 75.21(d)	40 C.F.R. 77.5(b)	F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(f)	40 C.F.R. 75.21(e)	40 C.F.R. 77.6	F.A.C. 62-297.310(6)(c)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.21(f)	F.A.C. 62-204.800(12)	F.A.C. 62-297.310(6)(d)
40 C.F.R. 73.33	40 C.F.R. 75.22	(state only)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 73.35	40 C.F.R. 75.24	F.A.C. 62-204.800(13)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.30(a)(1)	(state only)	F.A.C. 62-297.310(6)(g)
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(2)	F.A.C. 62-204.800(14)	F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.30(a)(3)	(state only)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.31	F.A.C. 62-210.650	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.32	F.A.C. 62-210.700 (1)	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.33	F.A.C. 62-210.700 (2)	F.A.C. 62-297.310(7)(a)5.
		F.A.C. 62-210.700 (3)	F.A.C. 62-297.310(7)(a)9.
		F.A.C. 62-210.700 (4)	F.A.C. 62-297.310(7)(c)
		F.A.C. 62-210.700 (6)	F.A.C. 62-297.310(8)
			Table 62-297.310-1

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

**Emission Point Description and Type**Information for Facility-ID 1 Emission Unit # : 1

1. Identification of Point on Plot Plan or Flow Diagram: Unit 1 boiler
2. Emission Point Type Code (1,2,3,4) : 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): The EU-1 emission unit (Unit 1 boiler) has one emission point which is the stack.
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission unit 1, Manatee Unit 1 boiler
5. Discharge Type Code (D, F, H, P, R, V, W) : v
6. Stack Height: 499 ft
7. Exit Diameter: 26.2 ft
8. Exit Temperature: 324.6 °F
9. Actual Volumetric Flow Rate: 2667409.9 acfm
10. Percent Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm
12. Nonstack Emission Point Height: ft
13. Emission Point UTM Coordinates: Zone: 17 East: 36.72 North: 3054.1
14. Emission Point Comment (limit to 200 characters): Information provided in item #8 and #9 reflects the highest recorded data measured during the May 1994 particulate test at this unit. flow rates at other points in time may vary from the number above.

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

**Segment Description and Rate:**

Information for Facility\_ID : 1 Emission Unit #: 1 Segment #: 1 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 boiler firing number 6 oil
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 56.9
5. Maximum Annual Rate: 498513
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 1
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 1 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 Boiler burning propane
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 8.65
5. Maximum Annual Rate: 865
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur:
8. Maximum Percent 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 #6 oil, #2 oil, propane or on-spec. used oil from FPL operations. Propane is used primarily for lighting off the boiler for start-up.

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

**Segment Description and Rate:**

Information for Facility\_ID : / Emission Unit #: / Segment #: 3 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 boiler firing on-specification used oil
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 0.5
5. Maximum Annual Rate: 20
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 1
8. Maximum Percent Ash:
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):

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

**Segment Description and Rate:**

Information for Facility\_ID : 1 Emission Unit #: 1 Segment #: 4 24

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 Boiler firing Number 2 diesel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 63.603
5. Maximum Annual Rate: 557162.3
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.007
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):

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

**Segment Description and Rate:**

Information for Facility\_ID : 1 Emission Unit #: 1 Segment #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 1 Boiler chemical cleaning waste evaporation. This process may be undertaken while firing #6 residual 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 Percent Sulfur:
8. Maximum Percent 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).



**G. EMISSIONS UNIT POLLUTANTS**  
**(Regulated Emissions Units Only)****Information for Facility\_ID: / Emission Unit #: /**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOX	026	025	EL
CO	NA	NA	NS
PM	077	NA	EL
PM10	077	NA	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

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

Information for Facility\_ID: / Emission Unit #: / Pollutant #: /

### Pollutant Detail Information

1. Pollutant Emitted: Sulfur Dioxide	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 9515 lbs/hr	41675.7 tons/yr
4. Synthetically Limited? (Yes/No): No	
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3) : to tons/yr	
6. Emission Factor: 1.1	Units lb/mmBtu
Reference: DEP Rule 62-297.405(1)(c)1.g.	
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>[ ] 1</span> <span>[ ] 2</span> <span>[ ] 3</span> <span>[ ] 4</span> <span>[ ] 5</span> </div>	
8. Calculation of Emissions (limit to 600 characters): 1.1 lb/mmBtu * 8650 mmBtu/hr = 9515.0 lb/hr  (9515.0 lb/hr * 8760 hr/yr) / 2000 lb/ton = 41675.7 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

**Information for Facility\_ID: 1 Emission Unit #: 1 Pollutant #: 1**  
**Basis For Allowable Emission #: 1**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code:      Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.1      Units : lb/mmBtu
4. Equivalent Allowable Emissions: 9515 lbs/hr 41675.7 tons/yr
5. Method of Compliance:      Fuel sampling & analysis
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): 155 1.1 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-296.405(1)(c)1.g.]. Equivalent allowable emissions are given for liquid fuel firing.

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

Information for Facility\_ID: 1 Emission Unit #: 1 Pollutant #: 2

### Pollutant Detail Information

1. Pollutant Emitted: Nitrogen Oxides
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 2595 lbs/hr      11366.1 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3) : to tons/yr
6. Emission Factor: 0.3      Units lb/mmBtu Reference: Rule 62-296.405(1)(d)2.
7. Emissions Method Code: (0, 1, 2, 3, 4, 5): 0 [ ] 0      [ ] 1      [ ] 2      [ ] 3      [ ] 4      [ ] 5
8. Calculation of Emissions (limit to 600 characters): 0.3 lb/mmBtu * 8650 mmBtu/hr = 2595 lb/hr  (2595 lb/hr * 8760 hr/yr) / 2000 lb/ton = 11366.1 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

**Information for Facility\_ID: 1 Emission Unit #: 1 Pollutant #: 2**  
**Basis For Allowable Emission #: 1**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code: Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 Units : lb/mmBtu
4. Equivalent Allowable Emissions: 2595 lbs/hr 11366.1 tons/yr
5. Method of Compliance: Continuous Emission Monitoring
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): 95 0.3 lb/mmBtu is the current permit limit on nitrogen oxides emissions [30-day rolling average].

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

**Information for Facility\_ID: / Emission Unit #: / Pollutant #: 4**

**Pollutant Detail Information**

1. Pollutant Emitted:	Particulate Matter - Total
2. Total Percent Efficiency of Control:	%
3. Potential Emissions:	1081.25 lbs/hr      4735.9 tons/yr
4. Synthetically Limited? (Yes/No):	No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3) :	to    tons/yr
6. Emission Factor:	0.125      Units    lb/mmBtu Reference:    DEP Rule 62-296.405(1)(b) and Rule 62-210.700(3)
7. Emissions Method Code: (0, 1, 2, 3, 4, 5):	0 [ ] 0      [ ] 1      [ ] 2      [ ] 3      [ ] 4      [ ] 5
8. Calculation of Emissions (limit to 600 characters):	0.125lb/mmBtu x 8650mmBtu/hr = 1,081.25 lb/hr 1,081.25lb/hr x 8760hrs/yr x ton/2000lb = 4,735.9 tons/yr  (Note that 3 hrs@0.3 lb/mmBtu & 21 hrs@0.1 lb/mmBtu) = avg 0.125 lb/mmBtu
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	0.1 lb/mmBtu represents steady-state conditions. 0.3 lb/mmBtu is the emission limit for soot blowing and load changing conditions in the existing permit for up to 3 hrs in 24 hrs.

**Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 4**  
**Basis For Allowable Emission #: 1**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code: Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 Units : lb/mmBtu
4. Equivalent Allowable Emissions: 865 lbs/hr 3315.11 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): 175 0.1 lb/mmBtu is the current regulatory limit on PM emissions for 21 hours in 24 hours [Rule 62-296.405(1)(b)]. Equivalent allowable emissions are given for liquid fuel firing.

**Information for Facility\_ID: 1 Emission Unit #: 1 Pollutant #: 4**  
**Basis For Allowable Emission #: 2**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code:      Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3      Units : lb/mmBtu
4. Equivalent Allowable Emissions: 2595 lbs/hr 1420.8 tons/yr
5. Method of Compliance:    DEP Rule 62-296.405(1)(e)2.
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): <b>185</b> Data is for soot-blowing firing liquid fuel. Equiv. allowable emissions are for liquid fuel firing. 0.3 lb/mmBtu is the current regulatory limit on PM for a max. of 3 hours in 24 hours.



## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID : 1 Emission Unit #: 1

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype:	VE40
2. Basis for Allowable Opacity Code(R/O):	RULE      [ ] Rule                  [ ] Other
3. Allowable Opacity:	
Normal Conditions:	40 % Exceptional Conditions: %
Maximum Period of Excess Opacity Allowed:	min/hr
4. Method of Compliance Code:	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.	

## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID : 1 Emission Unit #: 1

Visible Emissions Limitation #: 2

1. Visible Emissions Subtype:	VE60
2. Basis for Allowable Opacity Code(R/O):	RULE      [ ] Rule                  [ ] Other
3. Allowable Opacity: Normal Conditions: 60                          % Exceptional Conditions: 100        % Maximum Period of Excess Opacity Allowed: 24     min/hr	
4. Method of Compliance Code:	EPA Method 9
5. Visible Emissions Comment (limit to 200 characters): Rule 62-210.700(3), F.A.C. limits soot blowing & load changing to 60% opacity for up to 3 hrs/24 hrs, with < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.	



**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 1  
Continuous Monitor #: 3

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Carbon dioxide	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information: Manufacturer: Milton Roy Model Number: 3300 Serial Number: N3K4370T		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(3)(i)		

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 1  
Continuous Monitor #: 4

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Volumetric flow rate	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information: Manufacturer: Air Monitor Model Number: MASSTRON		
Serial Number: 5744D		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1)		

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 1  
Continuous Monitor #: 2

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s): Nitrogen Oxides		
3. CMS Requirement Code(R/O): RULE Rule / Other		
4. Monitor Information: Manufacturer: TECO Model Number: 42 Serial Number: 42-45533-274K		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(2)		

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 1  
Continuous Monitor #: 1

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Sulfur Dioxide	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information: Manufacturer: TECO Model Number: 43B Serial Number: 43B-46689-276		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1)		

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 1  
Continuous Monitor #: 5

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Visible emissions (opacity)	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information: Manufacturer: Lear Siegler Model Number: RM41 Serial Number: 244		
5. Installation Date (DD-MON-YYYY): 06/01/75		
6. Performance Specification Test Date (DD-MON-YYYY): 12/07/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(4). Since the opacity monitors were just recertified, the original installation date is unknown. The date of manufacture is used as the installation date.		



**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 1  
 Continuous Monitor #: 5

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Visible emissions (opacity)	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information:		
Manufacturer: Lear Siegler		
Model Number: RM41		Serial Number: 253
5. Installation Date (DD-MON-YYYY): 06/01/75		
6. Performance Specification Test Date (DD-MON-YYYY): 12/07/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(4). Since the opacity monitors were just recertified, the original installation date is unknown. The date of manufacture is used as the installation date.		

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

Information for Facility-ID : / Emission Unit # : /

**PSD Increment Consumption Determination**

**1. Increment Consuming for Particulate Matter or Sulfur Dioxide?**

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

Select (1-5) : 5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 5 ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

## 2. Increment Consuming for Nitrogen Dioxide?

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

Select (1-5) : 5

- [ 1 ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 5 ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

## 3. Increment Consuming/Expanding Code: (C, E, U- unknown):

PM	U
SO2	U
NO2	U

## 4. Baseline Emissions:

PM	lbs/hr	tons/yr
SO2	lbs/hr	tons/yr
NO2	tons/yr	

5. PSD Comment (limit to 200 characters):

Construction commenced on this unit prior to the PSD baseline date of July 5, 1975. FPL believes that PSD does not apply to this unit.

