# TABLE OF CONTENTS RIVIERA PLANT TITLE V APPLICATION

Section 1 - Application Information

Section 2 - Facility Information

Section 3 - Emission Unit Information

(includes Emission Unit description, applicable regulations, emission point information, segment information, pollutant information, visible emission information, continuous monitor information, and supplemental information.)

Emission Unit 1 = Unit 3 Boiler

Emission Unit 2 = Unit 4 Boiler

Emission Unit 3 = Unregulated Trivial & De Minimis Emission Units



### DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF AIR RESOURCES MANAGEMENT

#### APPLICATION FOR AIR PERMIT - LONG FORM

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

#### I. APPLICATION INFORMATION

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

#### **Identification of Facility Addressed in This Application**

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

1. Facility Owner/Company Nam	e: Florida Power & Light Compa	any
2. Site Name: Riviera Plant		
3. Facility Identification Numbe	r : 0990042	
4. Facility Location Information: Facility Street Address: 200-300 City: Riviera Beach	Broadway County: Palm Beach	Zip Code: 33404
5. Relocatable Facility? (Y/N): N	6. Existing Per	rmitted 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: John M. Lindsay Title: Plant General Manager

2. Owner or Responsible Official Mailing Address:

Organization/Firm: FPL Environmental Services Department

Street Address: 11770 U.S. Highway One

City: North Palm Beach

State: FL

Zip Code: 33408

3. Owner or Responsible Official Telephone Numbers:

Telephone: 5618453101

Fax: 5618453155

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

Date 6/5/86

JM July

<sup>\*</sup> 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 3 (ARMS ID # 50PMB500042003)	
02	Fossil Fuel Steam Generator, Unit 4 (ARMS ID # 50PMB500042004)	
03	Unregulated Emission Units	

#### Purpose of Application and Category

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

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

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

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

Current construction permit number:

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

Operation permit to be renewed:

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

Current construction permit number:

Operation permit to be revised:

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

Operation permit to be revised/corrected:

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

Operation permit to be revised:

Reason for Revision:

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

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

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

Current operation/construction permit number(s):

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

Operation permit to be renewed:

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

Operation permit to be revised:

Reason for revision:

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

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

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

Current operation permit number(s), if any:

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

Current operation permit number(s):

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

#### **Application Processing Fee**

Check one:

[N] Applicable (Y/N)

Attached - Amount: \$

#### Construction/Modification Information

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

#### **Professional Engineer Certification**

1. Professional Engineer Name: Kennard F. Kosky

Registration Number: 14996

2. Professional Engineer Mailing Address:

Organization/Firm: KBN Engineering & Appl Sciences

Street Address: 6241 NW 23rd Street

City: Gainesville State: FL Zip Code: 326531500

3. Professional Engineer Telephone Numbers:

Telephone: 3523365600 Fax: 3523366603

#### **RIVIERA PLANT**

4.	Professional	Engineer	Statement:
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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

(seal)

\* Attach any exception to certification statement.

#### **Application Contact Information**

1. Name and Title of Application Contact:

Name: Richard G. Piper

Title: Environmental Specialist

2. Application Contact Mailing Address:

Organization/Firm: FPL Environmental Services Department

Street Address: P.O. Box 088801

City: North Palm Beach

State: FL

Zip Code: 33408

3. Application Contact Telephone Numbers:

Telephone: 5616257661

Fax: 5616257251

#### **Application Comment**

This application is for the FPL Riviera Power Plant, which is located at 200 - 300 Broadway, Riviera Beach, Palm Beach County, Florida on the Intracoastal Waterway.

The plant consists of two conventional steam electric generating stations, designated as units 3 and 4, four residual fuel oil storage tanks, and a 500 kilowatt diesel engine generator. The facility had at one time operated a 75 MW steam generating unit (Unit 2, permit #AO50-174444); however, this unit is no longer in service.

Units 3 & 4 are each comprised of a Foster-Wheeler outdoor-type boiler/steam generator and a General Electric steam turbine which drives an oil and hydrogen-cooled 300 MW class generator with gross capability of 315 megawatts.

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

#### A. GENERAL FACILITY INFORMATION

Information for Facility-Id: *I* Facility Location and Type

1. Facility UTM Coordinates:

Zone: 17

East: 594249

North: 2960632

2. Facility Latitude/Longitude:

Latitude (DD/MM/SS): 26 - 45 - 55

Longitude (DD/MM/SS): 80 - 3 - 9

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 steam generating units, and various unregulated emission units.

