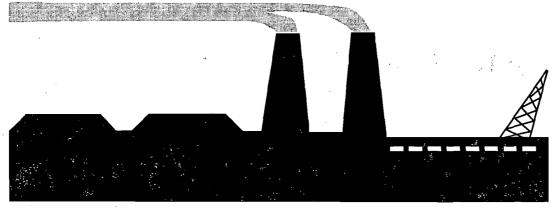
# Title V Permit Application



Turkey Point Fossil Plant





# RECEIVED 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

BUREAU OF AIR REGULATION

Re: Submittal of FPL Turkey Point Fossil Plant Title V Application

Dear Mr. Fancy:

0250003-001-AX 6/12/1996

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 <u>ELSA</u> 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 <u>ELSA</u> 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,

Rehal Rias

Richard Piper

**Environmental Specialist** 

Florida Power & Light Company

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

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

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## 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: Turkey Point Fossil Plant				
3. Facility Identification Number	: 0250003			
4. Facility Location Information: Facility Street Address: 9.5 miles City: Florida City	east of Florida City County: Dade	on SW 344 Street Zip Code: 33034		
5. Relocatable Facility? (Y/N):	6. E	xisting Permitted Facility?(Y/N):		

#### **Application Processing Information (DEP Use)**

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

#### Owner/Authorized Representative or Responsible Official

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

Name: Adalberto Alfonso Title: Plant General Manager

2. Owner or Responsible Official Mailing Address:

Organization/Firm: FPL Environmental Services Department

Street Address: P.O. Box 088801

City: North Palm Beach

State: FL

Zip Code: 33408

3. Owner or Responsible Official Telephone Numbers:

Telephone: 3052466000

Fax: 3052466905

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 statues 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

5/31/9

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.

Emission s Unit Id	Description of Emissions Unit	Permit Type
01	Fossil Fuel Steam Generator Unit 1 (ARMS ID # 50DAD13000301)	
02	Fossil Fuel Steam Generator Unit 2 (ARMS ID # 50DAD13000302)	
03	Five Similar Emergency Diesel Generators	
04	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**

- 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: 14996

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: 3523365600 Fax: 3523366603

#### TURKEY POINT FOSSIL 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 her [X] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified 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, Date

Attacheany 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**

Pursuant to DEP Form 62-210.900(1) - Instuctions; FPL is electing to submit a separate Title V application for that portion of the contiguous Turkey Point site containing Turkey Point Nuclear Units 3 and 4. These units are subject to regulation by the Nuclear Regulatory Commission.

#### **`II. FACILITY INFORMATION**

#### A. GENERAL FACILITY INFORMATION

Information for Facility-Id: 1 Facility Location and Type

1. Facility UTM Coordinates:

Zone: 17

East: 567230

North: 2813192

2. Facility Latitude/Longitude:

Latitude (DD/MM/SS): 25 - 26 - 9

Longitude (DD/MM/SS): 80 - 19 - 52

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)

The facility consists of two fossil steam generating units, 5 "Black Start" diesel generators, and various unregulated emission units.

#### **Facility Contact**

1. Name and Title of Facility Contact:

Name: Gary Andersen

Title : Environmental Specialist

2. Facility Contact Mailing Address:

Organization/Firm: FPL Turkey Point Fossil Plant

Street Address: 9700 S.W. 344 Street

City: Florida City State: FL Zip Code: 33034 -

3. Facility Contact Telephone Numbers:

Telephone: 3052466115 Fax: 3052466905

#### 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):

The facility is located in a former non-attainment area for ozone (recently redesignated to an air quality maintenence area) therefore the generating units are subject to NOx-RACT.

#### **B. FACILITY REGULATIONS**

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

No	ot Applicable			
			•	
		•		

DEP Form No. 62-210.900(1)

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

#### Information for Facility-Id: 1

#### C. FACILITY POLLUTANTS

#### <u>Facility Pollutant Information</u>:

1. Pollutant Emitted:	2. Pollutant Classification
SO2	A
NOX	A
СО	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: PTFFS\_1.BMP

  (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 2. Facility Plot Plan: PTFFS\_2.BMP

  (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- Process Flow Diagram(s): PTFFS\_3.BMP
   (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 4. Precautions to Prevent Emissions of Unconfined Particulate Matter: PTFFS\_4.txt (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 5. Fugitive Emissions Identification: PTFFS\_5.txt

  (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 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: PTFFS\_7.txt (Enter the Attached Document ID, NA Not Applicable)
- 8. List of Equipment/Activities Regulated under Title VI: PTFFS\_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: PTFFS\_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: PTFFS\_11.txt (Enter the Attached Document ID, NA Not Applicable)
- 12. Compliance Assurance Monitoring Plan: NA (Enter the Attached Document ID, NA Not Applicable)

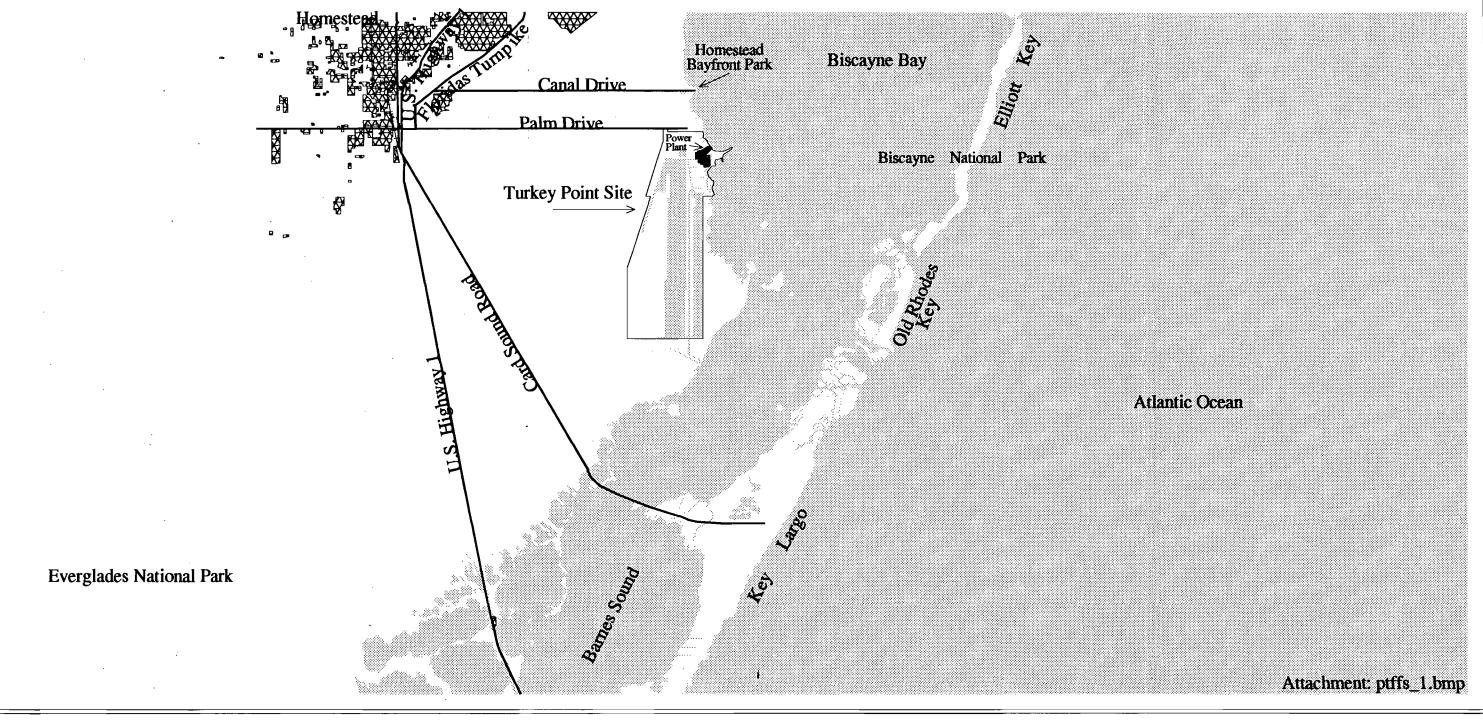
13. Risk Management Plan Verification: PLANNED

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

Plan to be Submitted to Implementing Agency by Required Date

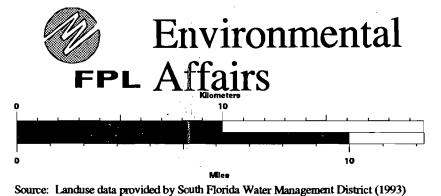
Not Applicable (NA)

- 14. Compliance Report and Plan: NA (Enter the Attached Document ID, NA Not Applicable)
- 15. Compliance Statement (Hard-copy Required): PTFFS\_14.txt (Enter the Attached Document ID, NA Not Applicable)

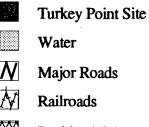


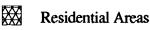
# Turkey Point Area Map Dade County

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.