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

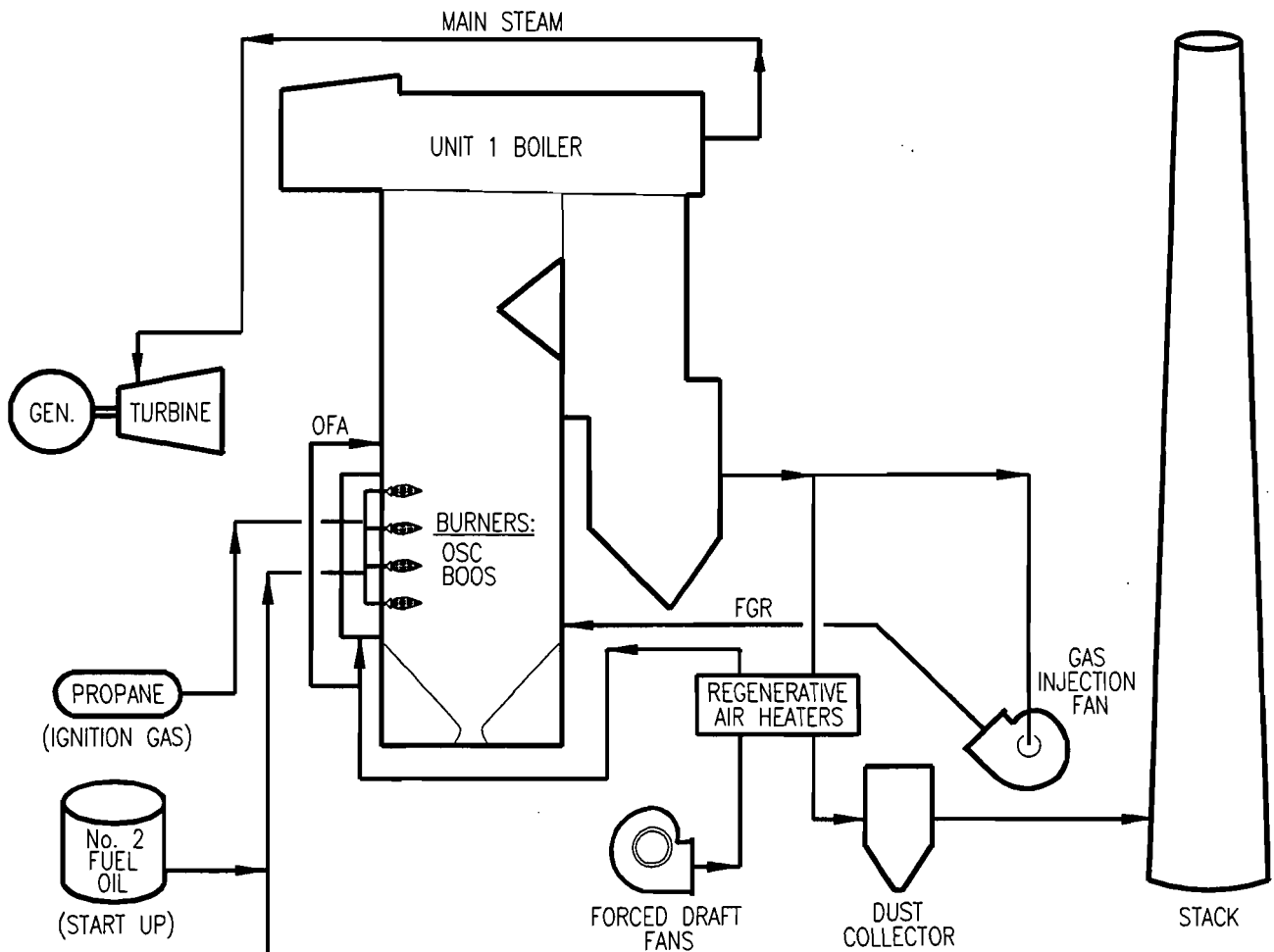
Information for Facility-ID : / Emission Unit # : /

**Supplemental Requirements for All Applications**

1. Process Flow Diagram : PMTEU1_1.bmp Attached Document ID / Not Applicable / Waiver Requested
2. Fuel Analysis or Specification: PMTU1_2.doc Attached Document ID / Not Applicable / Waiver Requested
3. Detailed Description of Control Equipment : PMTU1_3.doc Attached Document ID / Not Applicable / Waiver Requested
4. Description of Stack Sampling Facilities : Attached Document ID: PMTEU1_4.bmp Attached Document ID / Not Applicable / Waiver Requested
5. Compliance Test Report : Previously submitted, Date = July 15, 1994 Attached Document ID / Previously submitted, Date / Not Applicable
6. Procedures for Startup and Shutdown : PMTU1_6.doc Attached Document ID / Not Applicable
7. Operation and Maintenance Plan : NA Attached Document ID / Not Applicable
8. Supplemental Information for Construction Permit Application : NA Attached Document ID / Not Applicable
9. Other Information Required by Rule or Statute : NA Attached Document ID / Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation : PMTU1_10.doc Attached Document ID / Not Applicable
11. Alternative Modes of Operation (Emissions Trading) : NA Attached Document ID / Not Applicable
12. Identification of Additional Applicable Requirements : Not Applicable Attached Document ID / Not Applicable
13. Enhanced Monitoring Plan : Not Applicable Attached Document ID / Not Applicable
14. Acid Rain Permit Application  Acid Rain Application - Phase II (Form No. 17-210.900(1)(a)) Attached Document ID: Not Applicable  Repowering Extension Plan (Form No. 17-210.900(1)(b)) Attached Document ID: Not Applicable  New Unit Exemption (Form No. 17-210.900(1)(c)) Attached Document ID: Not Applicable  Retired Unit Exemption (Form No. 17-210.900(1)(c)) Attached Document ID: Not Applicable  Not Applicable



## LEGEND:

OSC: OFF-STOICHIOMETRIC COMBUSTION (OFA)  
 BOOS: BURNERS OUT OF SERVICE  
 FGR: FLUE GAS RECIRCULATION  
 OFA: OVER FIRE AIR

	SYSTEM	DISCIPLINE	PLANT/UNIT
	YY	M	MANATEE PLANT
	SCALE	CAD FILE NAME	TITLE
	N/A	MT002595	EMISSION UNIT PROCESS FLOW DIAGRAM STEAM GENERATOR/BOILER ATTACHMENT NO. EU1
	DRAWING SIZE	FPL ARCHIVE NAME	
	A (8.5X11)	MT002595	

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

DRAWING NUMBER

PMT1-M0104-YY

SHEET

1 OF 1

REV

0

FLORIDA POWER & LIGHT CO.  
STACK SAMPLING FACILITIES  
MANATEE

PMTU1\_1.BMP

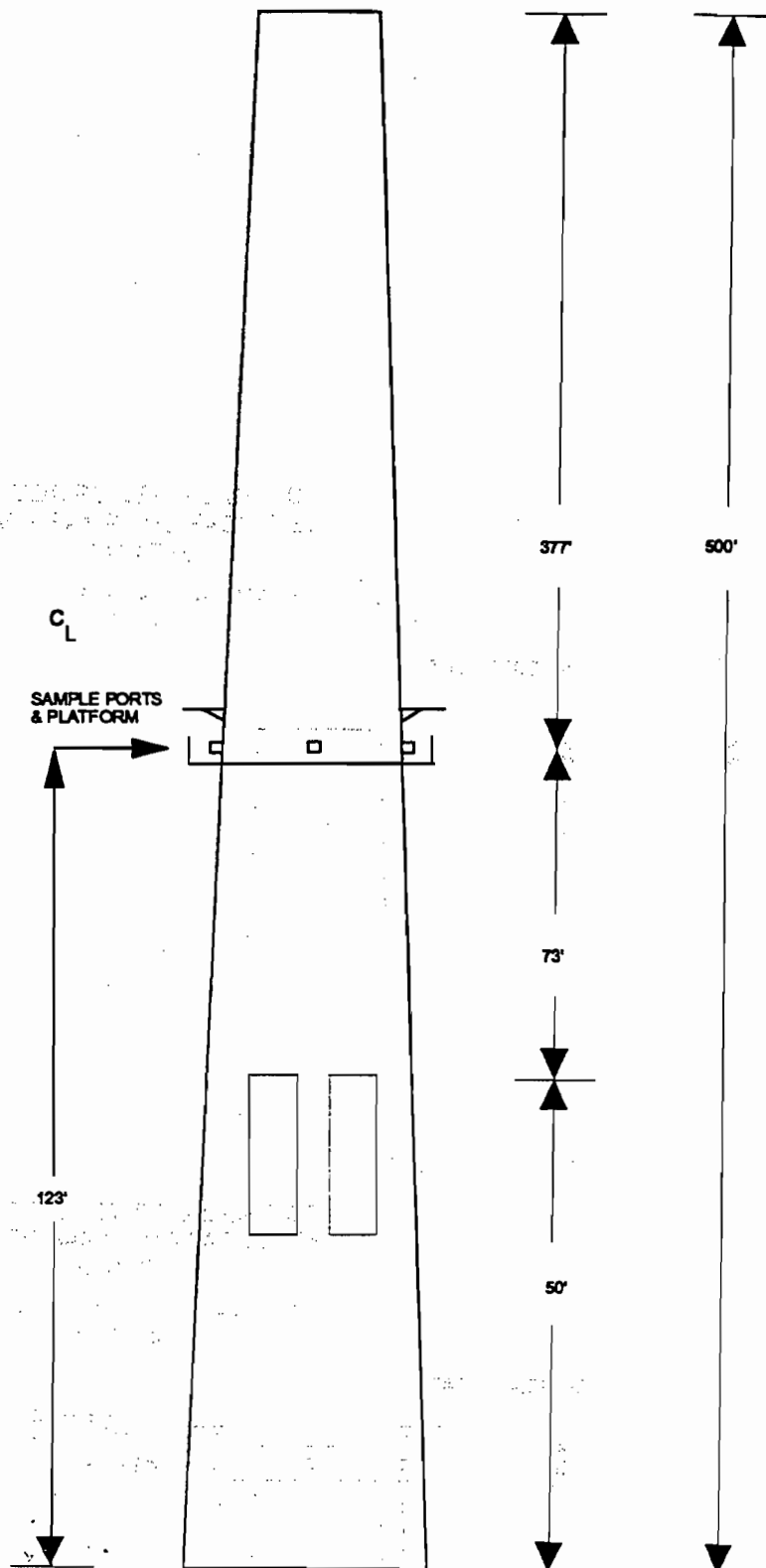
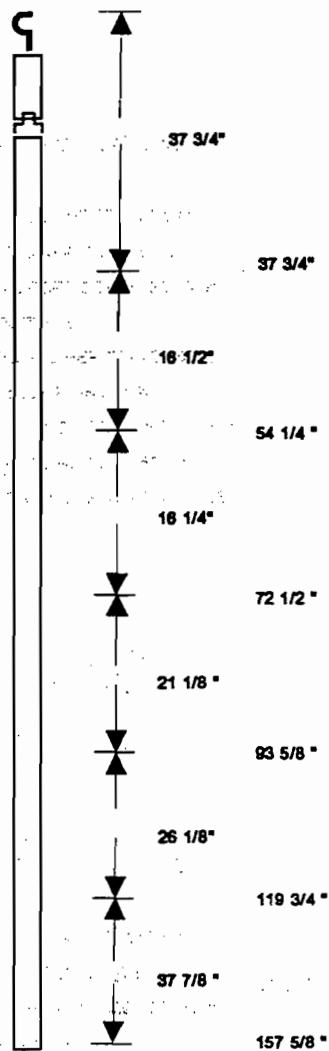
FOSSIL FUEL STEAM GENERATORS  
UNITS 1 & 2

STACK SPECIFICATIONS

SAMPLING DIAMETER: 357.6 in.  
SAMPLING AREA: 897.5 sq. ft.  
SAMPLING PORT DEPTH: 30 1/4 in.  
No. OF PORTS: 4  
No. OF POINTS PER TRAVERSE: 8  
TOTAL No. OF POINTS: 24  
SAMPLING TIME PER POINT: 2.5 min.  
TOTAL SAMPLING TIME: 60.0 min.  
NOTE: DRAWING IS NOT TO SCALE

STACK DIAGRAM

PARTICULATE SAMPLING  
PROBE 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 the stack.