#### **Facility Contact**

1. Name and Title of Facility Contact:

Name: Gary Moncrief

Title : Environmental Specialist

2. Facility Contact Mailing Address:

Organization/Firm: FPL Riviera Plant

Street Address: 200-300 Broadway

City: Riviera Beach

State: FL

Zip Code: 33404 -

3. Facility Contact Telephone Numbers:

Telephone: 5618453109

Fax: 5618453155

#### 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**

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

Not Applicable		
·		

# <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

#### **Facility Pollutant Information:**

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

#### E. FACILITY SUPPLEMENTAL INFORMATION

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

- Area Map Showing Facility Location: PRVFS-1.bmp (Enter the Attached Document ID, NA - Not Applicable or WaiverRequested)
- 2. Facility Plot Plan: PRVFS-2.bmp
  (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 3. Process Flow Diagram(s): PRVFS-3.bmp

  (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- 4. Precautions to Prevent Emissions of Unconfined Particulate Matter: PRVFS-4.txt (Enter the Attached Document ID, NA Not Applicable or WaiverRequested)
- Fugitive Emissions Identification: PRVFS-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: Not Applicable (Enter the Attached Document ID, NA Not Applicable)
- 8. List of Equipment/Activities Regulated under Title VI: PRVFS-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: PRVFS-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: PRVFS\_11. txt (Enter the Attached Document ID, NA Not Applicable)
- 12. Compliance Assurance Monitoring Plan: NA (Enter the Attached Document ID, NA Not Applicable)

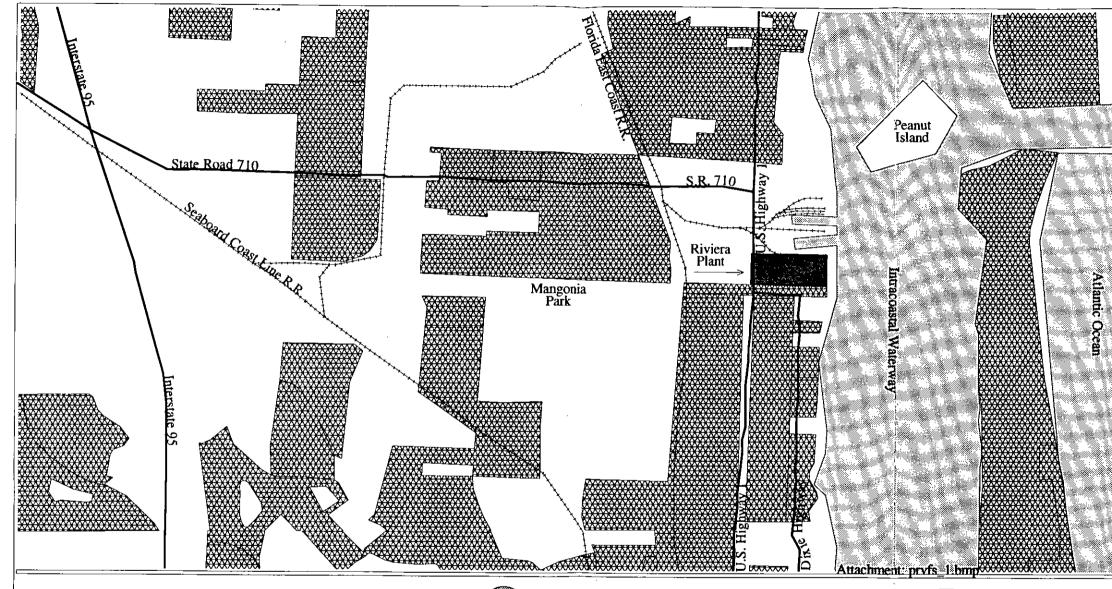
13. Risk Management Plan Verification: PLANNED

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: PRVFS-13.txt (Enter the Attached Document ID, NA Not Applicable)
- 15. Compliance Statement (Hard-copy Required): PRVFS-14.txt (Enter the Attached Document ID, NA Not Applicable)



### Riviera Plant Area Map Palm Beach County

No expressed or implied warranties including, but not limited to the implied warranties of MERCHANTABLITY OF FTINESS 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.