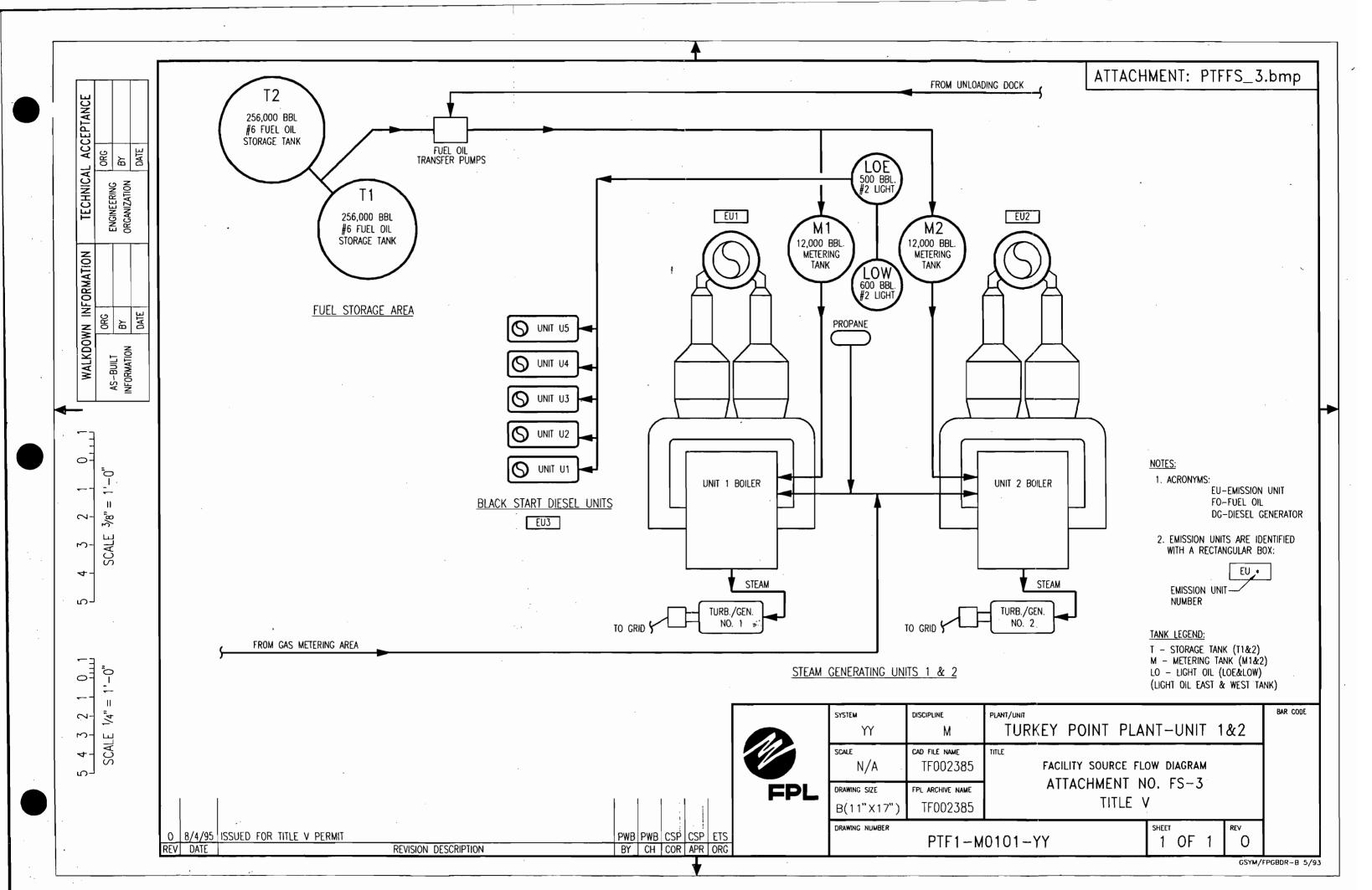








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## Attachment PTFFS\_4.txt Precautions to Prevent Emissions of Unconfined Particulate Matter

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

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

- The facility constructs and operates sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment.
- Maintenance of paved areas as needed
- Regular mowing of grass and care of vegetation
- Limiting access to plant property by unnecessary vehicles.
- Bagged chemical products are stored in weather-tight buildings until they are used. Spills of powdered cheical products are cleaned up as soon as practicable.
- Vehicles are restricted to slow speeds on the plant site

## Attachment PTFFS\_5.txt Fugitive Emission Identification

#### Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PTFFS\_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 PTFFS\_9.txt Alternative Methods of Operation

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

#### Attachment PTFFS\_13.txt Turkey Point Fossil 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 PTFFS\_14.txt Turkey Point 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 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.

Emission	Unit	Informati	on Section	of

#### III. EMISSIONS UNIT INFORMATION

Information for Facility - ID: 1 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>Emission</b>	Unit	Information	Section	of
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## B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Description and Status**

<ol> <li>Description of Emissions Unit Addressed in This Section (limit to 60 characters): Turkey Point Boiler Unit 1</li> </ol>
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 is taken from the 10-year Site Plan the FPL supplies annually to the Florida Public Service Commission. 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.
The method of compliance for determining the heat input rate is fuel sampling and analysis in conjunction with fuel flow

#### **Emissions Unit Control Equipment**

A. Control Equipment #: 1

1.	Description (limit to 200 characters): Low Nox Burners		
2.	Control Device or Method Code:	Modified Furnace or Burner Design	

En	nission Unit Informati	on Section of _	<del></del>	
В.	. Control Equipme	ent # : 2		
	Description (limit Multiple Cyclones	to 200 characters): with Fly Ash Reinjec	ction	
	2. Control Device of	r Method Code:	Multiple Cyclone w/Fly Ash Reinjection	
C.	. Control Equipme	:nt # :	••	
	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): 04/01/67

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: Foster-Wheeler

Model Number: NA

4. Generator Nameplate Rating: 402 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

#### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 4000 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):

Maximum heat input is reflective of residual oil firing. The maximum heat rate imput for natural gas is 4,180 mmBtu/hr. Method of compliance for heat input is fuel sampling & analysis.

#### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

	<b>Emission</b>	Unit In	formation	Section	of
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## 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		
,		
4		

DEP Form No. 62-210.900(1)

<b>Emission Unit Information</b> 5	Section	of
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<u>List of Applicable Regulations</u> (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. 72.20(a) 40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix D 40 C.F.R. 75 Appendix F 40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(b) 40 C.F.R. 75.53(c) 40 C.F.R. 75.53(d)(1)	F.A.C. 62-214.350 (2) F.A.C. 62-214.350 (3) F.A.C. 62-214.350 (5)
40 C.F.R. 72.20(c) 40 C.F.R. 72.21(a) 40 C.F.R. 72.21(b) 40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G-4 40 C.F.R. 75 Appendix H 40 C.F.R. 75.10(a)(1) 40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.54 40 C.F.R. 75.55(c) 40 C.F.R. 75.55(e) 40 C.F.R. 75.56	F.A.C. 62-214.350 (6) F.A.C. 62-214.370 (1) F.A.C. 62-214.370 (3)
40 C.F.R. 72.22(a) 40 C.F.R. 72.22(c) 40 C.F.R. 72.23 40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(3)(i) 40 C.F.R. 75.10(a)(4) 40 C.F.R. 75.10(b) 40 C.F.R. 75.10(c)	40 C.F.R. 75.60(a) 40 C.F.R. 75.60(b) 40 C.F.R. 75.60(c)(3) 40 C.F.R. 75.61(a)(1)	F.A.C. 62-214.370 (4) F.A.C. 62-214.370 (7) F.A.C. 62-214.430 F.A.C. 62-296.405(1)(a) paragraph 2
40 C.F.R. 72.30(a) 40 C.F.R. 72.30(b)(2) 40 C.F.R. 72.30(c) 40 C.F.R. 72.30(d)	40 C.F.R. 75.10(d) 40 C.F.R. 75.10(f) 40 C.F.R. 75.10(g) 40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(a)(5) 40 C.F.R. 75.61(b) 40 C.F.R. 75.62 40 C.F.R. 75.63	F.A.C. 62-296.405(1)(b) F.A.C. 62-296.405(1)(c)1.j. F.A.C. 62-296.405(1)(e)(1) F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.32 40 C.F.R. 72.33(b) 40 C.F.R. 72.33(c) 40 C.F.R. 72.33(d)	40 C.F.R. 75.11(c)(3) 40 C.F.R. 75.11(d) 40 C.F.R. 75.12(a) 40 C.F.R. 75.12(b)	40 C.F.R. 75.64(a) 40 C.F.R. 75.64(b) 40 C.F.R. 75.64(c) 40 C.F.R. 75.64(d)	F.A.C. 62-296.405(1)(e)(3) F.A.C. 62-296.405(1)(f)1.a.(i) F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.40(a) 40 C.F.R. 72.40(b) 40 C.F.R. 72.40(c) 40 C.F.R. 72.40(d) 40 C.F.R. 72.51	40 C.F.R. 75.13(a) 40 C.F.R. 75.13(b) 40 C.F.R. 75.14(a) 40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.65 40 C.F.R. 75.66(a) 40 C.F.R. 75.66(b) 40 C.F.R. 75.66(c) 40 C.F.R. 75.66(d)	F.A.C. 62-296.500(2)(a)1. F.A.C. 62-296.500(2)(c) F.A.C. 62-296.570(4)(a)3. F.A.C. 62-296.570(4)(a)4.
40 C.F.R. 72.90 40 C.F.R. 72.90 40 C.F.R. 72.9(a)(1)(iii) 40 C.F.R. 72.9(a)(1)(i) 40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.20(b) 40 C.F.R. 75.20(c) 40 C.F.R. 75.20(d) 40 C.F.R. 75.20(f)	40 C.F.R. 75.66(g) 40 C.F.R. 75.66(h) 40 C.F.R. 76.13 40 C.F.R. 76.13	F.A.C. 62-296.570(4)(b)2. F.A.C. 62-296.570(4)(c) F.A.C. 62-297.310(1) F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(b) 40 C.F.R. 72.9(c)(1)(iii) 40 C.F.R. 72.9(c)(2) 40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.20(g) 40 C.F.R. 75.21(a) 40 C.F.R. 75.21(b) 40 C.F.R. 75.21(c) 40 C.F.R. 75.21(d)	40 C.F.R. 77.5(b) 40 C.F.R. 77.6 Dade County Derm Chp 24-14 (state only)	F.A.C. 62-297.310(3) F.A.C. 62-297.310(4)(a)1. F.A.C. 62-297.310(4)(a)2.c. F.A.C. 62-297.310(4)(b) F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(5) 40 C.F.R. 72.9(d) 40 C.F.R. 72.9(e) 40 C.F.R. 72.9(f)	40 C.F.R. 75.21(e) 40 C.F.R. 75.21(f) 40 C.F.R. 75.22 40 C.F.R. 75.24	Dade County DERM Chp 24-24 (state only) Dade County DERM Chp 24-26(1)(e) (state only)	F.A.C. 62-297.310(4)(d) F.A.C. 62-297.310(4)(e) F.A.C. 62-297.310(5) F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(g)(4) 40 C.F.R. 73.33 40 C.F.R. 73.35 40 C.F.R. 75 Appendix A-1 40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(1) 40 C.F.R. 75.30(a)(2) 40 C.F.R. 75.30(a)(3) 40 C.F.R. 75.31	Dade County DERM Chp 24-37(1), (3) (state only) Dade County DERM Chp 24-39 (state only)	F.A.C. 62-297.310(6)(c) F.A.C. 62-297.310(6)(d) F.A.C. 62-297.310(6)(e) F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-2 40 C.F.R. 75 Appendix A-3 40 C.F.R. 75 Appendix A-4 40 C.F.R. 75 Appendix A-5 40 C.F.R. 75 Appendix A-6 40 C.F.R. 75 Appendix B	40 C.F.R. 75.32 40 C.F.R. 75.33 40 C.F.R. 75.35 40 C.F.R. 75.36 40 C.F.R. 75.4(a)(4)(ii)	Dade County DERM Chp 24-54(3) (state only) Dade County DERM Chp 25-25.4 (state only) F.A.C. 62-204.800(12)	F.A.C. 62-297.310(6)(g) F.A.C. 62-297.310(7)(a)1. F.A.C. 62-297.310(7)(a)2. F.A.C. 62-297.310(7)(a)3. F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix C-1 40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.5 40 C.F.R. 75.51(c) 40 C.F.R. 75.53(a)	(state only) F.A.C. 62-204.800(13) (state only) F.A.C. 62-204.800(14) (state only)	F.A.C. 62-297.310(7)(a)5. F.A.C. 62-297.310(7)(a)9. F.A.C. 62-297.310(7)(c) F.A.C. 62-297.310(8)
	·	F.A.C. 62-210.650 F.A.C. 62-210.700 (1) F.A.C. 62-210.700 (2) F.A.C. 62-210.700 (3) F.A.C. 62-210.700 (4)	Table 62-297.310-1
		F.A.C. 62-210.700 (6) F.A.C. 62-214.300 F.A.C. 62-214.330	

<b>Emission Unit Information S</b>	Section	of
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## E. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

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

1. Identification of Point on Plot Plan or Flow Diagram: EU 1, Turkey Point Boiler Unit 1
2. Emission Point Type Code (1,2,3,4): 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):  NA
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission Unit 1, Turkey Point Boiler Unit 1
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 400 ft
7. Exit Diameter: ft
8. Exit Temperature: °F
9. Actual Volumetric Flow Rate: 1241257.5 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: 567.2 North: 2813.2
14. Emission Point Comment (limit to 200 characters): Information provided in item #9 above is reflective of the highest flow rate measured during the February 1995 particulate test at this unit. Flow rates measured at other times may vary.