**Attachment PMTU1\_2.txt****Fuel Analysis  
No.6 Oil Analysis (typical)<sup>5</sup>**

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60° F)	6 - 12	none
Heat content(MBtu/bbl)	6,310 - 6420	6,340 <sup>4</sup>
% Sulfur	0.98	1.0 max <sup>3</sup>
% Nitrogen	0.2 - 0.5 <sup>2</sup>	none
% Ash	0.06 - 0.09 <sup>2</sup>	0.10 max <sup>4</sup>

**Footnotes:**

- (1) Manatee 1 and 2 can burn up to 1% sulfur fuel oil.
- (2) Data taken from laboratory analysis.
- (3) Maximum permitted from current air operation permit.
- (4) Data from FPL fuel purchasing specifications.
- (5) 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 PMTU1\_2.txt

Fuel Analysis  
No. 2 Distillate oil (typical)<sup>3</sup>

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60 F)	35.0 <sup>2</sup>	30 - 40 <sup>1</sup>
Heat content (MBtu/bbl)	5,700 - 5,800 <sup>2</sup>	none
% sulfur	0.2	0.3 maximum
% nitrogen	no specification	none
% ash	<0.01 <sup>2</sup>	0.01 <sup>1</sup>

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 PMTU1\_2.txt

Fuel Analysis  
On Specification Used Oil

The boilers 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 used oil values follow:

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60 F)	30.0 <sup>1</sup>	none
Heat content (MBtu/bbl)	6,000 <sup>1</sup>	none
% sulfur	0.31	none
% nitrogen	negligible	none
% ash	0.01 <sup>1</sup>	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.

Fuel Analysis  
Propane (typical)<sup>1</sup>

The boilers 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<sub>3</sub>H<sub>8</sub>.

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
Specific gravity (@ 60 F)	0.51 <sup>1</sup>	none
Heat content (MBtu/bbl)	600 - 1,000	none
% sulfur	<0.01	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 PMTU1\_3.txt**  
**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 @ 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. Flue Gas Recirculation - Nitrogen oxides reduction**

Purpose

The boiler design incorporates the techniques of flame temperature reduction and off-stoichiometric combustion designed to reduce and maintain the nitrogen oxides stack gas emissions below the boiler manufacturer's guaranteed maximum levels and below that maximum allowed by pollution control agencies.

The gas injection control system regulates the gas injection fan speeds and the associated dampers to control the amount of recirculated gas that will be mixed with the air flow to the boiler. By mixing recirculated gas with the air, the flame helps to reduce the formation of NOx. The gas injection control loop has two subloops; gas injection fan speed control and gas injection fan interlocks.

Gas Injection Fan Speed Control

The gas injection fan speeds are individually regulated to provide the proper amount of fuel gas injection into the boiler's air supply. There are two gas injection fans each providing injection to the discharge of one of the air preheaters. Steam flow (a load index) developed from first stage pressure is used to develop a base demand for gas injection from each fan. The gas injection for each fan can be biased as required for balanced operation. Also, each demand is limited according to the air flow to which the flue gas will be mixed. Thus if an forced draft (FD) fan is removed from service or operating at a reduced load, the high limit will prevent excessive flue gas from being mixed with the low air flow.

**Attachment PMTU1\_3.txt**  
**Detailed Description of Control Equipment**

page 2 of 2

The demand for gas injection for each fan is compared to each fan's actual gas injection. Any error between demand and actual flue gas flow causes a proportional plus integral controller to readjust the associated fan's speed. To prevent erroneous control action from attempting to exceed the maximum fan load, a low select is employed. Fan amps are compared to the maximum allowable fan amps. When actual fan amps exceed the maximum allowable, the low select will choose the fan amp signal, and fan speed will be controlled to maintain the maximum load until the normal control requests a lower fan speed.

#### **D. Flame Temperature Reduction**

This approach utilizes two gas injection fans to recirculate the flue gases and mix these gases with the combustion air. The recirculated gases act as an inert, absorbing a part of the energy released in combustion and, thereby, reducing the peak temperatures achieved. Controlling and generally reducing the high temperature conditions that would otherwise occur significantly reduce the formation of nitric oxide.

#### **E. Staged Combustion**

This technique involves operating the burners at fuel-rich mixture ratios. The proportion of fuel burned at peak temperatures in the presence of excess air is reduced and consequently NO<sub>x</sub> emissions are lowered. The remaining air required to maintain the overall furnace stoichiometry is introduced through overfire air ports located above the top row of burners.

A second way of operating the burners at a fuel-rich mixture ratio is to terminate the fuel flow to selected burners and utilize these burners as air ports. The other burners would be operated at a fuel-rich mixture ratio. This is called a bias-firing scheme.

## **Attachment PMTU1\_6.txt**

### **Startup & Shutdown Procedures - Minimizing Excess Emissions**

Startup of the fossil-fuel boilers begins when fuel 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 monitors are currently in place for NO<sub>x</sub>, SO<sub>2</sub> 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

Knowledge of the appropriate countermeasures to take under an excess emissions condition is a part of the routine operator training.

**Attachment PMTU1\_10.txt**  
**Alternative Methods of Operation**

Operation with No.6 oil

The Manatee boilers may each be operated up to 8760 hours per year at heat input rates from zero to 8,650 mmBtu per hour while firing No.6 oil.

Fuel Types

The units may burn low sulfur No. 6 fuel oil containing a maximum of 1.0% sulfur (by weight). The units may utilize propane fuel for ignition of the above-listed main fuels. The units may also burn No. 2 distillate fuel oil or on-specification used oil meeting EPA specifications under 40 CFR 279 Subpart B.

Current emissions limitations are as follows:

<u>Pollutant</u>	<u>Emission Limit</u>
Particulate matter-steady state	0.1 lb/mmBtu
Particulate matter-soot blowing	0.3 lb/mmBtu
Sulfur dioxide	1.1 lb/mmBtu
Nitrogen oxides	0.30 lb/mmBtu
Visible Emissions	40 percent opacity steady-state 60 percent opacity soot blowing (3 hours/24 hour period with up to four six-minute periods of up to 100 percent opacity if the unit has an operational CEM)

Soot Blowing

The units may blow soot for up to 24 hours per day, so long as this does not result in excess emissions that exceed regulatory limits. Up to 3 hours of excess emissions per 24 hour period are allowed at up to 60 percent opacity. Visible emissions above 60 percent are allowed for up to 4, 6-minute periods during the aforementioned 3-hour period, for soot blowing and load changing.

Utilization of Additives

When residual oil is fired, various additives such as Magnesium hydroxide (MgOH) are added to the boilers 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 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 Manatee, 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 PMTU1\_10.txt**  
**Alternative Methods of Operation**

Flame Temperature Reduction

This approach utilizes two gas injection fans to recirculate the flue gases and mix these gases with the combustion air. The recirculated gases act to reduce the peak combustion temperature and significantly reducing the formation of nitrogen oxide.

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 the Manatee units are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

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 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).



## Attachment PMTU1\_12.txt

### Identification of Additional Applicable Requirements

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

Air operation permit No. AO41-204804 contains the following conditions:

1. Heat input rate for Unit 1 is not to exceed 8,650 mmBtu/hour while burning No.6 residual fuel oil. *FPL tracks heat input using fuel sampling and analysis and fuel flow measurement. Note that the units are currently permitted to fire natural gas if a pipeline is installed in the future. In such an instance the heat input limit on natural gas is 9,040 mmBtu / hour.*

2. The boiler shall be fired with a variable combination of No.6 residual fuel oil, No.2 fuel oil, propane gas or on-specification used oil from FPL operations. *FPL tracks the fuel usage on a daily basis.*

3. The maximum allowable emissions for Unit 1 are as follows:

Pollutant	Fuel	Emission Limit	Test Method
<u>Particulate Matter</u> - Steady-State	Oil	0.1 lb/mmBtu	EPA Method 5 or 17
Soot Blowing or Load Changing.	Oil	0.3 lb/mmBtu (3 hrs/24 hrs.)	EPA Method 5 or 17
<u>Sulfur Dioxide</u> -	Oil	1.1 lb/mmBtu	Monthly Fuel Analysis
<u>Nitrogen Oxides</u> -	Oil	0.30 lb/mmBtu	Continuous Emissions Monitor (CEMS).
<u>Visible Emissions</u> - Steady-State	Oil	40 percent opacity	DEP Method 9
Soot Blowing or Load Changing.	Oil	60 percent opacity (3 hrs/24 hrs.)	DEP Method 9

*FPL conducts annual compliance testing to determine compliance with the emission limitations. However, in the case of NOx emissions, FPL has opted to use the CEMs as the compliance determination method.*

7/18/83

IN REPLY TO:

Petition for Reduction in Quarterly  
Particulate Emissions Compliance  
Testing;  
FLORIDA POWER AND LIGHT COMPANY,

Petitioner.

OCC Case Nos.: 83-0578  
83-0577, 83-0576,  
83-0585, 83-0586,  
83-0587, 83-0588  
83-0581, 83-0582

ED

ORDER GRANTING PETITION FOR REDUCED  
FREQUENCY OF PARTICULATE TESTING

On September 16, 1983, the Petitioner, FLORIDA POWER AND LIGHT COMPANY, filed a Petition for Reduction in Quarterly Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1 for the following fossil fuel steam generating units:

Port Everglades Plant Unit No. 2  
Port Everglades Plant Unit No. 3  
Port Everglades Plant Unit No. 4  
Turkey Point Plant Unit No. 1  
Turkey Point Plant Unit No. 2  
Riveria Plant Unit No. 3  
Riveria Plant Unit No. 4  
Manatee Plant Unit No. 1  
Manatee Plant Unit No. 2

Each of the units has a heat input exceeding 250 million Btu per hour.

The petition and supporting documentation submitted by the Petitioner indicate that between August 1979 and July 21, 1983, these units were afforded relief from the particulate standard contained in Florida Administrative Code Rule 17-2.600(5)(b)2 under the terms of a Department-issued variance. During the same period of time the Company elected to test quarterly as permitted under Rule 17-2.600(5)(b)1. Despite the existence of the variance, the tests results submitted during the last two years reveal that each of the above-listed units met the particulate emissions limitations contained in Rule 17-2.600(5)(b)2 of 0.1 pounds per million Btu heat input.

Florida Administrative Code Rule 17-2.600(5)(b)1 specifically provides that I may reduce the frequency of particulate testing

upon a demonstration that the particulate standard has been regularly met. The particulate standard referred to is the general standard found in the rule--0.1 parts per million Stu heat input--not a relaxed emission limit established by a variance.

The intent of Rule 17-2.600(5)(b)1 is to ensure that before the frequency of particulate testing is reduced, the source has established a record of complying with the requirements of Florida Administrative Code Chapter 17-2 relating to particulate matter emissions. Petitioner has documented that each of these units has a history of regularly complying with the particulate matter standard applicable to them.

IT IS ORDERED that the present petition is GRANTED. Under the terms of Rule 17-2.600(5)(b)1, Petitioner may reduce the frequency of particulate testing to an annual basis for each of the units named in this Order. If, however, any of the units fails to comply with the applicable particulate or visible emission standard, this Order will terminate upon written notice by the Department.


The Petitioner may request a hearing in accordance with Section 120.57, Florida Statutes, and Florida Administrative Code Chapters 17-1 and 28-5. The request for hearing must be filed (received) in the Office of General Counsel of the Department, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of receipt of this Order. Failure to file a request for hearing within this time shall constitute a waiver of Petitioner's right to request a hearing under Section 120.57, Florida Statutes.

DONE and ORDERED this 24 day of April, 1984.