Riviera Plant

Water

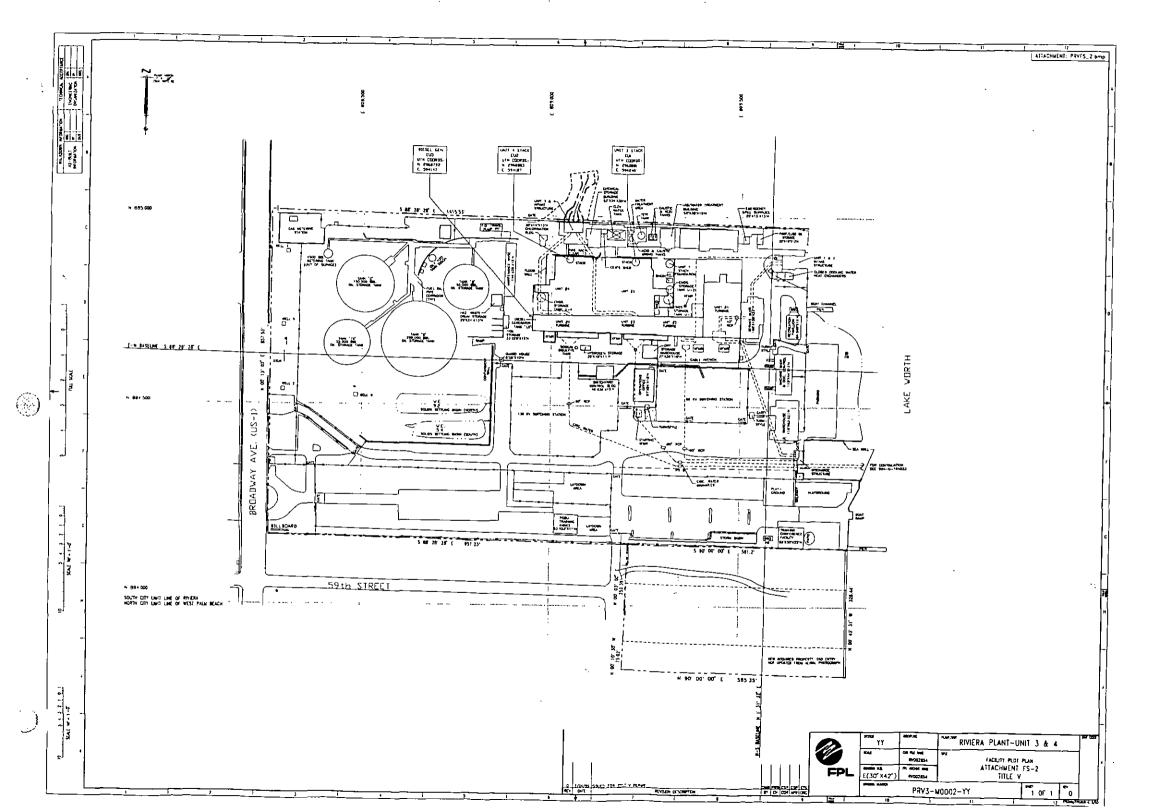
Residential

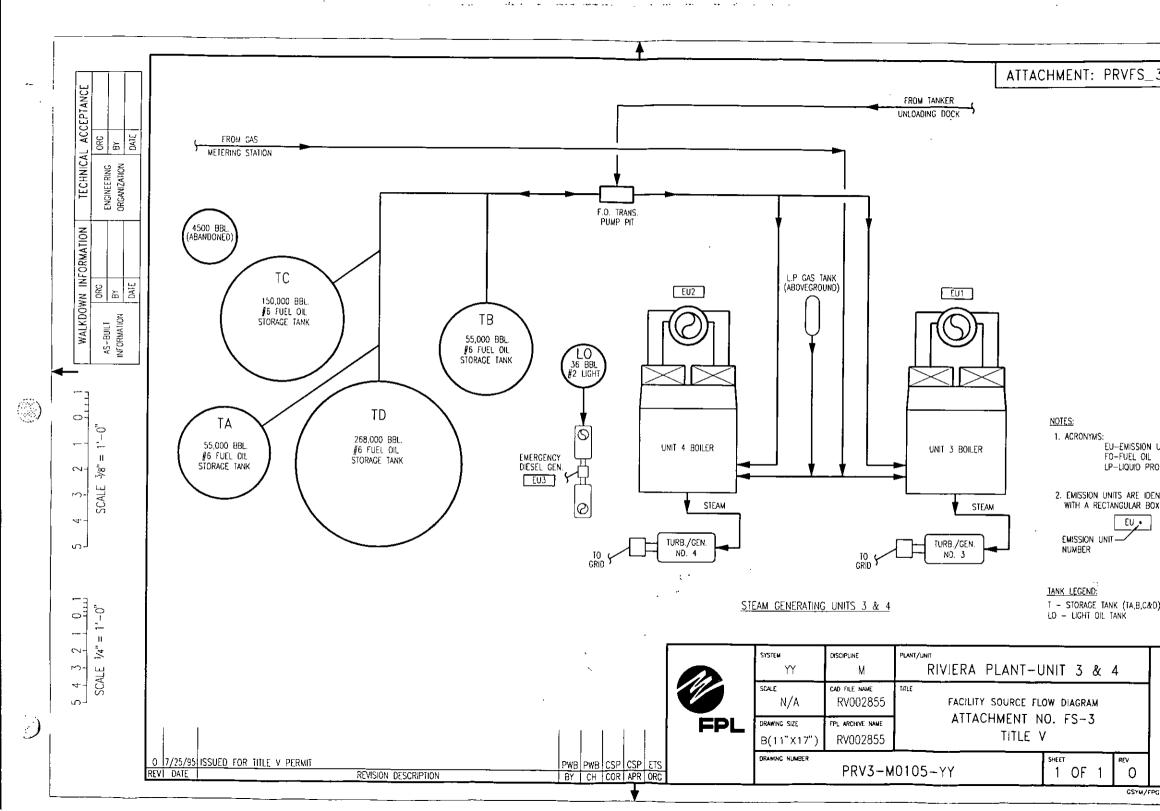
Major Roads

Railroads

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

/export/home/ron/pry-site.ma





### Attachment PRVFS\_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 62-296.310 F.A.C.:

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

#### Attachment PRVFS\_5.txt Fugitive Emission Identification

#### Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PRVFS\_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 PRVFS\_8.txt

#### EQUIPMENT / ACTIVITIES REGULATED UNDER TITLE VI

The Riviera facility has many refrigeration and air-conditioning units on the plant site. Of these, there are no units which currently meet the 50-pound threshold established by 40 CFR 82 for regulated Class 1 and Class 2 substances.

### Attachment PRVFS\_9.txt Alternative Methods of Operation

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

#### Attachment PRVFS\_13.txt Riviera 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 PRVFS\_14.txt Riviera 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 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	Information	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.	Regu	lated or Unregulated Emissions Units? Check one:
[	x ]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
I	]	The emissions unit addressed in this Emissions Unit Information Section is a unregulated emissions unit.
2.	Singl	le 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.

DEP Form No. 62-210.900(1)

Emission Unit Information Section	of	
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### 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): Fossil Fuel Steam Generator, Unit 3
2.	Emissions Unit Identification Number: 003 (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
	Emissions Unit Comment (limit to 500 characters):  The generator nameplate rating given is taken from data provided to the Florida Public Service mmission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the value given, due to changes

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

A. Control Equipment #: 1

1.	. Description (limit to 200 characters):	