Emission	Unit	Information	Section	of

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

Segment Description	and	Rate:
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Information for Facility\_ID: 1 Emission Unit #: 1 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):

Unit 1 Boiler burning natural gas fuel

- 2. Source Classification Code (SCC): 1-01-006-01
- 3. SCC Units: Million cubic feet burned
- 4. Maximum Hourly Rate: 3.83
- 5. Maximum Annual Rate: 33580
- 6. Estimated Annual Activity Factor:
- 7. Maximum Percent Sulfur: 0.0031
- 8. Maximum Percent Ash:
- 9. Million Btu per SCC Unit: 1050
- 10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas and on-specification used oil from FPL operations.

Emission Unit Information Section of	<b>Emission</b>	Unit l	Information	Section	of
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#### F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment</u>	Descri	iption	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 Number 2 diesel oil 2. Source Classification Code (SCC): 1-01-005-01

- 3. SCC Units: Thousand gallons burned
- 4. Maximum Hourly Rate: 28.31
- 5. Maximum Annual Rate: 247985.29
- 6. Estimated Annual Activity Factor:
- 7. Maximum Percent Sulfur: 0.5
- 8. Maximum Percent Ash:
- 9. Million Btu per SCC Unit: 136
- 10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission Unit Information Section</b>	of
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## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

#### **Segment Description and Rate:**

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

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):

Unit 1 Boiler burning on-specification used oil

2. Source Classification Code (SCC): 1-01-013-02

3. SCC Units: thousand gallons burned

4. Maximum Hourly Rate: 25.33

5. Maximum Annual Rate: 221881.6

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur: 1

8. Maximum Percent Ash: 0.007

9. Million Btu per SCC Unit: 152

10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission Unit Information</b>	Section	of
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## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<b>Segment</b>	<b>Description</b>	and	Rate:

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

1.	Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (lim	it
to	500 characters):	
Ur	nit 1 Boiler burning propane	

- 2. Source Classification Code (SCC): 1-01-006-01
- 3. SCC Units: Million cubic feet burned
- 4. Maximum Hourly Rate: 4.03
- 5. Maximum Annual Rate: 35259
- 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 No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

	<b>Emission</b>	Unit	Information	Section	of
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## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

	<b>Segment</b>	Descri	ption ar	id Rate:
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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 burning residual oil
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: Thousand gallons
4. Maximum Hourly Rate: 25.33
5. Maximum Annual Rate: 221881.6
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152

10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil (up to 2.5% sulfur), natural gas, No. 2 fuel oil, propane gas and on-specification used oil from FPL operations.

1

Emission Unit Information Section of
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## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

<u>Segment</u>	<b>Description</b>	and Rate:

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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
 Unit 1 co-firing all possible combinations of natural gas, residual oil, on specification used oil, #2 fuel oil, and propane.
 Source Classification Code (SCC): 1-01-006-01
 SCC Units: million cubic feet and thousand gallons
 Maximum Hourly Rate:
 Maximum Annual Rate:
 Estimated Annual Activity Factor:
 Maximum Percent Sulfur: 2.5
 Maximum Percent Ash: 0.1
 Million Btu per SCC Unit:

10. Segment Comment (limit to 200 characters):

Air Operation Permit # AO-13-238939 allows Unit 1 to burn a mixture of the above fuels in a ratio that will result in a max. SO2 emission rate of 2.75 lbs/mmBtu.

Emission Unit Information Section of	<b>Emission</b>	Unit In	formation	Section	of
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## F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate:
Information for Facility\_ID: 1 Emission Unit #: 1 Segment #: 7

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 natural gas or #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).

Emission Unit Information Section of	<b>Emission</b>	Unit 1	Information	Section	of
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# G. EMISSIONS UNIT POLLUTANTS (Regulated Emissions Units Only)

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOX	024	NA	EL
СО	NA	NA	NS
VOC	NA	NA	NS
PM	077	NA	EL
PM10	077	NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS

Emission Unit Information Section \_\_\_\_\_ of \_\_\_\_

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

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

## **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 11000 lbs/hr 48180 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 2.75 Units lb/mmBtu Reference: DEP Rule 62-296.405(1)(c)1.j.
7. Emissions Method Code: (0, 1, 2, 3, 4, 5): 0
8. Calculation of Emissions (limit to 600 characters): 2.75 lb/mmBtu * 4000 mmBtu/hr = 11000 lb/hr
(11000 lb/hr * 8760 hr/yr) / 2000 lb/ton = 48,180 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Dade County DERM Chapter 24-17(2)(a)(ii) limits SO2 emissions to 1.1 lb/mmBtu for liquid fuel firing.

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: / Pollutant #: /
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: 2.75 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 11000 lbs/hr 48180 tons/yr
5. Method of Compliance: Fuel sampling & analysis
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  197

1.1 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-296.405(1)(c)1.j.]. Equiv. allowable emissions are given for liquid fuel firing. Dade County limits emissions to 1.1 lb/mmBtu.

1

## 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: 2120 lbs/hr 9285.6 tons/yr			
4. Synthetically Limited? (Yes/No): No			
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr			
6. Emission Factor: 0.53 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)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): 0.53 lb/mmBtu * mmBtu/hr = 2120 lb/hr			
(2120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9285.6 tons/yr			
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):			

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: / 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: 0.53 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 2120 lbs/hr 9285.6 tons/yr
- 5. Method of Compliance: Continuous Emissions Monitor
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

194

0.53 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.

Emission Unit Information Section	of
Information for Facility_ID:	Emission Unit #: 1 Pollutant #: 2

Allowable Emissions (Pollutant identified on front page)

**Basis For Allowable Emission #: 2** 

- Basis for Allowable Emissions Code: Emissions limit required by rule
   Future Effective Date of Allowable Emissions:
   Requested Allowable Emissions and Units: 0.4 Units: lb/mmBtu
   Equivalent Allowable Emissions: 1672 lbs/hr 7323.36 tons/yr
- 5. Method of Compliance: Continuous Emissions Monitor
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

194

0.40 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

## 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: 500 lbs/hr 2190 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 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): 0.125 lb/mmBtu x 4000 mmBtu/hr = 500 lb/hr 500 lb/hr x 8760 hr/yr x 1ton/2000 lb = 2190 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  The particulate matter emissions limit of 3hrs/24hrs at 0.3 lb/mmBtu and 21hrs/24hrs at 0.1 lb/mmBtu is equivalent to an average of 0.125 lb/mmBtu.

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: / Pollutant #: 4
Basis For Allowable Emission #: 1

62-296.405(1)(e)]. Equivalent allowable emissions are given for liquid fuel firing.

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: 400 lbs/hr 1752 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
<ul> <li>6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode)</li> <li>(limit to 200 characters):</li> <li>178</li> <li>0.1 lb/mmBtu is the current regulatory limit on particulate emissions for 21hrs in a day [Rule</li> </ul>

Emission Unit Information Section	of
Information for Facility ID: A	Emission Unit #: 1 Pollutant #: 4

Allowable Emissions (Pollutant identified on front page)

Basis For Allowable Emission #: 2

- Basis for Allowable Emissions Code: Emissions limit required by rule
   Future Effective Date of Allowable Emissions:
   Requested Allowable Emissions and Units: 0.3 Units: lb/mmBtu
   Equivalent Allowable Emissions: 1200 lbs/hr 657 tons/yr
   Method of Compliance: DEP Rule 62-296.405(1)(e)2.
   Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
  - 147

Data is for sootblowing conditions firing liquid fuel, worst case. Equivalent allowable emissions are based on 3hrs of sootblowing per 24hr period.

<b>Emission</b>	Unit	Information	Section	of

## 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.

Emission Unit Information Section of	<b>Emission</b>	Unit	Informa	tion	Section	of
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## 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 < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.	up to 3 hrs/24 hrs, with			

Emission Unit Information Section of	Information Section of
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## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

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

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:	
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.	

Emission Unit Information Section of	
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## 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-4715C-278

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/16/94

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1).

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

## 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: 42-4713C-277

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/16/94

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)2.

Emission Unit Information Section of	<b>Emission</b>	<b>Unit Information Section</b>	n of
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## 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: N3K4184T

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/16/94

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(3)(i)

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

## 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: 6081D

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 08/16/94

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1)

Emission	Unit	Information	Section	of

## 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: 1048

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 01/05/95

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(4)

Emission Unit Information Section of	Emission	ection of	t Information
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## K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

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

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.

<b>Emission</b>	Unit	Information	Section	of	

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. Incre	ement Consu	suming/Expanding Code: (C, E, U- unkown):	
PM	U		
SO2	U		
NO2	U		
4. Base PM SO2 NO2	eline Emissio lbs/hr lbs/hr tons/yr	ions: tons/yr tons/yr	



5. PSD Comment (limit to 200 characters):

This unit went on line in April of 1967 which predates the major source baseline date of 1/5/75. FPL believes PSD does not apply to this emissions unit.