RECEIVED  
 Pursuant to S120.52 (9),  
 Florida Statutes, with the designated Department  
 Clerk, receipt of which is hereby acknowledged.

Clerk

Date

  
 VICTORIA J. TSCHINKEL  
 Secretary

STATE OF FLORIDA DEPARTMENT  
 OF ENVIRONMENTAL REGULATION  
 2600 Blair Stone Road  
 Tallahassee, Florida 32301  
 (904)488-4805

00037

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Order Denying  
Petition for Reduced Frequency of Particulate Testing and the  
Order Granting Petition for Reduced Frequency of Particulate  
Testing have been furnished by U.S. Mail to Peter C. Cunningham,  
Esquire, Hop,ing Boyd Green and Sams, Post Office Box 6526,  
Tallahassee, Florida 32314 this 25th day of April, 1984.

Nancy E. Wright  
NANCY E. WRIGHT  
Assistant General Counsel

State of Florida Department  
of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301  
904/488-9730

In the matter of: )  
 Florida Power and Light )  
 Co., Inc. )  
 Petitioner )  
 \_\_\_\_\_ )

ASP-86-E01

SEP 11 1986  
 ENV. S. DIVISION

ORDER APPROVING REQUEST FOR ALTERNATIVE  
 PROCEDURES AND REQUIREMENTS

Pursuant to Section 17-2.700 (3), Florida Administrative Code, Petitioner Florida Power and Light Company ("Petitioner") submitted to the Department a request for approval of alternate source sampling procedures and requirements. Having considered the written request, a copy of which is attached hereto as Exhibit 1, and supporting documentation, the following Findings of Fact, Conclusions of Law and Order are entered:

FINDINGS OF FACT

1. On May 30, 1986, Petitioner submitted a written request for approval of alternative procedures and requirements for Manatee Plant Units 1 and 2.
2. The petition requested that the Department grant Petitioner the authority to use EPA Reference Method 7E as an alternate procedure for measuring nitrogen oxides (NO<sub>x</sub>) emissions from the facility.
3. As grounds for the request, Petitioner has stated that using EPA Reference Method 7E in place of the existing EPA Reference Method 7, would allow the testing to be done quicker and would save Petitioner about \$4000 per test. The Petitioner also stated that Reference Method 7E would soon be certified by the Federal government as an adequate procedure for demonstrating compliance with NO<sub>x</sub> emissions. EPA Reference Method 7E was subsequently promulgated in the Federal Register as an approved method on June 11, 1986.
4. After review of the petition and supporting documentation, the Department finds that the alternate procedures and requirements would be adequate for the affected air pollution sources to demonstrate compliance with applicable emission limiting standards.

CONCLUSIONS OF LAW

5. The relief requested is within the scope of relief which can be granted by the Department pursuant to Section 403.061, Florida Statutes, and Section 17-2.700 (3), Florida Administrative Code. Such relief does not relieve Petitioner of the responsibility to comply with all applicable emission limiting standards, ambient air quality standards, or other permit conditions.

ORDER

6. Having considered the petition and supporting documentation, it is hereby ORDERED that:

The relief requested by Petitioner is granted. Therefore, specific condition No. 1 of permit No. A041-51630 and specific condition 1 of permit No. A041-64792 are hereby amended to reflect that Petitioner, Florida Power and Light Company is authorized to utilize EPA Reference Method 7E to demonstrate compliance at Manatee Plant Units 1 and 2.

This order shall constitute final agency action by the Department pursuant to Section 120.52 (9), Florida Statutes. The Petitioner may file a petition for an administrative hearing on this order within twenty-one (21) days of receipt of the order. The petition shall be filed with the Department of Environmental Regulation, Office of General Counsel, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301, and shall be in the form required by Chapters 17-103 and 28-5, Florida Administrative Code. Failure to file a petition within the time specified above shall constitute a waiver by the Petitioner to an administrative hearing under Chapter 120, Florida Statutes.


Done and ordered this 5 day of September, 1985 in  
Tallahassee, Florida.

## FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to §120.52 (9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

C. A. Hutchins  
Clerk

9-5-85  
Date

  
Victoria J. Tschinkel  
Secretary

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Telephone: (904) 488-4805

**BASIS OF REQUEST:** EPA Reference Method 7E has been promulgated in the Federal Register; will allow quicker testing; and will save the petitioner approximately \$4000 per each test.

### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID : 1 Emission Unit # : 2

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

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

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Units? 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 a unregulated emissions unit.

2. Single Process, Group Processes, or Fugitive Only?

Enter The Number (1-3): 1

- [ 1 ] 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).
- [ 2 ] 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.
- [ 3 ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.



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

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unit 2 Steam Generator
2. Emissions Unit Identification Number: 002 (No Corresponding ID or Unknown)
3. Emission Unit Status Code: (A or C) : A
4. Acid Rain Unit? (Y/N): Y
5. Emissions Unit Major Group SIC Code: 49
6. Emissions Unit Comment (limit to 500 characters): The generator nameplate rating given on page 4 is reflective of the information provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the value given, or may vary seasonally, with changes in unit efficiency, or due to fluctuations in system load demand.

**Emissions Unit Control Equipment**

**A. Control Equipment # : 1**

1. Description (limit to 200 characters): Multiple Cyclone w/Fly Ash Reinjection
2. Control Device or Method Code: Multiple Cyclone w/Fly Ash Reinjection

**B. Control Equipment # : 2**

1. Description (limit to 200 characters):  
Flue Gas Recirculation

2. Control Device or Method Code: Flue Gas Recirculation

**C. Control Equipment # : 3**

1. Description (limit to 200 characters):  
Staged Combustion (includes overfire air and burners out of service)

2. Control Device or Method Code: Staged Combustion

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

#### Emissions Unit Details

1. Initial Startup Date (DD-MON-YYYY): 11/19/77
2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
3. Package Unit: <div style="display: flex; justify-content: space-between;"> <span>Manufacturer: Foster-Wheeler</span> <span>Model Number: NA</span> </div>
4. Generator Nameplate Rating: 863 MW
5. Incinerator Information: <div style="margin-left: 100px;">Dwell Temperature: °F</div> <div style="margin-left: 100px;">Dwell Time: seconds</div> <div style="margin-left: 50px;">Incinerator Afterburner Temperature: °F</div>

#### Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: 8650 mmBtu/hr
2. Maximum Incineration Rate:    lbs/hr tons/day
3. Maximum Process or Throughput Rate:    Units:
4. Maximum Production Rate:                      Units:
5. Operating Capacity Comment (limit to 200 characters): The maximum heat input rate given above is for residual oil firing.

#### Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/yr	8760 hours/yr

**D. EMISSIONS UNIT REGULATIONS**  
**(Regulated Emissions Units Only)**

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

Not Applicable

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

## Emissions Unit ID 2

40 C.F.R. 279.72	40 C.F.R. 75 Appendix B	40 C.F.R. 75.35	F.A.C. 62-214.300
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.36	F.A.C. 62-214.330
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.4(a)(4)(ii)	F.A.C. 62-214.350 (2)
40 C.F.R. 72.20(c)	40 C.F.R. 75 Appendix D	40 C.F.R. 75.5	F.A.C. 62-214.350 (3)
40 C.F.R. 72.21(a)	40 C.F.R. 75 Appendix F	40 C.F.R. 75.51(c)	F.A.C. 62-214.350 (5)
40 C.F.R. 72.21(b)	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(a)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.53(b)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.22(a)	40 C.F.R. 75 Appendix H	40 C.F.R. 75.53(c)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.22(c)	40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.53(d)(1)	F.A.C. 62-214.370 (4)
40 C.F.R. 72.23	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.54	F.A.C. 62-214.370 (7)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(3)(i)	40 C.F.R. 75.55(c)	F.A.C. 62-214.430
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.55(e)	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.10(b)	40 C.F.R. 75.56	paragraph 2
40 C.F.R. 72.30(c)	40 C.F.R. 75.10(c)	40 C.F.R. 75.60(a)	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.30(d)	40 C.F.R. 75.10(d)	40 C.F.R. 75.60(b)	F.A.C. 62-296.405(1)(c)1. g.
40 C.F.R. 72.32	40 C.F.R. 75.10(f)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-296.405(1)(d)2.
40 C.F.R. 72.33(b)	40 C.F.R. 75.10(g)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.33(c)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(a)(5)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.33(d)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.61(b)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.40(a)	40 C.F.R. 75.11(d)	40 C.F.R. 75.62	F.A.C.
40 C.F.R. 72.40(b)	40 C.F.R. 75.12(a)	40 C.F.R. 75.63	62-296.405(1)(f)1. a.(i)
40 C.F.R. 72.40(c)	40 C.F.R. 75.12(b)	40 C.F.R. 75.64(a)	F.A.C. 62-296.405(1)(f)1. b.
40 C.F.R. 72.40(d)	40 C.F.R. 75.13(a)	40 C.F.R. 75.64(b)	F.A.C. 62-296.700(2)(b)
40 C.F.R. 72.51	40 C.F.R. 75.13(b)	40 C.F.R. 75.64(c)	F.A.C. 62-297.310(1)
40 C.F.R. 72.90	40 C.F.R. 75.14(a)	40 C.F.R. 75.64(d)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.65	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(a)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.20(c)	40 C.F.R. 75.66(b)	F.A.C. 62-297.310(4)(a)2. c.
40 C.F.R. 72.9(b)	40 C.F.R. 75.20(d)	40 C.F.R. 75.66(c)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.20(f)	40 C.F.R. 75.66(d)	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.20(g)	40 C.F.R. 75.66(g)	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(a)	40 C.F.R. 75.66(h)	F.A.C. 62-297.310(4)(e)
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.21(b)	40 C.F.R. 76.13	F.A.C. 62-297.310(5)
40 C.F.R. 72.9(d)	40 C.F.R. 75.21(c)	40 C.F.R. 77.3	F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(e)	40 C.F.R. 75.21(d)	40 C.F.R. 77.5(b)	F.A.C. 62-297.310(6)(c)
40 C.F.R. 72.9(f)	40 C.F.R. 75.21(e)	40 C.F.R. 77.6	F.A.C. 62-297.310(6)(d)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.21(f)	F.A.C. 62-204.800(12)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 73.33	40 C.F.R. 75.22	(state only)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 73.35	40 C.F.R. 75.24	F.A.C. 62-204.800(13)	F.A.C. 62-297.310(6)(g)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.30(a)(1)	(state only)	F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(2)	F.A.C. 62-204.800(14)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.30(a)(3)	(state only)	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.31	F.A.C. 62-210.650	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.32	F.A.C. 62-210.700 (1)	F.A.C. 62-297.310(7)(a)5.
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.33	F.A.C. 62-210.700 (2)	F.A.C. 62-297.310(7)(a)9.
		F.A.C. 62-210.700 (3)	F.A.C. 62-297.310(7)(c)
		F.A.C. 62-210.700 (4)	F.A.C. 62-297.310(8)
		F.A.C. 62-210.700 (6)	Table 62-297.310-1

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

**Emission Point Description and Type**Information for Facility-ID 1 Emission Unit # : 2

1. Identification of Point on Plot Plan or Flow Diagram: Unit 2 boiler
2. Emission Point Type Code (1,2,3,4) : 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): The EU-2 emission unit (Unit 2 boiler) has one emission point which is the stack.
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission unit 2, Manatee Unit 2 boiler.
5. Discharge Type Code (D, F, H, P, R, V, W) : v
6. Stack Height: 499 ft
7. Exit Diameter: 26.2 ft
8. Exit Temperature: 327 °F
9. Actual Volumetric Flow Rate: 2568733.4 acfm
10. Percent Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm
12. Nonstack Emission Point Height: ft
13. Emission Point UTM Coordinates: Zone: 17 East: 36.72 North: 3054.1
14. Emission Point Comment (limit to 200 characters): Information provided in item #8 and #9 reflects the highest recorded data measured during the June 1994 particulate test at this unit. Flow rates at other times may vary from the number above.