	<b>Emission</b>	Unit 1	<b>Information</b>	Section	of
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## L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

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

### Supplemental Requirements for All Applications

Attached Document ID / Not Applicable

Attached Document ID / Not Applicable

9. Other Information Required by Rule or Statute: NA

Process Flow Diagram: Attached Document ID:PTFEU1\_1.bmp
 Attached Document ID / Not Applicable / Waiver Requested
 Fuel Analysis or Specification: Attached Document ID: PTFU1\_2.doc
 Attached Document ID / Not Applicable / Waiver Requested
 Detailed Description of Control Equipment: Attached Document ID: PTFU1\_3.doc
 Attached Document ID / Not Applicable / Waiver Requested
 Description of Stack Sampling Facilities: Attached Document ID: PTFEU1\_4.bmp
 Attached Document ID / Not Applicable / Waiver Requested
 Compliance Test Report:
 Attached Document ID / Previously submitted, Date / Not Applicable
 Procedures for Startup and Shutdown: Attached Document ID: PTFU1\_6.doc
 Attached Document ID / Not Applicable
 Operation and Maintenance Plan: NA
 Attached Document ID / Not Applicable
 Supplemental Information for Construction Permit Application: NA

DEP Form No. 62-210.900(1)

### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation : Attached Document ID: PTFU1\_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

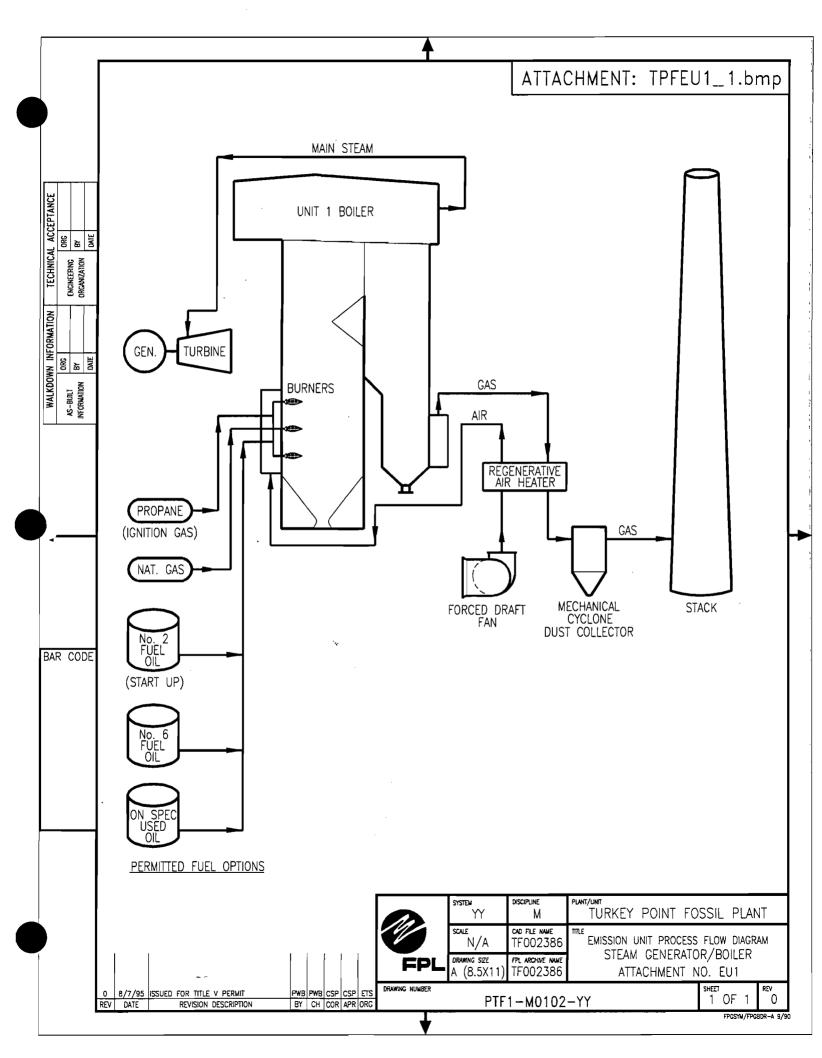
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

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



STACK DIAGRAM

#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES TURKEY POINT

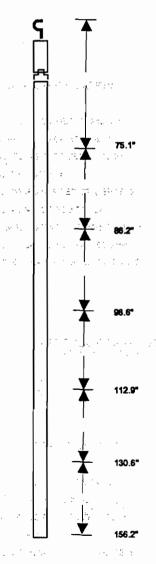
#### FOSSIL FUEL STEAM GENERATORS UNIT 1

#### STACK SPECIFICATIONS

SAMPLING DIAMETER: 242.3 in.
SAMPLING AREA: \$20.1 eq. ft.
SAMPLING PORT DEPTH: 70.0 in.
No. OF PORTS: 4
No. OF POINTS PER TRAVERSE: 6
TOTAL No. OF POINTS: 24
SAMPLING TIME PER POINT: 2.5 min.
TOTAL SAMPLING TIME: 60.0 min.

NOTE: DRAWING IS NOT TO SCALE

#### PARTICULATE SAMPLING PROBE DIAGRAM



NUMBER OF STATES 183'6" 397% ELECTIONS! SAMPLE PORTS & PLATFORM 166'10" 47'2"

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

#### Fuel Analysis

Natural Gas Analysis (typical \*)

Typical value Max value <u>Parameter</u> 0.58 (compared to air) Relative density not applicable 1000<sup>2</sup> - 1124 Btu/cu ft. not applicable heat content 0.43 grains/CCF 1 % sulfur 1 grain/100 CF % nitrogen 0.8% by volume not applicable % ash not applicable negligible

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

- 1 Data from laboratory analysis
- 2 Data from FPL fuel purchasing specification

## Fuel Analysis

#6 Oil Analysis (typical \*)

<u>Parameter</u>	<u>Typical value</u>	<u>Max value</u>
Relative density	6.0 min API	not applicable
heat content	6,340 min mmBtu/bbl	not applicable
% sulfur	1 - 2	2.5 <sup>1</sup>
% nitrogen	0.30	not applicable
% ash	0.07 max weight	not applicable

<sup>\*</sup>Note: The values listed are "typical" values based upon FPL's purchasing criteria for fuel, and actual analytical data. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

1 Turkey Point Boilers 1 and 2 can burn up to 2.5% sulfur oil

### Fuel Analysis

Light Distillate oil (typical)\*

<u>Parameter</u>	<u>Typical value</u>	<u>Max value</u>
API gravity @ 60 F	41.2 <sup>1</sup>	51 <sup>1</sup>
Relative density	285 lb / bbl <sup>2</sup>	not applicable
Heat content	19,130 Btu / lb	not applicable
% sulfur	0.5 <sup>3</sup>	not applicable
% nitrogen	9 mg / kg	not applicable
% ash	negligible	0.001 <sup>1</sup>

<sup>\*</sup>Note: The values listed are "typical" values based upon:

- 1 Data taken from the FPL fuel purchasing specification
- 2 Data from laboratory analysis

<sup>1)</sup> information FPL gathered by laboratory analysis, and 2) FPL's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.

### Fuel Analysis

#### Propane

Boiler unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as #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>

### Fuel Analysis

#### Used Oil

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

Parameter	Max value		
Halogens	1,000 ppm <sup>1</sup>		
PCBs	50 ppm		
Arsenic	5 ppm		
Chromium	10 ppm		
Cadmium	2 ppm		
Lead	100 ppm		
Flash point	100 deg. F (minimum)		

<sup>1</sup> Subject to the "rebuttable presumption" under 40 CFR 279.10(b)(1)(ii)

## Attachment PTFU1\_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. Low Nox Burners - The boiler design incorporates "Low Nox burners" which have as their primary purpose the reduction of NOx production during the combustion process. These burners have achieved a 25% reduction in NOx emissions from the baseline rate on natural gas fuel, and a 24% reduction while firing residual oil.

#### 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 PTFU1\_10.txt Alternative Methods of Operation

### Operation at Various Capacities and heat input rates

The Turkey Point boilers may be operated up to 8760 hours per year at heat input rates from zero to 3,850 MMBtu per hour on #6 oil, and from zero to 4,025 MMBtu per hour on natural gas. When a blend of fuel oil and natural gas are burned, the heat input is prorated based upon the percent heat input of each fuel.

#### Different Fuel Types

The units may each burn low sulfur fuel oil containing a maximum concentration of 1% by weight, natural gas, or a mixture of intermediate sulfur fuel oil of variable concentration of sulfur (by wt) and natural gas in a ratio which will result in a maximum SO2 emission rate of 1.1 lb/mmBtu. The units may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11 The units may occasionally utilize propane fuel to light off (start up) the boiler, then switch to another fuel, such as #6 residual oil.

#### Current emissions limitations are as follows:

Pollutant Emission Limit
Particulate matter-Steady state 0.1 lb/MMBtu
Particulate matter-Sootblowing 0.3 lb/MMBtu
Sulfur dioxide 1.1 lb/MMBtu

Nitrogen oxides 0.40 lb/MMBtu (natural gas, 30-day rolling average)

0.53 lb/MMBtu (residual oil, 30-day rolling average)

#### Soot\_blowing

The units may blow soot for up to 24 hours per day, so long as excess emissions are limited to 60% opacity for 3 hours in 24 hours with up to four 6-minute periods of up to 100% opacity.

#### **Utilization of Additives**

When residual oil is fired, additives such as Magnesium hydroxide Mg(OH)<sub>2</sub> are added to the boiler on a continuous basis. This material is typically added to the fuel oil just prior to its being fed into the furnace, but it may also be injected into the boiler via the I.K. soot blower lances and through manual hand lances on a batch basis, rather than continuously. The dosage rate is based on the quantity of fuel burned and the amount of ash in the fuel. FPL reserves the right to use other additives if they are suitable.

## 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).

#### A013-238939 Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 3,850 mmBtu/hr during fuel oil firing or 4,025 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis to monitor the heat input rate to the boiler.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA					
MAXIMUM ALLOWABLE EMISSION LIMITS					
Pollutant	Fuel	lb/mmBtu	Test Method		
Particulate Matter <sup>(1)</sup> Steady state	Oil	0.1	EPA Method 5 or 17		
sootblowing	Oil	0.3 (max. 3 hours)	EPA Method 5 or 17		
SO2 <sup>(3)</sup>	Oil	2.75	Monthly fuel analysis		
NOx-RACT NOx <sup>(2)</sup>	Oil	0.53 or 2,041lbs/hr	CEM		
NOx <sup>(2)</sup>	Gas	0.40 or 1,610 lbs/hr	CEM		

These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.

(3) Dade County has established an SO2 limit of 1.1 lb/mm8tu. This limit is not federally enforceable as

(3) Dade County has established an SO2 limit of 1.1 lb/mmBtu. This limit is not federally enforceable and therefore not an applicable requirement

To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of oil consumption for each boiler and monthly records of heating value for such fuel. All records shall be riaintained for a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

FPL has the records required by the above permit condition and such records are available to the Department for review.

5. Any change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau of Air Regulation. FPL has not undertaken any such changes, but if changes are contemplated, will notify the department as specified.

## Attachment PTFU1\_10.txt Alternative Methods of Operation

### Evaporation of Spent Boiler Chemical Cleaning Chemicals

On a periodic basis, as part of routine maintenance, the inside of the steam generator tubes (boiler tubes) at the Turkey Point 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 offsite hazardous waste facility for the appropriate disposal.

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

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## **X**218625 50 55876 EPARTHENT OF ENVIRONMENTAL REGULATION

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Patition for Reduction in Quarterly Particulate Daissions Compliance Testines PLORIDA POWER AND LIGHT COMPANY.

Petitioner.

OGC Case Mos.: **83-0578 81-0577, 83-0576, 83-0585**, **83-0**586, 83-0587, 83-0586 13-0581, 13-054A, ED

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### ORDER GRANTING PETITION FOR REDUCED . PREQUENCY 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 Plorida 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. Manatee Plant Unit Mo. 1 Manatee Plant Unit No. 2

Each of the units has a heat input exceeding 250 million Btm 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)]. 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 regulary 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.

FM S.J. will this take, pursuant to \$120.52 (9), have this take, pursuant to \$120.52 (9), have a Salar is, with the designated Department Clerk, recept of which is hereby acknowledged.

Clerk Date

VICTORIA J. TSCHINKEL Secretary

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

## 00037

### CERTIFICATE OF SERVICE

MANCY & WRIGHT
Assistant General Coursel

State of Plorida Department of Environmental Regulation 2600 Blair Stone Road Tallabassee, Plorida 32301 904/488-9730 DEPARTMENT OF ENVIRONMENTAL REGULATION

Best Available Copy

In the matter of: Florida Power and Light Co., Inc.

Petitiones

ASP-86-E01



## 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

- 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 $_{\rm X}$ ) 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 and 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. 4041-51630 and specific condition 1 of permit No. AU41-64792 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.

Part and ordered this 5 day of September, 1986 int Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT FILED, on this date, persuant to \$120.52 (9). Fiorica Statutes, with the designated Departnunt Clark, receipt of which is hereby nownew-KiCZeQ.

Clest Usia Victoria J. Tschinkel

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

Telephone: (904) 488-4805

Secretary

#### 17-2.700(3) EXCEPTIONS AND APPROVAL OF ALTERNATE

#### PROCEDURES AND REQUIREMENTS

Florida Power and Light Co., Incorporation

#### REQUEST FOR EXCEPTION

UNIT: Oil Fired Steam PERMIT NO: A041-51630 (Unit 1)

Electric and AO41-64792 (Unit 2)

Generating - EMISSION LIMITING STANDARD:

850 megawatts  $NO_X = 0.30$  pounds per million BTU heat input

PLANT: Manatee

DESCRIPTION: Compliance Testing for NO<sub>x</sub> for Manatee Plants

Units No. 1 and No. 2.

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

EXCEPTION REQUESTED: Use of EPA Reference Method 7E

in lieu of EPA Reference Method 7

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.

<b>Emission</b>	Unit	Informa	tion	Section	of
~*********	~			- CULOII	~~

# 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): Turkey Point Boiler Unit 2
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 is taken from the 10-year Site Plan the FPL supplies annually to the Florida Public Service Commission. 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.
The method of compliance for determining the heat input rate is fuel sampling and analysis in conjunction with fuel flow

## **Emissions Unit Control Equipment**

A. Control Equipment #: 1

1.	Description (limit to 200 characters):
	Low Nox Burners

2. Control Device or Method Code: Modified Furnace or Burner Design

Emi	ssion Unit Information Section of	
В.	Control Equipment # : 2	
1	. Description (limit to 200 characters): Multiple Cyclones with Fly Ash Reinjection	
2	. Control Device or Method Code: Multiple Cyclone w/Fly Ash Reinjection	
C.	Control Equipment #:	
1	Description (limit to 200 characters)	

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): 04/01/68

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: Foster-Wheeler Model Number: NA

4. Generator Nameplate Rating: 402 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 4000 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):

Maximum heat input is reflective of residual oil firing. The maximum heat rate imput for natural gas is 4,180 mmBtu/lb. Method of compliance for heat input is fuel sampling & analysis.

#### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

Emission	Unit Infor	mation Section	ı of

# 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		
	·	

DEP Form No. 62-210.900(1)

Emission	Unit	Information	Section	of
	OHIL	manon manon	Section	OI.

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

## Emissions Unit ID 2

40 C.F.R. 72.20(a) 40 C.F.R. 75 Appendix D 40 C.F.R. 75 Appendix C.2 40 C.F.R. 75 Appendix G.2 40 C.F.R. 75 D(a)(1) 40 C.F.R. 75 D(a)(2) 40 C.F.R. 75 D(a)(3)(1) 40 C.F.R. 75 D(a)(2) 40 C.F.R. 75 D(a)(3)(1) 40 C.F.R. 75 D(a)(4) 4
F.A.C. 62-210.700 (6) F.A.C. 62-214.300 F.A.C. 62-214.330

# 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 EU 2, Turkey Point Boiler Unit 2	v Diagram:
2. Emission Point Type Code (1,2,3,4): 1	
3. Descriptions of Emissions Points Comprisicharacters):  NA	ng this Emissions Unit (limit to 100
4. ID Numbers or Descriptions of Emission U Emission unit 2, Turkey Point Boiler Unit 2	Jnits with this Emission Point in Common:
5. Discharge Type Code (D, F, H, P, R, V, V	W): V
6. Stack Height: 400 ft	
7. Exit Diameter: ft	
8. Exit Temperature: °F	
9. Actual Volumetric Flow Rate: 1188480.2	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: 567.2	North: 2813.2
14. Emission Point Comment (limit to 200 charac Information provided in item #9 above is reflecti 1994 particulate test for this unit. Flow rates measured	ve of the highest flow rate measured during the June

Emission Unit Information Section of
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Segment	Descri	ption	and	Rate:

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

1.	Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (1	limit
to :	500 characters):	
Un	nit 2 Boiler burning natural gas fuel	

- 2. Source Classification Code (SCC): 1-01-006-01
- 3. SCC Units: Million cubic feet burned
- 4. Maximum Hourly Rate: 3.83
- 5. Maximum Annual Rate: 33580
- 6. Estimated Annual Activity Factor:
- 7. Maximum Percent Sulfur: 0.0031
- 8. Maximum Percent Ash:
- 9. Million Btu per SCC Unit: 1050
- 10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas and on-specification used oil from FPL operations.

	<b>Emission</b>	Unit	Information	Section	of
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Segment	Descri	otion	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 Number 2 diesel oil

2. Source Classification Code (SCC): 1-01-005-01

3. SCC Units: Thousand gallons burned

4. Maximum Hourly Rate: 28.31

5. Maximum Annual Rate: 247985.29

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur: 0.5

8. Maximum Percent Ash:

9. Million Btu per SCC Unit: 136

10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

	<b>Emission</b>	Unit	Information	Section	of
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### **Segment Description and Rate:**

Information for Facility ID: 1 Emission Unit #: 2 Segment #: 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):

Unit 2 Boiler burning on-specification used oil

2. Source Classification Code (SCC): 1-01-013-02

3. SCC Units: thousand gallons burned

4. Maximum Hourly Rate: 25.33

5. Maximum Annual Rate: 221881.6

6. Estimated Annual Activity Factor:

7. Maximum Percent Sulfur: 1

8. Maximum Percent Ash: 0.007

9. Million Btu per SCC Unit: 152

10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil, natural gas, No. 2 fuel oil, propane gas or on-specification used oil from FPL operations.

<b>Emission</b>	Unit	Information	Section	of

## **Segment Description and Rate:**

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

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: 4.03
5. Maximum Annual Rate: 35259
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 No. 6 residual oil, natural gas, No. 2 fuel oil, propage gas or on-specification used oil from FPL operations.

<b>Emission Unit Information Section</b>	of
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### **Segment Description and Rate:**

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

10. Segment Comment (limit to 200 characters):

The unit is currently permitted to burn a variable combination of No. 6 residual oil (up to 2.5% sulfur), natural gas, No. 2 fuel oil, propane gas and on-specification used oil from FPL operations.

<b>Emission Un</b>	t Information	Section	of
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### **Segment Description and Rate:**

Information for Facility\_ID:1 Emission Unit #: 2 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
Unit 2 co-firing all possible combinations of natural gas, residual oil, on specification used oil, #2 fuel oil, and propane.

- 2. Source Classification Code (SCC): 1-01-006-01
- 3. SCC Units: million cubic feet and thousand gallons
- 4. Maximum Hourly Rate:
- 5. Maximum Annual Rate:
- 6. Estimated Annual Activity Factor:
- 7. Maximum Percent Sulfur: 2.5
- 8. Maximum Percent Ash: 0.1
- 9. Million Btu per SCC Unit:
- 10. Segment Comment (limit to 200 characters):

Air Operation Permit # AO-13-238932 allows Unit 1 to burn a mixture of the above fuels in a ratio that will result in a max. SO2 emission rate of 2.75 lbs/mmBtu.

<b>Emission</b>	Unit	Information	Section	of

10. Segment Comment (limit to 200 characters):

DARM guidance, and EPA waste rules (40 CFR 279.72).

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

<b>Segment</b>	Description	and Rate:

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

to Uı	Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit 500 characters): nit 2 Boiler chemical cleaning waste evaporation. This process may be undertaken while firing natural gas or residual oil.
2.	Source Classification Code (SCC): 1-01-013-01
3.	SCC Units: thousand gallons 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:

Items 6,7,8 & 9 do not apply. This activity to be undertaken on a periodic basis in accordance with

# 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	024	NA	EL
co	NA	NA	NS
voc	NA	NA	NS
PM	077	NA	EL
PM10	077	NA	NS
H133	NA	NA	NS
H106	NA	NA ·	NS
H107	NA	NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS

<b>Emission Unit Information S</b>	Section	of
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## H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

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

### **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 11000 lbs/hr 48180 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 2.75 Units lb/mmBtu Reference: DEP Rule 62-296.405(1)(c)1.j.
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): 2.75 lb/mmBtu * 4000 mmBtu/hr = 11000 lb/hr
(11000 lb/hr * 8760 hr/yr) / 2000 lb/ton = 48,180 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  Dade County DERM Chapter 24-17(2)(a)(ii) limits SO2 emissions to 1.1 lb/mmBtu for liquid fuel firing.

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: 2 Pollutant #: /
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: 2.75 Units: lb/mmBtu	
4. Equivalent Allowable Emissions: 11000 lbs/hr 48180 tons/yr	
5. Method of Compliance: Fuel sampling & analysis	
<ol> <li>Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode)</li> <li>(limit to 200 characters):         <ul> <li>197</li> </ul> </li> <li>1.1 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-296.405(1)(c)1.j.]. Equiv. allowable emissions are given for liquid fuel firing. Dade County limits emissions to 1.1 lb/mmBtu.</li> </ol>	

Emission Unit Information Section \_\_\_\_ of \_\_\_\_

# 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: 500 lbs/hr 2190 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 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): 0.125 lb/mmBtu x 4000 mmBtu/hr = 500 lb/hr 500 lb/hr x 8760 hr/yr x 1ton/2000 lb = 2190 tons/yr	
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): The particulate matter emissions limit of 3hrs/24hrs at 0.3 lb/mmBtu and 21hrs/24hrs at 0.1lb/mmBtu is equivalent to an average of 0.125 lb/mmBtu.	

Emission Unit Information Section of
Information for Facility_ID: / Emission Unit #: 2 Pollutant #: 4
Basis For Allowable Emission #: 1

62-296.405(1)(e)]. Equivalent allowable emissions are given for liquid fuel firing.

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: 400 lbs/hr 1752 tons/yr
5. Method of Compliance: DEP Rule 62-296.405(1)(e)2.
<ul> <li>6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):</li> <li>178</li> <li>0.1 lb/mmBtu is the current regulatory limit on particulate emissions for 21hrs in a day [Rule</li> </ul>

Emission Unit Information Section of
Information for Facility_ID: / 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: 1200 lbs/hr 657 tons/yr
5.	Method of Compliance: DEP Rule 62-296.405(1)(e)2.
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode)

147

(limit to 200 characters):

Data is for sootblowing conditions firing liquid fuel, worst case. Equivalent allowable emissions are based on 3hrs of sootblowing per 24hr period.