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 1 9

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 boiler firing number 6 oil
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 56.9
5. Maximum Annual Rate: 498513
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 1
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler burning propane
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 8.65
5. Maximum Annual Rate: 865
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur:
8. Maximum Percent 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 #6 oil, #2 oil, propane or on-spec. used oil from FPL operations. Propane is used primarily for lighting off the boiler for start-up.



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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 3 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 boiler firing on-specification used oil
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 0.5
5. Maximum Annual Rate: 20
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 1
8. Maximum Percent Ash:
9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 4 25

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler firing Number 2 diesel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: Thousand gallons burned
4. Maximum Hourly Rate: 63.603
5. Maximum Annual Rate: 557162.3
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.007
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): T

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 2 Boiler chemical cleaning waste evaporation. This process may be undertaken while firing #6 residual 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 Percent Sulfur:
8. Maximum Percent 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).

**G. EMISSIONS UNIT POLLUTANTS**  
**(Regulated Emissions Units Only)****Information for Facility\_ID: 1 Emission Unit #: 2**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOX	026	025	EL
CO	NA	NA	NS
PM	077	NA	EL
PM10	077	NA	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

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

Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 1

### Pollutant Detail Information

1. Pollutant Emitted: Sulfur Dioxide	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 9515 lbs/hr	41675.7 tons/yr
4. Synthetically Limited? (Yes/No): No	
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3) : to tons/yr	
6. Emission Factor: 1.1	Units lb/mmBtu
Reference: DEP Rule 62-297.405(1)(c)1.g.	
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0 <div style="display: flex; justify-content: space-around; margin-top: 5px;"> <span>[ ] 1</span> <span>[ ] 2</span> <span>[ ] 3</span> <span>[ ] 4</span> <span>[ ] 5</span> </div>	
8. Calculation of Emissions (limit to 600 characters): 1.1 lb/mmBtu * 8650 mmBtu/hr = 9515.0 lb/hr  (9515.0 lb/hr * 8760 hr/yr) / 2000 lb/ton = 41675.7 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

**Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 1**  
**Basis For Allowable Emission #: 1**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code:      Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.1      Units : lb/mmBtu
4. Equivalent Allowable Emissions: 9515 lbs/hr 41675.7 tons/yr
5. Method of Compliance:    DEP Rule 62-296.405(1)(e)3.
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): 155 1.1 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-296.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.

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

**Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 2**

**Pollutant Detail Information**

1. Pollutant Emitted: Nitrogen Oxides	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 2595 lbs/hr	11366.1 tons/yr
4. Synthetically Limited? (Yes/No): No	
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3) : to tons/yr	
6. Emission Factor: 0.3 Units lb/mmBtu Reference: Rule 62-296.405(1)(d)2.	
7. Emissions Method Code: (0, 1, 2, 3, 4, 5): 0 [ ] 0 [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5	
8. Calculation of Emissions (limit to 600 characters): 0.3 lb/mmBtu * 8650 mmBtu/hr = 2595 lb/hr  (2595 lb/hr * 8760 hr/yr) / 2000 lb/ton = 11366.1 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):	

**Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 2**  
**Basis For Allowable Emission #: 1**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code: Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 Units : lb/mmBtu
4. Equivalent Allowable Emissions: 2595 lbs/hr 11366.1 tons/yr
5. Method of Compliance: Continuous Emission Monitoring
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): 95 0.3 lb/mmBtu is the current permit limit on nitrogen oxides emissions [30-day rolling average].



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

Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 4

### Pollutant Detail Information

1. Pollutant Emitted:      Particulate Matter - Total
2. Total Percent Efficiency of Control: _____ %
3. Potential Emissions:   1081.25 lbs/hr                      4735.9 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3) : to    tons/yr
6. Emission Factor:   0.125                      Units   lb/mmBtu Reference:    DEP Rule 62-296.405(1)(b) and Rule 62-210.700(3)
7. Emissions Method Code: (0, 1, 2, 3, 4, 5):   0 <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
8. Calculation of Emissions (limit to 600 characters): 0.125lb/mmBtu x 8650mmBtu/hr = 1,081.25 lb/hr 1,081.25lb/hr x 8760hrs/yr x ton/2000lb = 4,735.9 tons/yr  (Note that 3 hrs@0.3 lb/mmBtu & 21 hrs@0.1 lb/mmBtu) = avg 0.125 lb/mmBtu
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): 0.1 lb/mmBtu represents steady-state conditions. 0.3 lb/mmBtu is the emission limit for soot blowing and load changing conditions in the existing permit for up to 3 hrs in 24 hrs.

**Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 4**  
**Basis For Allowable Emission #: 1**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 Units : lb/mmBtu
4. Equivalent Allowable Emissions: 865 lbs/hr 3315.11 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): 175 0.1 lb/mmBtu is the current regulatory limit on PM emissions for 21 hours in 24 hours [Rule 62-296.340(1)(e)]. Equivalent allowable emissions are given for liquid fuel firing.

**Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 4**  
**Basis For Allowable Emission #: 2**

**Allowable Emissions** (Pollutant identified on front page)

1. Basis for Allowable Emissions Code: Emissions limit required by rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 Units : lb/mmBtu
4. Equivalent Allowable Emissions: 2595 lbs/hr 1420.8 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
6. Pollutant Allowable Emissions Comment ( <b>Desc. of Related Operating Method/Mode</b> ) (limit to 200 characters): <b>185</b> Data is for soot-blowing firing liquid fuel. Equiv. allowable emissions are for liquid fuel firing. 0.3 lb/mmBtu is the current regulatory limit on PM for a max. of 3 hours in 24 hours.

# **I. VISIBLE EMISSIONS INFORMATION** **(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 2

Visible Emissions Limitation #: 1

1. Visible Emissions Subtype: VE40			
2. Basis for Allowable Opacity Code(R/O):    RULE <input type="checkbox"/> Rule <input type="checkbox"/> Other			
3. Allowable Opacity: Normal Conditions: 40                                  %    Exceptional Conditions:        % Maximum Period of Excess Opacity Allowed:        min/hr			
4. Method of Compliance Code:    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.			

## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID : 1 Emission Unit #: 2

### Visible Emissions Limitation #: 2

1. Visible Emissions Subtype:	VE60
2. Basis for Allowable Opacity Code(R/O):	RULE      [ ] Rule      [ ] Other
3. Allowable Opacity:	
Normal Conditions:	60 % Exceptional Conditions: 100 %
Maximum Period of Excess Opacity Allowed:	24 min/hr
4. Method of Compliance Code:	EPA Method 9
5. Visible Emissions Comment (limit to 200 characters):	
	Rule 62-210.700(3), F.A.C. limits soot blowing & load changing to 60% opacity for up to 3 hrs/24 hrs, with < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.

## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID : 1 Emission Unit #: 2

Visible Emissions Limitation #: 3

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

## J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID : 1 Emission Unit #: 2  
Continuous Monitor #: 3

### Continuous Monitoring System

1. Parameter Code:			
2. Pollutant(s):		Carbon dioxide	
3. CMS Requirement Code(R/O):		RULE	Rule / Other
4. Monitor Information:			
Manufacturer:		Milton Roy	
Model Number:		3300	Serial Number: N3K4365T
5. Installation Date (DD-MON-YYYY): 02/07/94			
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94			
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(3)(i)			

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 2  
Continuous Monitor #: 4

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Volumetric flow rate	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information: Manufacturer: Air Monitor Model Number: MASSTRON		
Serial Number: 5743D		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1)		



**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 2  
Continuous Monitor #: 2

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s): Nitrogen Oxides		
3. CMS Requirement Code(R/O): RULE Rule / Other		
4. Monitor Information: Manufacturer: TECO Model Number: 42 Serial Number: 42-45958-275K		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(2)		

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 2  
Continuous Monitor #: 1

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Sulfur Dioxide	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information: Manufacturer: TECO Model Number: 43B		
Serial Number: 43B-46687-276 .		
5. Installation Date (DD-MON-YYYY): 02/07/94		
6. Performance Specification Test Date (DD-MON-YYYY): 11/09/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1)		

**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 2  
 Continuous Monitor #: 5

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Visible emissions (opacity)	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information:		
Manufacturer: Lear Siegler		
Model Number: RM41	Serial Number: 243	
5. Installation Date (DD-MON-YYYY): 01/01/76		
6. Performance Specification Test Date (DD-MON-YYYY): 12/07/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(4). Since the opacity monitors were just recertified, the original installation date is unknown. The date of manufacture is used as the installation date.		

**J. CONTINUOUS MONITOR INFORMATION  
(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 2  
Continuous Monitor #: 5

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):	Visible emissions (opacity)	
3. CMS Requirement Code(R/O):	RULE	Rule / Other
4. Monitor Information:		
Manufacturer: Lear Siegler		
Model Number: RM41		Serial Number: 1926
5. Installation Date (DD-MON-YYYY): 01/01/76		
6. Performance Specification Test Date (DD-MON-YYYY): 12/07/94		
7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(4). Since the opacity monitors were just recertified, the original installation date is unknown. The date of manufacture is used as the installation date.		

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

Information for Facility-ID : 1 Emission Unit # : 2

**PSD Increment Consumption Determination**

**1. Increment Consuming for Particulate Matter or Sulfur Dioxide?**

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

Select (1-5) : 5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 5 ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

## 2. Increment Consuming for Nitrogen Dioxide?

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

Select (1-5) : 5

- [ 1 ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 5 ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

### 3. Increment Consuming/Expanding Code: (C, E, U- unkown):

PM	U
SO2	U
NO2	U

### 4. Baseline Emissions:

PM	lbs/hr	tons/yr
SO2	lbs/hr	tons/yr
NO2	tons/yr	

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

Information for Facility-ID : 1 Emission Unit # : 2

**Supplemental Requirements for All Applications**

1.. Process Flow Diagram : PMTEU2_1.bmp Attached Document ID / Not Applicable / Waiver Requested
2. Fuel Analysis or Specification: PMTU1_2.doc Attached Document ID / Not Applicable / Waiver Requested
3. Detailed Description of Control Equipment : PMTU1_3.doc Attached Document ID / Not Applicable / Waiver Requested
4. Description of Stack Sampling Facilities : PMTEU2_4.bmp Attached Document ID / Not Applicable / Waiver Requested
5. Compliance Test Report : Previously submitted, Date = July 15, 1994 Attached Document ID / Previously submitted, Date / Not Applicable
6. Procedures for Startup and Shutdown : PMTU1_6.doc Attached Document ID / Not Applicable
7. Operation and Maintenance Plan : NA Attached Document ID / Not Applicable
8. Supplemental Information for Construction Permit Application : NA Attached Document ID / Not Applicable
9. Other Information Required by Rule or Statute : NA Attached Document ID / Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation : PMRU1\_10.doc  
Attached Document ID / Not Applicable

11. Alternative Modes of Operation (Emissions Trading) : Not Applicable  
Attached Document ID / Not Applicable

12. Identification of Additional Applicable Requirements : Not Applicable  
Attached Document ID / Not Applicable

13. Enhanced Monitoring Plan : Not Applicable  
Attached Document ID / Not Applicable

14. Acid Rain Permit Application

Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))  
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))  
Attached Document ID: Not Applicable

New Unit Exemption (Form No. 17-210.900(1)(c))  
Attached Document ID: Not Applicable

Retired Unit Exemption (Form No. 17-210.900(1)(c))  
Attached Document ID: Not Applicable