Emission Unit Information Section \_\_\_\_\_ of \_\_\_\_

## 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: 2120 lbs/hr 9285.6 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 0.53 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)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): 0.53 lb/mmBtu * mmBtu/hr = 2120 lb/hr
(2120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9285.6 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):

Emission Unit Information Section of
Information for Facility_ID: / 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: 0.53 Units: lb/mmBtu
4.	Equivalent Allowable Emissions: 2120 lbs/hr 9285.6 tons/yr
5.	Method of Compliance: Continuous Emissions Monitor

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

194

0.53 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.

<b>Emission</b>	Unit	Information	Section	of

Information for Facility\_ID: 1 Emission Unit #: 2 Pollutant #: 2 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: 0.4 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 1672 lbs/hr 7323.36 tons/yr
- 5. Method of Compliance: Continuous Emissions Monitor
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

194

0.40 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)2] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

Emission Unit Information Section of	of
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# 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 [ ] 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.				

<b>Emission Unit Information Se</b>	ection of	
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# 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.				

Emission Unit Information Section	of	
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# 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.				

Emission Unit Information Section of

### 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-47138-278

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 02/27/95

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(1)

Emission Unit Information Section \_\_\_\_ of \_\_\_

### 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: 42-46492-276K

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 02/27/95

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)2.

<b>Emission</b>	Unit	Inforn	ation	Section	of	

### 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: N3K4406T

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 02/27/95

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CRF 75.10(a)(3)(i)

Emission Unit Information Section of

### 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: 6082D

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 02/27/95

7. Continuous Monitor Comment (limit to 200 characters):

Required by 40 CFR 75.10(a)(1)

Emission Unit Information Section
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## 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: 101599

5. Installation Date (DD-MON-YYYY): 04/23/94

6. Performance Specification Test Date (DD-MON-YYYY): 01/05/95

7. Continuous Monitor Comment (limit to 200 characters): Required by 40 CFR 75.10(a)(4)

<b>Emission</b>	Unit	Information	Section	of

## 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. Incr	ement Consu	ming/Expanding Code: (C, E, U- unkown):
PM	U	
SO2	U	
NO2	U	
4. Base PM SO2 NO2	eline Emissic lbs/hr lbs/hr tons/yr	ons: tons/yr tons/yr

Emission	Unit	Informa	tion	Section	of

PSD Comment (limit to 200 characters): This unit went on line in April of 1968 which predates the major source baseline date of 1/5/75. FPL believes PSD does not apply to this unit.

Emission Unit Information Section of	<b>Emission</b>	Unit In	formation	Section	of
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## 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: PTFU2\_1.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- Fuel Analysis or Specification: PTFU1\_2.doc
   Attached Document ID / Not Applicable / Waiver Requested
- 3. Detailed Description of Control Equipment: PTFU1\_3.doc Attached Document ID / Not Applicable / Waiver Requested
- 4. Description of Stack Sampling Facilities: PTFEU1\_4.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- 5. Compliance Test Report: Previously submitted
  Attached Document ID / Previously submitted, Date / Not Applicable
- 6. Procedures for Startup and Shutdown: PTFU1\_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

1

### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: PTFU1\_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

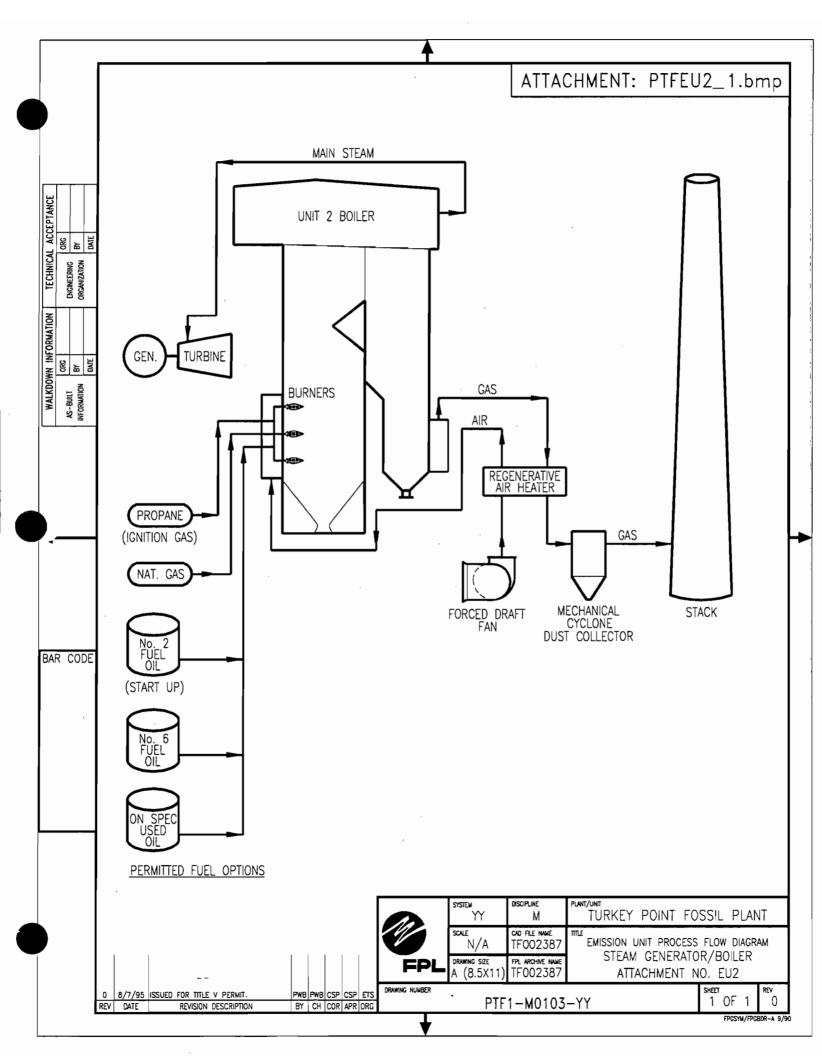
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

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



### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES TURKEY POINT

#### FOSSIL FUEL STEAM GENERATORS UNIT 2

#### STACK SPECIFICATIONS

SAMPLING DIAMETER: 236.5 in.

SAMPLING AREA: 305.1 eq. ft.

SAMPLING PORT DEPTH: 81.5 in.

No. OF PORTS: 4

No. OF POINTS PER TRAVERSE: 6

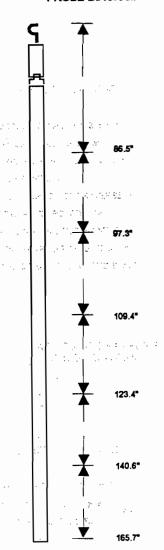
TOTAL No. OF POINTS: 24

SAMPLING TIME PER POINT: 2.5 min.

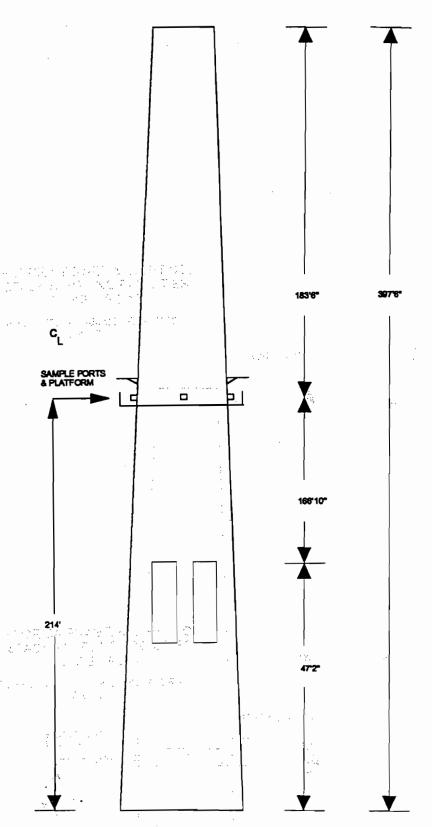
TOTAL SAMPLING TIME: 60.0 min.

NOTE: DRAWING IS NOT TO SCALE

## PARTICULATE SAMPLING PROBE DIAGRAM



#### STACK DIAGRAM



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

### Attachment PTFU2\_13.txt

### Identification of Additional Applicable Requirements

### A013-238932 Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 3,850 mmBtu/hr during fuel oil firing or 4,025 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis to monitor the heat input rate to the boiler.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

MAXIMUM ALLOWABLE EMISSION LIMITS					
Pollutant	Fuel	lb/mmBtu	Test Method		
Particulate Matter <sup>(1)</sup> Steady state	Oil	0.1	EPA Method 5 or 17		
sootblowing	Oil	0.3 (max. 3 hours)	EPA Method 5 or 17		
SO2 <sup>(3)</sup>	Oil	2.75	Monthly fuel analysis		
NOx-RACT NOx <sup>(2)</sup>	Oil	0.53 or 2,041lbs/hr	CEM		
NOx <sup>(2)</sup>	Gas	0.40 or 1,610 lbs/hr	CEM		

- (1) For compliance with each of these emission limits, FPL uses annual stack tests.
- (2) These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.
- (3) County limit 1.1 lb/mmBtu
- 4. To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for each boiler and monthly records of heating value for such fuel. All records shall be naintained for a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

FPL has the records required by the above permit condition and such records are available to the Department for review.

5. Any change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau Air Regulation. FPL has not undertaken any such changes, but if changes are contemplated, will notify the \_\_partment as specified.

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

Petitioner.

00C Case Nos.: 83-0578 83-0577, 83-0576, 83-0585, 83-0586, 83-0587, 83-0588 83-0581, 83-058A, ED

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## ORDER GRANTING PETITION FOR REDUCED . FREQUENCY OF PARTICULATE TESTING

On September 16, 1983, the Petitioner, FLORIDA POWER AND LIGHT COMPANY, fixed 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

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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 regulary 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)l, 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. Pailure 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  $\frac{2^{-4}}{}$  day of April, 1984.

FMED, we this take, pursuant to \$120.52 (9). Further Sunct is, with the designated Department Clork, recept of which is hereby acknowledged.

Clerk Date

VICTORIA J. TSCHINKEL Secretary

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

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### CERTIFICATE OF SERVICE

Whomen E. Whishot
NANCY & WRIGHT
Assistant General Courses

State of Plorida Department of Environmental Regulation 2600 Blair Stone Road Tallabassee, Plorida 32301 904/488-9730 DEPARTMENT OF ENVIRONMENTAL REGULATION

**Best Available Copy** 

In the matter of: Florida Power and Light Co., Inc.

Petitioner

ASP-86-E01



## 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

- 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 $_{\rm X}$ ) 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 and 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. AU41-64792 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.

there and ordered this 5 day of September, 1986 in

Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to \$120.52 (9), Fiorica Statutes, with the designated Departnunt Clark, receipt of which is hereby acknow-MCZEG.

C. A. HITCL 9-5-14 Cherk مرددا

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION 2600 Blair Stone Road

Tallahassee, Florida 32301

Telephone: (904) 488-4805

Victoria J. Tschink Secretary

### 17-2.700(3) EXCEPTIONS AND APPROVAL OF ALTERNATE

#### PROCEDURES AND REQUIREMENTS

Florida Power and Light Co., Incorporation

### REQUEST FOR EXCEPTION

UNIT: Oil Fired Steam PERMIT NO: A041-51630 (Unit 1)

Electric and AO41-64792 (Unit 2)

Generating - EMISSION LIMITING STANDARD:

850 Begawatts NO<sub>X</sub> - 0.30 pounds per million BTU heat input

PLANT: Manatee

DESCRIPTION: Compliance Testing for NO<sub>x</sub> for Manatee Plants

Units No. 1 and No. 2.

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

EXCEPTION REQUESTED: Use of EPA Reference Method 7E

in lieu of EPA Reference Method 7

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.

<b>Emission</b>	Unit	Informa	tion	Section	of

### 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:

[	x ]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
٢	1	The emissions unit addressed in this Emissions Unit Information Section is a

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

unregulated emissions unit.

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>Emission</b>	Unit	Information	Section	of

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

### **Emissions Unit Description and Status**

<ol> <li>Description of Emissions Unit Addressed in This Section (limit to 60 characters):</li> <li>5 emergency diesel generators supporting units 1 and 2.</li> </ol>
Emissions Unit Identification Number: Unknown     (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: 049
6. Emissions Unit Comment (limit to 500 characters):

### **Emissions Unit Control Equipment**

A. Control Equipment #:

- 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):

2. Long-term Reserve Shutdown Date (DD-MON-YYYY):

3. Package Unit:

Manufacturer: MKW Powersystems, Inc.

Model

Number: EMD MP-45

4. Generator Nameplate Rating: MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 24.89 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):

Maximum heat input is reflective of #2 oil firing for each of the five emergency diesel generators.

### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

	Emission	Unit I	nformation	Section	of
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# 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	
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DEP Form No. 62-210.900(1)

Emission Unit Information Section of	<b>Emission</b>	Unit In	formation	Section	of
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<u>List of Applicable Regulations</u> (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. 62-296.570(4)(a)3. F.A.C. 62-296.570(4)(b)7.	F.A.C. 62-296.570(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)4.a. F.A.C. 62-297.310(7)(a)9. F.A.C. 62-297.310(8)
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### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     EU 3, Turkey Point Emergency Diesel Unit-1 Generators
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): NA
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): V
6. Stack Height: 14 ft
7. Exit Diameter: 1.83 ft
8. Exit Temperature: 735 °F
9. Actual Volumetric Flow Rate: 23000 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: 567252 North: 2813469
14. Emission Point Comment (limit to 200 characters):  Each of the emergency diesel generators burns 183 gallons an hour, therefore combined is 915 gallons an hour. Less than 400 hours of operation per year is typical.

### **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     EU 3, Turkey Point Emergency Diesel Unit-2 Generators
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): NA
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): V
6. Stack Height: 14 ft
7. Exit Diameter: 1.83 ft
8. Exit Temperature: 735 °F
9. Actual Volumetric Flow Rate: 23000 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: 567258 North: 2813469
14. Emission Point Comment (limit to 200 characters):  Each of the emergency diesel generators burns 183 gallons an hour, therefore combined is 915 gallons an hour. Less than 400 hours of operation per year is typical.

Emission Unit information Section of	<b>Emission</b>	rmation Section of	Unit	Emission Unit Information Section of
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## **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     EU 3, Turkey Point Emergency Diesel Unit-3 Generators
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):  NA
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): V
6. Stack Height: 14 ft
7. Exit Diameter: 1.83 ft
8. Exit Temperature: 735 °F
9. Actual Volumetric Flow Rate: 23000 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: 567266 North: 2813469
14. Emission Point Comment (limit to 200 characters):  Each of the emergency diesel generators burns 183 gallons an hour, therefore combined is 915 gallons an hour. Less than 400 hours of operation per year is typical.

	<b>Emission</b>	Unit	Information	Section	of
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## **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     EU 3, Turkey Point Emergency Diesel Unit-4 Generators
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): NA
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): V
6. Stack Height: 14 ft
7. Exit Diameter: 1.83 ft
8. Exit Temperature: 735 °F
9. Actual Volumetric Flow Rate: 23000 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: 567273 North: 2813469
14. Emission Point Comment (limit to 200 characters): Each of the emergency diesel generators burns 183 gallons an hour, therefore combined is 915 gallons an hour. Less than 400 hours of operation per year is typical.

	<b>Emission</b>	Unit Inf	formation	Section	of
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## **Emission Point Description and Type**

Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     EU 3, Turkey Point Emergency Diesel Unit-5 Generators
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):  NA
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): V
6. Stack Height: 14 ft
7. Exit Diameter: 1.83 ft
8. Exit Temperature: 735 °F
9. Actual Volumetric Flow Rate: 23000 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: 567281 North: 2813469
14. Emission Point Comment (limit to 200 characters):  Each of the emergency diesel generators burns 183 gallons an hour, therefore combined is 915 gallons an hour. Less than 400 hours of operation per year is typical.

**DEP Form No. 62-210.900(1)** 

Emission Chit into mation Section 01	<b>Emission</b>	Unit	Information	Section	of
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# 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): Unit 3 consists of five emergency diesel generators
2. Source Classification Code (SCC): 2-02-001-02
3. SCC Units: thousand gallons
4. Maximum Hourly Rate: 0.183
5. Maximum Annual Rate: 73.2
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters):  Each of the emergency diesel generators burns 183 gallons an hour; combined = 915 gph. Rates are based on 400 hours of operation per year.

Emission Unit Information Section of
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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

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

### **Pollutant Detail Information**

1. Pollutant Emitted: Nitrogen Oxides
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 118.23 lbs/hr 23.646 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 4.75 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)7.
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): 4.75 lb/mmBtu * 24.89 mmBtu/hr = 118.2 lb/hr
(118.2  lb/hr * 400  hr/yr) / 2000  lb/ton = 23.646  tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  Data for one diesel gen. Emission rate supplied by manufacturer. AP-42 for this class of diesel = 3.1 lb/mmBtu.

<b>Emission</b>	Unit	Information	Section	 of	

Information for Facility\_ID: 1 Emission Unit #: 3 Pollutant #: 2 Basis For Allowable Emission #: 2

Allowable Emissions (Pollutant identified on front page)

- Basis for Allowable Emissions Code: Emissions limit required by rule
   Future Effective Date of Allowable Emissions:
   Requested Allowable Emissions and Units: 4.75 Units: lb/mmBtu
   Equivalent Allowable Emissions: 118.23 lbs/hr 23.65 tons/yr
   Method of Compliance: None
- 6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

183

Rule 62-296.570(4)(a)3. allows no testing if op. hrs. < 400/yr on oil. Rule was made retroactively applicable by changes to 62-210.300(3)(a) which previously had exempted these units.

<b>Emission</b>	Unit	Information	Section	of

# 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 [ ] Rule [ ] Other
3. Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hr
4. Method of Compliance Code:
5. Visible Emissions Comment (limit to 200 characters):  Diesel generators are subject to the general visibility standard in Rule 62-296.310(2)(a).

<b>Emission Unit Information</b>	Section	of
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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

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

Visible Emissions Limitation #: 3

1. Visible Emissions Subtype: VE100
2. Basis for Allowable Opacity Code(R/O): RULE [ ] Rule [ ] Other
Allowable Opacity:     Normal Conditions:
4. Method of Compliance Code: DEP Method 9
5. Visible Emissions Comment (limit to 200 characters): Rule 62-210.700(1), F.A.C. allows up to 100% opacity for up to 2 hrs/24 hrs for startup, shutdown & malfunctions.

Emission Unit Information Section of	<b>Emission</b>	Unit	Information	Section	of
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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

Continuous Monitor #:

### **Continuous Monitoring System**

<ol> <li>Parameter Code:</li> <li>Pollutant(s):</li> </ol>					
3. CMS Requirement Code(R/O):	Rule	/ Other			
4. Monitor Information: Manufacturer:					
Model Number:	Serial Numb	er:			
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.					

	<b>Emission</b>	Unit	Information	Section	of
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## 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.

<b>Emission Unit Information S</b>	Section	of
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### 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

Emission Unit Information Section o	of
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4. Bas	eline Emissions:			
PM	12.3 lbs/hr	2.46	tons/yr	
SO2	65 lbs/hr	13	tons/yr	
NO2	125 0 tons/yr			

5. PSD Comment (limit to 200 characters):

# 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: Attached Document ID: PTFU3\_1.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- 2. Fuel Analysis or Specification: Attached Document ID: PTFU3\_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: Attached Document ID: PTFU3\_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 : Attached Document ID: PTFU3\_10.txt Attached Document ID / Not Applicable
- 11. Alternative Modes of Operation (Emissions Trading): NA Attached Document ID / Not Applicable
- 12. Identification of Additional Applicable Requirements : Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: Not Applicable Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

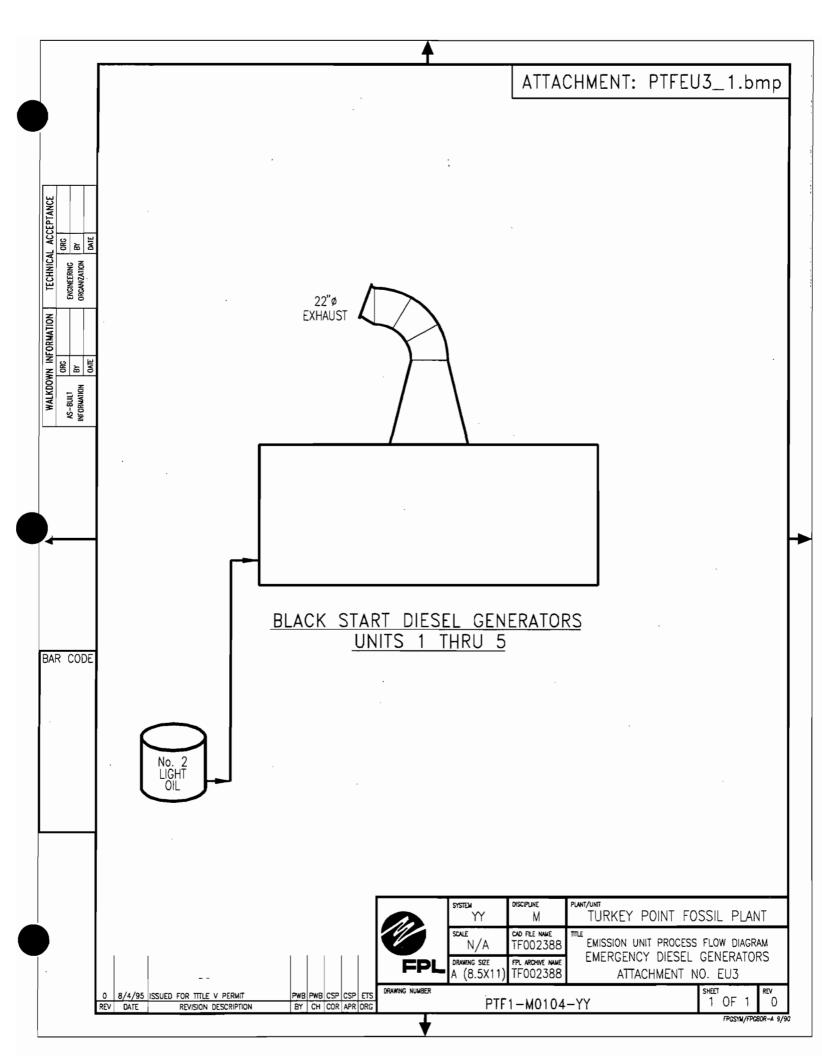
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