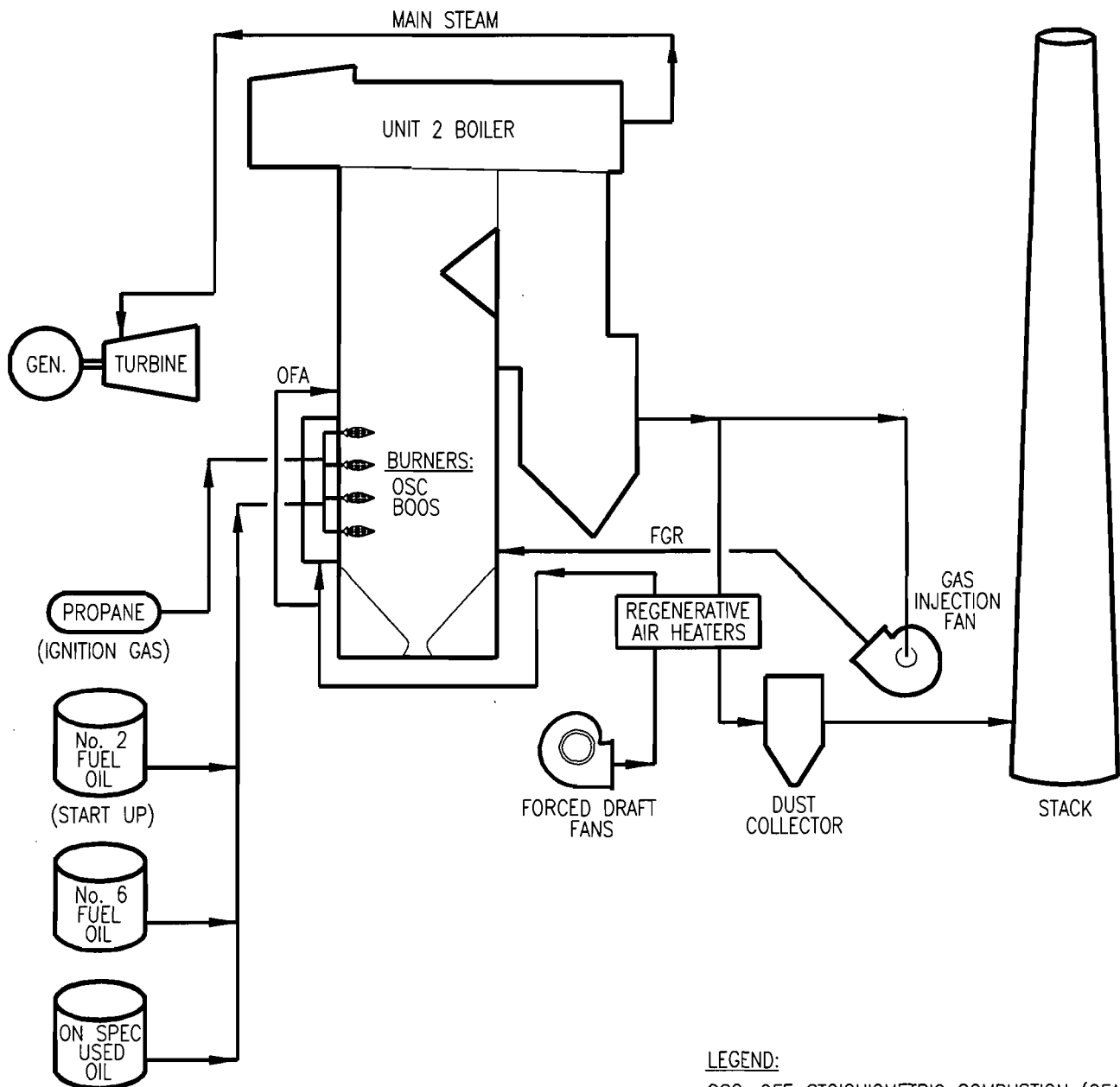
Not Applicable



5. PSD Comment (limit to 200 characters):

Construction commenced on this unit prior to the PSD baseline date of July 5, 1975. FPL believes that PSD does not apply to this unit.

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



PERMITTED FUEL OPTIONS

## LEGEND:

OSC: OFF-STOICHIOMETRIC COMBUSTION (OFA)  
 BOOS: BURNERS OUT OF SERVICE  
 FGR: FLUE GAS RECIRCULATION  
 OFA: OVER FIRE AIR

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

	SYSTEM	YY	DISCIPLINE	M	PLANT/UNIT	MANATEE PLANT
	SCALE	N/A	CAD FILE NAME	MT002596	TITLE	EMISSION UNIT PROCESS FLOW DIAGRAM
	DRAWING SIZE	A (8.5X11)	FPL ARCHIVE NAME	MT002596		STEAM GENERATOR/BOILER
						ATTACHMENT NO. EU2
DRAWING NUMBER						SHEET
PMT1-M0105-YY						1 OF 1
						REV
						0

## Attachment PMTU2\_12.txt

### Identification of Additional Applicable Requirements

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

Air operation permit No. AO41-219341 contains the following conditions:

1. Heat input rate for Unit 2 is not to exceed 8,650 mmBtu/hour while burning No.6 residual fuel oil. *FPL tracks heat input on a continuous basis using fuel sampling and analysis and fuel flow measurement.*
2. The boiler shall be fired with a variable combination of No.6 residual fuel oil, No.2 fuel oil, propane gas or on-specification used oil from FPL operations. *FPL tracks the fuel usage on a continuous basis.*
3. The maximum allowable emissions for Unit 2 are as follows:

Pollutant	Fuel	Emission Limit	Test Method
<u>Particulate Matter</u> - Steady-State	Oil	0.1 lb/mmBtu	EPA Method 5 or 17
Soot Blowing or Load Changing.	Oil	0.3 lb/mmBtu (3 hrs/24 hrs.)	EPA Method 5 or 17
<u>Sulfur Dioxide</u> -	Oil	1.1 lb/mmBtu	Monthly Fuel Analysis
<u>Nitrogen Oxides</u> -	Oil	0.30 lb/mmBtu	Continuous Emissions Monitor (CEMS).
<u>Visible Emissions</u> - Steady-State	Oil	40 percent opacity	DEP Method 9
Soot Blowing or Load Changing.	Oil	60 percent opacity (3 hrs/24 hrs.)	DEP Method 9

*FPL conducts annual compliance testing to determine compliance with the emission limitations. However, in the case of NOx emissions, FPL has opted to used the CEMS as the compliance determination method.*

In the matter of:

Petition for Reduction in Quarterly  
Particulate Emissions Compliance  
Testing;  
FLORIDA POWER AND LIGHT COMPANY,

Petitioner.

OGC Case Nos.: 83-0578  
83-0577, 83-0576,  
83-0585, 83-0586,  
83-0587, 83-0588  
83-0581, 83-0580

ED

ORDER GRANTING PETITION FOR REDUCED  
FREQUENCY OF PARTICULATE TESTING

On September 16, 1983, the Petitioner, FLORIDA POWER AND LIGHT COMPANY, filed a Petition for Reduction in Quarterly Particulate Emissions Compliance Testing pursuant to Florida Administrative Code Rule 17-2.600(5)(b)1 for the following fossil fuel steam generating units:

Port Everglades Plant Unit No. 2  
Port Everglades Plant Unit No. 3  
Port Everglades Plant Unit No. 4  
Turkey Point Plant Unit No. 1  
Turkey Point Plant Unit No. 2  
Riveria Plant Unit No. 3  
Riveria Plant Unit No. 4  
Manatee Plant Unit No. 1  
Manatee Plant Unit No. 2

Each of the units has a heat input exceeding 250 million Btu per hour.

The petition and supporting documentation submitted by the Petitioner indicate that between August 1979 and July 21, 1983, these units were afforded relief from the particulate standard contained in Florida Administrative Code Rule 17-2.600(5)(b)2 under the terms of a Department-issued variance. During the same period of time the Company elected to test quarterly as permitted under Rule 17-2.600(5)(b)1. Despite the existence of the variance, the tests results submitted during the last two years reveal that each of the above-listed units met the particulate emissions limitations contained in Rule 17-2.600(5)(b)2 of 0.1 pounds per million Btu heat input.

Florida Administrative Code Rule 17-2.600(5)(b)1 specifically provides that I may reduce the frequency of particulate testing

upon a demonstration that the particulate standard has been regularly met. The particulate standard referred to is the general standard found in the rule--0.1 parts per million Btu heat input--not a relaxed emission limit established by a variance.

The intent of Rule 17-2.600(5)(b)1 is to ensure that before the frequency of particulate testing is reduced, the source has established a record of complying with the requirements of Florida Administrative Code Chapter 17-2 relating to particulate matter emissions. Petitioner has documented that each of these units has a history of regularly complying with the particulate matter standard applicable to them.

IT IS ORDERED that the present petition is GRANTED. Under the terms of Rule 17-2.600(5)(b)1, Petitioner may reduce the frequency of particulate testing to an annual basis for each of the units named in this Order. If, however, any of the units fails to comply with the applicable particulate or visible emission standard, this Order will terminate upon written notice by the Department.

The Petitioner may request a hearing in accordance with Section 120.57, Florida Statutes, and Florida Administrative Code Chapters 17-1 and 28-5. The request for hearing must be filed (received) in the Office of General Counsel of the Department, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within (14) days of receipt of this Order. Failure to file a request for hearing within this time shall constitute a waiver of Petitioner's right to request a hearing under Section 120.57, Florida Statutes.

DONE and ORDERED this 24 day of April, 1984.

IN WITNESS WHEREOF, I have hereunto set my hand and the seal of the Department of Environmental Regulation, at Tallahassee, Florida, this 24th day of April, 1984.

Clerk

Date

VICTORIA J. TSCHINKEL  
Secretary

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION  
2600 Blair Stone Road  
Tallahassee, Florida 32301  
(904) 488-4805

00037

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Order Denying  
Petition for Reduced Frequency of Particulate Testing and the  
Order Granting Petition for Reduced Frequency of Particulate  
Testing have been furnished by U.S. Mail to Peter C. Cunningham,  
Esquire, Hop, ing Boyd Green and Sams, Post Office Box 6326,  
Tallahassee, Florida 32314 this 25th day of April, 1984.

Nancy E. Wright  
NANCY E. WRIGHT  
Assistant General Counsel

State of Florida Department  
of Environmental Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32301  
904/488-9730

In the matter of: )  
 )  
Florida Power and Light )  
Co., Inc. )  
 )  
Petitioner )  
\_\_\_\_\_ )

ASP-86-E01

SEP 11 1986  
EPA-86-000000

**ORDER APPROVING REQUEST FOR ALTERNATIVE  
PROCEDURES AND REQUIREMENTS**

Pursuant to Section 17-2.700 (3), Florida Administrative Code, Petitioner Florida Power and Light Company ("Petitioner") submitted to the Department a request for approval of alternate source sampling procedures and requirements. Having considered the written request, a copy of which is attached hereto as Exhibit 1, and supporting documentation, the following Findings of Fact, Conclusions of Law and Order are entered:

**FINDINGS OF FACT**

1. On May 30, 1986, Petitioner submitted a written request for approval of alternative procedures and requirements for Manatee Plant Units 1 and 2.
2. The petition requested that the Department grant Petitioner the authority to use EPA Reference Method 7E as an alternate procedure for measuring nitrogen oxides (NO<sub>x</sub>) emissions from the facility.
3. As grounds for the request, Petitioner has stated that using EPA Reference Method 7E in place of the existing EPA Reference Method 7, would allow the testing to be done quicker and would save Petitioner about \$4000 per test. The Petitioner also stated that Reference Method 7E would soon be certified by the Federal government as an adequate procedure for demonstrating compliance with NO<sub>x</sub> emissions. EPA Reference Method 7E was subsequently promulgated in the Federal Register as an approved method on June 11, 1986.
4. After review of the petition and supporting documentation, the Department finds that the alternate procedures and requirements would be adequate for the affected air pollution sources to demonstrate compliance with applicable emission limiting standards.

CONCLUSIONS OF LAW

5. The relief requested is within the scope of relief which can be granted by the Department pursuant to Section 403.061, Florida Statutes, and Section 17-2.700 (3), Florida Administrative Code. Such relief does not relieve Petitioner of the responsibility to comply with all applicable emission limiting standards, ambient air quality standards, or other permit conditions.