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 PTFU3\_2.txt

### Fuel Analysis

### Light Distillate oil (typical)\*

<u>Parameter</u>	Typical value	Max value
API gravity @ 60 F	41.2 ¹	51 ¹
Relative density	285 lb / bbl <sup>2</sup>	not applicable
Heat content	19,130 Btu / Ib	not applicable
% sulfur	0.5	not applicable
% nitrogen	9 mg / kg	not applicable
% ash	negligible	0.001 1

<sup>\*</sup>Note: The values listed are "typical" values based upon:

- 1) information FPL gathered by laboratory analysis, and
- 2) FPL's fuel purchasing specifications. However, analytical results from grab samples of fuel taken at any given point in time may vary from those listed.
- 1 Data taken from the FPL fuel purchasing specification
- 2 Data from laboratory analysis

### Attachment PTFU3\_10.txt

### Alternative Methods of Operation

The five "Black Start" emergency diesel generators are peaking units which may occasionally be run to produce additional megawatts to meet system load demand. In addition, they serve as the main backup power supply components for the fossil steam boiler generating units in the event of a disconnect from the rest of the generating system.

These emergency diesel generators will be fired with light distillate oil fuel. Operating hours on the diesel generators are unlimited; they may each be operated up to 8760 hours per year. However, as a practical matter, the generators typically do not operate nearly that often; historically the generators have operated less than 400 hours per year each.

The emergency diesel generator is typically started up at least once per month and run for about an hour to ensure operability if & when needed to provide startup power to large plant operating equipment.

<b>Emission Un</b>	it Information	Section	of
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#### 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.
- [ X ] 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

- [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.

Emission Unit Information Section of
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# B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

<ol> <li>Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unregulated emission units</li> </ol>
2. Emissions Unit Identification Number: 004 (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: 49
6. Emissions Unit Comment (limit to 500 characters):  This emission unit is comprised of all unregulated emission units at the facility. Attachment PTP-FW contains a list of the sources that are included in this emission unit section.

### **Emissions Unit Control Equipment**

A. Control Equipment #:

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

B. Control Equipment #:

1. Description (limit to 200 characters):

2. Control Device or Method Code:

C. Control Equipment #:

2. Control Device or Method Code:

1. Description (limit to 200 characters):

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

### **Emissions Unit Details**

1	Initial	Startup	Date	(DD-MON-YYYY):
1.	minia	Startup	Date	

- 2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
- 3. Package Unit:

Manufacturer:

Model Number:

- 4. Generator Nameplate Rating: MW
- 5. Incinerator Information:

Dwell Temperature:

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 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):

This emission unit is comprised of various sources which 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

Emission Unit Information Section of	•
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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: 1 Emission \	Unit #: 4
Visible Emissions Limitation #:	

1. Visible Emissions Subtype: VE20	
2. Basis for Allowable Opacity Code(R/O): OTHER [ ] Rule	[ ] 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 st PM.	andard, if they emit

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 the with 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..

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

Steam and Air systems
Steam Drum 3" Relief Valves

Steam Drum 2" Valves to Vent

Main Steam 21/2" Relief Valves with Silencer

Main Steam Stop Valve Vents

Main Steam 1" Free Blow & Vent

Reheat Outlet Header 2" Vents

Reheat Outlet Header 6" Relief Valves

Hot Reheat 2" Vents

Cold Reheat at Inlet Header 6" Relief Valves

Blowdown Tank 16" Silencer Vent

Main Steam 6" Relief Valve at Desuperheater

After Condenser 1/2" Vent from Drainer

After Condenser 2" Vents

Hogging Ejector 10" Exhaust Head with Silencer

Moisture Separator 10" Exhaust Head with Silencer

Moisture Separator 1" Vent

Vacuum Tanks 2A, B, C, & D 4" Vents

Steam Relief Valves at Steam Seal Regulator

Boiler Blowdown Heat Exchanger 1" Vent

Boiler Feed Condensate, Heater Drains

Condensate Storage Tank Vent

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

<u>Steam & Air Evacuation Systems</u> (Continued) Condensate Recovery Tank Vents

Condensate Recovery Cooler - 3/4" Vent

Condensate Recovery Flash Tank - 8" Relief Valve

Vent Condenser 1/2" Vent

After Condenser 1/2" Vent

Inter-Condenser 1/2" Vent

Boiler Feed Pumps 1" Vent

Boiler Feed Condensate, Heater Drains Boiler Feed Pumps Relief Valves

Extraction Heater 3" & 4" Relief Valves

Gland Steam Condenser Air Ejector

Extraction Heaters 3/4" & 1" Vents

Hydrazine Storage Tank

Ammonia Storage Tank

Phosphate Storage Tank

Service Water, Cooling Water & Fire Protection Water Storage Tank (500,000 Gal.) 6" Vent

Closed C.W. Heat Exchanger A & B 1" Vent

F.D. Fan Hydraulic Coupling Coolers A & B 3/4" Vent

H<sub>2</sub> Coolers A, B, C & D ½" Vent

Boiler Feed Pump Hydrogen Coupling Coolers 3/4" Vent

Cooling Water Surge Tank 8" Vent

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

Service Water, Cooling Water & Fire Protection (Continued)

Closed Cooling Water System Units A & B 3/4"

Boiler Feed Pump Seal Piping Cooler Vents

Fuel Oil, Lube Oil & Lube Oil Purification

Fuel Oil Storage Tanks (256,000 BBL.) 6" Vent

Fuel Oil Metering Tanks (12,000 BBL.) Vent - 6"

Fuel Oil Storage Tanks (256,000 BBL.) Draw-Off Sump

Light Oil Storage Tank (500 BBL.) Vent

Light Oil Storage Tank (600 BBL) Vent

Blowback Tank at Metering Tank 1" Relief Valve

Blowback Tank at Metering 2" Valve

Blowback Tank at Fuel Oil Burner Pumps - 1" Relief Valve

Blowback Tank at Fuel Oil Burner Pumps - 2" Valves

Fuel Oil Lines 1: Relief Valves

Fuel Oil Lines 3/4" Valves

Fuel Oil, Lube Oil & Lube Oil Purification

Blowback Tanks at Each Level of Burners - 2" Vent

Blowback Tanks at Each Level of Burners - 1" Relief Valve

Fuel Oil burner Booster Pumps Vents

8" Fuel Oil Line at Heaters Vents

Station Air at all Blowback Tanks 2" Vent

Generator Loop Seal Tank Exhaust Head - 4"

Oil Mist Eliminator 6" Vent

Fuel Oil, Lube Oil & Lube Oil Purification (continued) Lube Oil Coolers 1/2" Vent

Lube Oil Conditioner Filter Vent

Lube Oil Piping High Point Filter Vent

Lube Oil Batch Tank Filter Vent

Magnesium Hydroxide Tank (Fuel Additive)

Lime Slurry, Caustic Wash, Nitrogen Purge Instrument Air Nitrogen Relief Valve

High Pressure Heater Nitrogen Vents

Steam Drum Nitrogen Vent

Secondary S.H. Outlet Nitrogen Vent

Primary S.H. Outlet Nitrogen Vent

Instrument AirAir ReceiverRelief Valves

Instrument Air After Cooler Relief Valves

Station Air After Cooler Relief Valves

Station Air Air ReceiverRelief Valves

Slurry Mixing Tank

Slurry Service Tank

Soda Ash Service Tank

Soda Ash Mixing Tank

#### **GENERAL SITE**

<u>Miscellaneous</u>	<b>Buildings</b>	H.V.A.C	(Cooling/Heating)

Stores Building

Control Building

Service Building

North Gate Guard House

Switchyard Buildings

C.E.M. Building

Switchgear Room

Water Treatment/Lab

**Elevators** 

Administration Building

Sanitary Vents/Stacks

Control Building

Recreation Pavilion

Service Building

Administration Building

Port-A-Johns

Sheet Metal Shop

Service Building

Chemical Lab

Chemical Storage Bldg.

Sanitary Vents/Stacks (continued) Switchyard Control Bldg.
Battery Room
Paint & Lube Oil Bldg.
Dry Storage Bldg.
Electrical Bldg.
Warehouses
Boiler Feed Pump Bldg.
Control Bldg.
Chlorination Bldg.
I & C Shop
Weld Shop
Administration Bldg.
Kitchen Vent/Exhaust Systems Control Room
Service Bldg.
Administration Bldg.
Recreation Pavilion

<u>C.E.M. Equipment</u> Monitoring Gases

#### **GENERAL SITE**

Gas Bottle Storage

Nitrogen, CO<sub>2</sub>. Hydrogen, Oxygen, Acetylene, Argon

Oily Waste WaterSumps

Filling Station2000 Gallon Diesel Fuel Tank 2" Vent

2000 Gallon Unleaded Fuel Tank 2" Vent

<u>Hazardous Waste Storage Area</u> Sealed Drums & Containers

Natural GasGas Metering Station

Ignition Gas (Liquid Propane)

Propane Storage Tank

Water Treatment

Chemical Storage Area

Waste Water Treatment

Storm Water Sumps

Oil/Water Separator Tank Vent

Waste Neutralization Basin

Storm Water Basin

Ash Disposal Basin

#### Miscellaneous Activities

Home Heating and Comfort Heating with a gross maximum heat output of less than one million BTU/hour

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

Vacuum Pumps used in laboratory operations

Equipment used for steam cleaning

Miscellaneous Activities (continued)

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 a hazardous air pollutant

Plant Grounds Maintenance

Routine Maintenance/Repair Activities
Non-Halogenated Solvent Cleaning Operations

Use of spray cans or solvents for routine maintenance activities

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

Transformers, Switches and Switchgear, Processing & Venting

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

Air Compressors and Centrifuges Used for Compressing Air

Storage of Product in Sealed Containers

Painting of Plant Equipment

#### **GENERAL SITE**

<u>Miscellaneous Mobile Vehicle Operation</u>
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.

Sandblast Shed (future)