ORDER

6. Having considered the petition and supporting documentation, it is hereby ORDERED that:

The relief requested by Petitioner is granted. Therefore, specific condition No. 1 of permit No. A041-51630 and specific condition 1 of permit No. A041-64792 are hereby amended to reflect that Petitioner, Florida Power and Light Company is authorized to utilize EPA Reference Method 7E to demonstrate compliance at Manatee Plant Units 1 and 2.

This order shall constitute final agency action by the Department pursuant to Section 120.52 (9), Florida Statutes. The Petitioner may file a petition for an administrative hearing on this order within twenty-one (21) days of receipt of the order. The petition shall be filed with the Department of Environmental Regulation, Office of General Counsel, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32301, and shall be in the form required by Chapters 17-103 and 28-5, Florida Administrative Code. Failure to file a petition within the time specified above shall constitute a waiver by the Petitioner to an administrative hearing under Chapter 120, Florida Statutes.

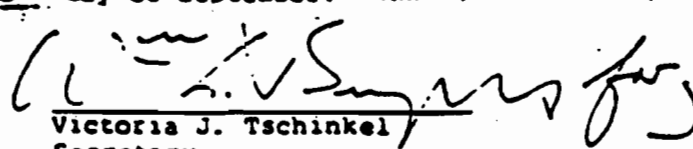
Done and ordered this 5 day of September, 1986 in Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 (9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

C. A. Huth  
Clerk

9-5-86  
Date

  
Victoria J. Tschinkel  
Secretary

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION  
2600 Blair Stone Road  
Tallahassee, Florida 32301

Telephone: (904) 488-4805



**17-2.700(3) EXCEPTIONS AND APPROVAL OF ALTERNATE  
PROCEDURES AND REQUIREMENTS**

**REQUEST FOR EXCEPTION**

**PLANT:** Manatee

**PROVISION TO BE EXCEPTED:** Section 17-2.700(2)(a) ., F.A.C. and Specific Condition 1 of the Air Permits A041-51630 and A041-64792

**BASIS OF REQUEST:** EPA Reference Method 7E has been promulgated in the Federal Register; will allow quicker testing; and will save the petitioner approximately \$4000 per each test.

### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID : 1 Emission Unit # : 3

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

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

##### Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Units? Check one:

- ☐ 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 a unregulated emissions unit.

2. Single Process, Group Processes, or Fugitive Only?

Enter The Number (1-3): 2

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point(stack or vent) but may also produce fugitive emissions.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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

**Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unregulated emission Units
2. Emissions Unit Identification Number: Unk (No Corresponding ID or Unknown)
3. Emission Unit Status Code: (A or C) : A
4. Acid Rain Unit? (Y/N): N
5. Emissions Unit Major Group SIC Code: 4911
6. Emissions Unit Comment (limit to 500 characters): This emission unit section includes all sources of emissions that are unregulated at the facility, including the diesel generator, which is used as an emergency power supply to provide electric power to essential plant equipment in the event of a loss of external power to the facility, while the main units are off-line.

**Emissions Unit Control Equipment**

**A. Control Equipment # : 1**

1. Description (limit to 200 characters): None
2. Control Device or Method Code:

**B. Control Equipment # :**

1. Description (limit to 200 characters):

2. Control Device or Method Code:

**C. Control Equipment # :**

1. Description (limit to 200 characters):

2. Control Device or Method Code:

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

#### Emissions Unit Details

1. Initial Startup Date (DD-MON-YYYY): 10/01/76
2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
3. Package Unit: Manufacturer: Detroit Diesel. <span style="float: right;">Model Number: 9163-7301</span>
4. Generator Nameplate Rating: 0.8 MW
5. Incinerator Information: <div style="text-align: right; margin-right: 50px;">Dwell Temperature: °F</div> <div style="text-align: right; margin-right: 50px;">Dwell Time: seconds</div> <div style="text-align: right;">Incinerator Afterburner Temperature: °F</div>

#### Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: 9.97 mmBtu/hr
2. Maximum Incineration Rate:    lbs/hr <div style="text-align: right;">tons/day</div>
3. Maximum Process or Throughput Rate:    Units:
4. Maximum Production Rate:                      Units:
5. Operating Capacity Comment (limit to 200 characters): Information provided is for the diesel generator, which is limited to 400 hrs / yr of operation. Other emission units in this section may operate up to 8760 hours per year.

#### Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:	
hours/day	days/week
weeks/yr	8760 hours/yr

**D. EMISSIONS UNIT REGULATIONS**  
**(Regulated Emissions Units Only)**

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

Not Applicable

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

Emissions Unit ID 3

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

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

**Emission Point Description and Type**

Information for Facility-ID 1 Emission Unit # : 3

1. Identification of Point on Plot Plan or Flow Diagram: Emergency Diesel Gen
2. Emission Point Type Code (1,2,3,4) : 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:
5. Discharge Type Code (D, F, H, P, R, V, W) : H
6. Stack Height: 16 ft
7. Exit Diameter: 1.17 ft
8. Exit Temperature: 710 °F
9. Actual Volumetric Flow Rate: 10770 acfm
10. Percent Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm
12. Nonstack Emission Point Height: ft
13. Emission Point UTM Coordinates: Zone: 17 East: North:
14. Emission Point Comment (limit to 200 characters):



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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 3 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Diesel fuel burned in the emergency diesel generator
2. Source Classification Code (SCC): 2-02-001-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 0.0733
5. Maximum Annual Rate: 29.32
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash: 0
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): The maximum annual rate is calculated based upon 400 hours per year of operation.

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 3 Segment #: 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #TA - 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: 1002206425
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 115.91 lbs VOC / yr (per EPA Tanks2 program) Working loss = 337.27 lbs VOC / yr (per EPA Tanks2) Total estimated losses = 0.23 TPY, using estimated activity factor given above.

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

**Segment Description and Rate:**

Information for Facility\_ID :1 Emission Unit #: 3 Segment #: 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #B - 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: 1002206425
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 115.91 lbs VOC / yr (per EPA Tanks2 program) Working loss = 337.27 lbs VOC / yr (per EPA Tanks2) Total estimated losses = 0.23 TPY, using estimated activity factor given above.

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

**Segment Description and Rate:**

Information for Facility\_ID : / Emission Unit #: 3 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (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: 1002206425
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 5.56 lbs VOC / yr (per EPA Tanks2 program) Working loss = 85.06 lbs VOC / yr (per EPA Tanks2) Total estimated losses = 0.45 TPY, using estimated activity factor given above.

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

**Segment Description and Rate:**

Information for Facility\_ID : / Emission Unit #: 3 Segment #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (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: 1002206425
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): Breathing loss = 5.56 lbs VOC / yr (per EPA Tanks2 program) Working loss = 85.06 lbs VOC / yr (per EPA Tanks2) Total estimated losses = 0.45 TPY, using estimated activity factor given above.

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

**Segment Description and Rate:**

Information for Facility\_ID : 1 Emission Unit #: 3 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Above-ground tank #LO - 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: 57296118
7. Maximum Percent Sulfur:
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): Tot. est. losses = 0.27 TPY, using est. activity factor given above. Data reflects one unit @ max thruput

**G. EMISSIONS UNIT POLLUTANTS**  
**(Regulated Emissions Units Only)**

**Information for Facility\_ID: 1 Emission Unit #: 3**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	NS
NOX	NA	NA	NS
CO	NA	NA	NS
VOC	NA	NA	NS

**I. VISIBLE EMISSIONS INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 3

Visible Emissions Limitation #:

1. Visible Emissions Subtype: VE20
2. Basis for Allowable Opacity Code(R/O): OTHER <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: 20                      % Exceptional Conditions: 100    % Maximum Period of Excess Opacity Allowed:    min/hr
4. Method of Compliance Code:
5. Visible Emissions Comment (limit to 200 characters): The variety of equipment in this EU may be subject to the general visible emission standard, if they emit PM.



**J. CONTINUOUS MONITOR INFORMATION**  
**(Regulated Emissions Units Only)**

Information for Facility-ID : 1 Emission Unit #: 3  
Continuous Monitor #: 1 11

**Continuous Monitoring System**

1. Parameter Code:		
2. Pollutant(s):		
3. CMS Requirement Code(R/O):	Rule	/ Other
4. Monitor Information: Manufacturer: Model Number:		
Serial Number:		
5. Installation Date (DD-MON-YYYY):		
6. Performance Specification Test Date (DD-MON-YYYY):		
7. Continuous Monitor Comment (limit to 200 characters): Continuous monitors are not required for the emergency diesel generators.		

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

Information for Facility-ID : 1 Emission Unit # : 3

**PSD Increment Consumption Determination**

**1. Increment Consuming for Particulate Matter or Sulfur Dioxide?**

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

Select (1-5) : 5

- [ 1 ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 5 ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

## 2. Increment Consuming for Nitrogen Dioxide?

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

Select (1-5) : 5

- [ 1 ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. Final determination is that emissions unit consumes increment.
- [ 2 ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 17-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 3 ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 4 ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. Preliminary determination is that baseline emissions are zero, and emissions unit consumes increment.
- [ 5 ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

## 3. Increment Consuming/Expanding Code: (C, E, U- unkown):

PM	U
SO2	U
NO2	U

## 4. Baseline Emissions:

PM	lbs/hr	tons/yr
SO2	lbs/hr	tons/yr
NO2	tons/yr	

5. PSD Comment (limit to 200 characters):

Construction commenced on this unit prior to the PSD baseline date of July 5, 1975. FPL believes that PSD does not apply to this unit.

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

Information for Facility-ID : 1 Emission Unit # : 3

**Supplemental Requirements for All Applications**

1. Process Flow Diagram : PMRU3_1.bmp Attached Document ID / Not Applicable / Waiver Requested
2. Fuel Analysis or Specification: PMRU3_2.txt Attached Document ID / Not Applicable / Waiver Requested
3. Detailed Description of Control Equipment : Not Applicable Attached Document ID / Not Applicable / Waiver Requested
4. Description of Stack Sampling Facilities : Not Applicable Attached Document ID / Not Applicable / Waiver Requested
5. Compliance Test Report : Not Applicable Attached Document ID / Previously submitted, Date / Not Applicable
6. Procedures for Startup and Shutdown : PMRU3_6.txt Attached Document ID / Not Applicable
7. Operation and Maintenance Plan : NA Attached Document ID / Not Applicable
8. Supplemental Information for Construction Permit Application : NA Attached Document ID / Not Applicable
9. Other Information Required by Rule or Statute : NA Attached Document ID / Not Applicable

**Additional Supplemental Requirements for Category I Applications Only**

10. Alternative Methods of Operation : NA Attached Document ID / Not Applicable
11. Alternative Modes of Operation (Emissions Trading) : NA Attached Document ID / Not Applicable
12. Identification of Additional Applicable Requirements : PMRU9_13.txt Attached Document ID / Not Applicable
13. Enhanced Monitoring Plan : Not Applicable Attached Document ID / Not Applicable
14. Acid Rain Permit Application  Acid Rain Application - Phase II (Form No. 17-210.900(1)(a)) Attached Document ID: Not Applicable  Repowering Extension Plan (Form No. 17-210.900(1)(b)) Attached Document ID: Not Applicable  New Unit Exemption (Form No. 17-210.900(1)(c)) Attached Document ID: Not Applicable  Retired Unit Exemption (Form No. 17-210.900(1)(c)) Attached Document ID: Not Applicable  Not Applicable

**ATTACHMENT PMT - FW****LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS**

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

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

ATTACHMENT PMT - FW

LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK

Main Steam - Hot & Cold

$\frac{3}{4}$ " Vents to Atmosphere

6" Pressure Relief Valves

Extraction Steam

Vents to Atmosphere

Auxiliary Steam Chemical Feed Chlorine & Gas Purging Systems

Waterbox Vacuum Pump Pressure Relief Valve  $2\frac{1}{2}$ " (Safety)

Waterbox Vacuum Silencer Separator Vent

12" Steam Air Ejector Exhaust

Air Leakage Rotameter Vent

3" After Condenser Vent

4" Condenser P.D.I. Vent

2" Condenser Relief Valve (Safety)

$2\frac{1}{2}$ " Generator Vent

$\frac{3}{4}$ " Hydrogen Detector Cabinet Vent

Hydrogen Supply Vent to Atmosphere

$\frac{3}{4}$ " Nitrogen Relief Valve

Nitrogen Purge System



## ATTACHMENT PMT - FW

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### UNITS 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK

CO<sub>2</sub> Relief Valve (Safety)

1" Chlorine Pressure Relief Valve

1/2" Chlorine Dispenser Vent (Safety)

Auxiliary Steam Relief Valves (Safety)

#### Boiler Feedwater

Maintenance Vents to Atmosphere

3" B.F.P. Seal Drain Tank Vent

#### Condensate

Maintenance Vents to Atmosphere

1" Relief Valves

Condensate Storage Tanks Vent  
(400,000 Gallons)

#### Continuous Emission Monitors

C.E.M. Cal. Gases

#### Turbine Gland Seal Steam & Drain Piping

Gland Steam Condenser Exhauster 6" Vent to Atmosphere

#### Closed Cooling Water System

Maintenance Vents to Atmosphere

Cooling Water Heat Exchangers Relief Valve (Safety)

#### Caustic Wash Lime Slurry, Ash Disposal & Reinjection

Steam Relief Valves (Safety)

Condensate Relief Valves (Safety)

Ash Pit

**ATTACHMENT PMT - FW**

**LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS**

Boiler Vents & Drains

Maintenance Vents to Atmosphere

Condensate Recovery Flash Tank Relief Valve 4" (Safety)

Condensate Recovery Tank Vents 4"

Vent Condenser

Blowdown Tank Vent - 22"

Condensate Recovery Drain Cooler

Fuel Oil

Blowback Tank Relief Valve - 1"

Steam Supply Relief Valve

Fuel Oil Storage Tanks Vents 500,000 BBL

Fuel Oil Metering Tanks 6" Vents 24,000 BBL

Light Oil Distillate Tank 6" Vent 2,000 BBL

Water Draw-Off Sumps

Misc. Fuel Oil Maintenance Vents to Atmosphere

Fuel Oil Metering Area Relief Valves

Instrument Air

Water Separator Relief Valve

Receiver Relief Valve

Air Dryer Relief Valve

Service Air

Receiver Relief Valve

Compressor Relief Valve

## ATTACHMENT PMT - FW

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### Turbine Generator Lube Oil System

Batch Tank 4" Vent w/Filter

Lube Oil Reservoir Vapor Educator Vent - 2"

Lube Oil Conditioner Vapor Extractor Vent - 4"

Demister Vent

Lube Oil Conditioner Skid Filter Vents to Atmosphere

#### B.F.P. Lube Oil

B.F.P. Oil Reservoir Vent Fan - 4"

B.F.P. Lube Oil Batch Tank 4" Vent

B.F.P. Lube Oil Condition Vent Fan - 4"

#### Control Building

Battery Room Exhaust Fans

Bathroom Exhaust Fans

Elevator Shaft Exhaust Fan

M.C.C. Areas Exhaust Fans

Lab Exhaust Hoods

#### Circulating & Intake Cooling Water

Cooling Pond

#### Boiler Blowdown

Blowdown Lift Station

1" Vent to Atmosphere

2" Air Release & Vacuum Valve

Blowdown Sump Pit

**ATTACHMENT PMT - FW**

**LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS**

**GENERAL SITE**

Waste Water

Drying Basin

Precip. Basins (2)

Storm Water Basin

Neutralization Basins

Recovered Service Water Sump Pit

Storm Water Basin Oil Separator

Neutralization Basins Sump Pit

Recovered Service Water Sump Pit

Ash Basin recir. Water Sump Pit

Caustic Storage Tank

Oil Holding Tank

Oil Separator Sump Pit

Reactivator Sump Pit

Basin Pumps Sump Pit

Bead Blasters

Raw Water

Raw Water Storage Tanks vent (500,000 Gallons)

4" Well Water Pump Casing Vent

4" Vent to Atmosphere

## ATTACHMENT PMT - FW

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### Service Water

Treated Water Storage Tank Vent 6" (500,000 Gallons)

Maintenance Vents to Atmosphere

#### Potable Water

4" Potable Water Storage Tanks Vent

3" Potable Water Well & Pump Casing Vent

#### Water Treatment

Building vents

Bleach Tank Vent

Polymer Feed Drum

Bleach Feed Drum

Caustic Feed Drum

Acid Feed Drum

30,000 gallon ultrafiltration product tank

Equipment Cleaning tank

#### Miscellaneous Buildings Vent / Exhaust Systems

Lunchroom Building Exhaust Fans

Paint & Lube Oil Storage Building Exhaust Fan

Chlorinator Building Roof Exhaust Fan

Switch yard Control Building Exhaust Fan

Warehouse Exhaust Fans

Paint Shop Exhaust Fan

Chemical Storage Building Exhaust Fans

Fire Equipment Vents

Diesel Generator Building Vents

**ATTACHMENT PMT - FW**

**LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS**

Miscellaneous Buildings Sanitary Vents/Stacks  
Service Bldg.

Control Bldg.

Recreational Pavilion

Miscellaneous Buildings H.V.A.C. (Cooling/Heating)  
C.E.M. Bldgs.

Land Utilization Office Building

Pumpstation Building vents

Service Bldg.

Lunch Room

Control Bldg.

Training Bldg.

Switch Yard

Control Bldg.

Water Treatment

Control Room

Warehouse Office

Recreation Pavilion

Recreational Pavilion  
L.P. Gas Tank

Sewage Treatment Facility  
Open to Atmosphere

## ATTACHMENT PMT - FW

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### Service / Warehouse Building Vent / Exhaust Systems

Roof Mounted Exhaust Fans

Locker Room Exhaust Fan

Tool Room Exhaust Fan

Machine Shop Exhaust Fan

Laundry Exhaust Fan

Solvent Degreaser Tank

Bead Blasting Unit

#### Miscellaneous Vent/Exhaust from Kitchens

Control Room

Service Bldg.

Recreation Pavilion

#### Storm Water Basins

Retention Area

#### Unpaved Areas

Limited Vehicular Traffic

#### Bulk Gas Storage

Hydrogen

Nitrogen

CO<sub>2</sub>

Acetylene

Oxygen

Argon

#### Waste Accumulation

55 Gal. Drum Storage Area

## ATTACHMENT PMT - FW

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Fire Protection  
Control Bldg.

Halon Cylinders

Miscellaneous Activities

Plant Grounds Maintenance

Routine Maintenance/Repair Activities

Non-Halogenated Solvent Cleaning Operators

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

Transformers, Switches and Switchgear, Processing & Venting

Electrically Heated Equipment Used for Heat Treating, Tracing, Drying, Soaking, Case

Use of spray cans and solvents for plant maintenance activities

Hardening or Surface Conditioning

Air Compressors and Centrifuges Used for Compressing Air

Storage of Product in Sealed Containers

Maintenance/Painting Activities

Miscellaneous Mobile Vehicle Operation

Cars, Light Trucks, Heavy Duty Trucks, Back Hoes, Tractors, Forklifts, Cranes, Etc.

Miscellaneous Mobile Equipment Operation

Compressors, Chain Saws, Small Generators, (<100kw

Welding Machines, Electric Saws & Drills, Etc.



## ATTACHMENT PMT - FW

### LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### Miscellaneous Mobile Emergency Diesel Equipment

500 kw Detroit Diesel Generator Enclosed in Trailer

Home Heating and comfort heating with a gross maximum heat output of less than one million Btu/hour.

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

Vacuum pumps used in laboratory operations

Equipment used for steam cleaning

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.

Equipment used exclusively for space heating, other than boilers

Laboratory equipment used exclusively for chemical or physical analysis

Brazing, soldering or welding equipment

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

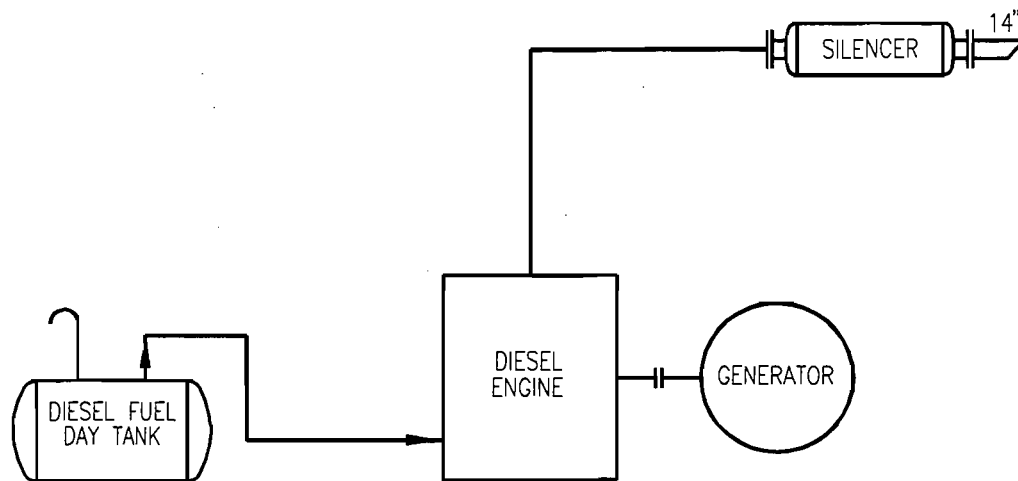
Fire & Safety Equipment

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

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

ATTACHMENT: PMTEU3\_1.bmp

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



BAR CODE

0		8/3/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS										
REV	DATE	REVISION DESCRIPTION			BY	CH	COR	APR										
<table border="1"> <tr> <td rowspan="3"> </td> <td>SYSTEM YY</td> <td>DISCIPLINE M</td> <td>PLANT/UNIT MANATEE PLANT UNITS 1 &amp; 2</td> </tr> <tr> <td>SCALE N/A</td> <td>CAD FILE NAME MT002597</td> <td>TITLE EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU3</td> </tr> <tr> <td>DRAWING SIZE A (8.5X11)</td> <td>FPL ARCHIVE NAME MT002597</td> <td></td> </tr> </table>										SYSTEM YY	DISCIPLINE M	PLANT/UNIT MANATEE PLANT UNITS 1 & 2	SCALE N/A	CAD FILE NAME MT002597	TITLE EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU3	DRAWING SIZE A (8.5X11)	FPL ARCHIVE NAME MT002597	
	SYSTEM YY	DISCIPLINE M	PLANT/UNIT MANATEE PLANT UNITS 1 & 2															
	SCALE N/A	CAD FILE NAME MT002597	TITLE EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU3															
	DRAWING SIZE A (8.5X11)	FPL ARCHIVE NAME MT002597																
DRAWING NUMBER					PMT1-M0106-YY													
					SHEET 1 OF 1		REV 0											

Attachment PMTU3\_2.txt

Fuel Analysis  
No. 2 Distillate oil (typical)<sup>3</sup>

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

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 PMTU3\_6.txt**

### **Procedures for Startup / Shutdown**

The emergency diesel generator is the main backup emergency electrical power supply component for the fossil generating units. The function of the emergency diesel generator is to supply electric power to key power plant equipment during emergency loss-of-power situations. This equipment is typically test-run on a monthly basis for 1 to 2 hours to ensure that it will function properly when needed in an emergency.

Startup for the emergency diesel generator begins with actuating a switch which operates an electric start motor on the diesel engine which "turns over" the diesel engine until ignition of the diesel fuel commences.

Shutdown is performed when the normal electric power supply to plant equipment is restored. Shutdown is performed by shutting off the diesel fuel supply to the emergency diesel generator.

Best Operating Practices include proper maintenance of the diesel engines by trained personnel on the generating unit in accordance with manufacturer specifications, and the purchase of diesel fuel that also meets specifications.

If excess emissions are suspected during operation of the emergency diesel generator, appropriate measures to minimize the duration of the event may include shutting down the equipment and investigating the cause of the opacity.