	Multiple cyclone with fly Ash Reinjection	

in unit efficiency, or with fluctuations in system load demand.

2. Control Device or Method Code: Multiple Cyclone w/Fly Ash Reinjection

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

**B.** Control Equipment #: 2

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

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

**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): 05/01/62

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

3. Package Unit:

Manufacturer: Foster-Wheeler

Model Number: NA

4. Generator Nameplate Rating: 310 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

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

1. Maximum Heat Input Rate: 3260 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 Rate is based on firing 100% Natural Gas. The Heat Input Rate for #6 fuel oil is 3050 mmBtu/hr. The method of compliance for determining heat input is fuel sampling and analysis.

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

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

	mission U	nit Inform	ation Section	n of
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### D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

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

Not Applicable	

<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

		<del></del>	i
40 C.F.R. 279.72	40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.4(a)(4)(ii)	F.A.C. 62-214,350 (3)
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.5	
40 C.F.R. 72.20(b)	40 C.F.R. 75 Appendix D	40 C.F.R. 75,51(c)	F.A.C. 62-214.350 (5)
40 C.F.R. 72.20(c)	40 C.F.R. 75 Appendix F	40 C.F.R. 75.53(a)	F.A.C. 62-214.350 (6)
40 C.F.R. 72,21(a)	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75,53(b)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.21(b)	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(c)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G	40 C.F.R. 75.53(d)(1)	F.A.C. 62-214.370 (4)
40 C.F.R. 72.22(a)	40 C.F.R. 75 Appendix H 40 C.F.R. 75.10(a)(1)	40 C.F.R. 75.54	F.A.C. 62-214.370 (7)
40 C.F.R. 72.22(c)	40 C.F.R. 75.10(a)(1) 40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.55(c)	F.A.C. 62-214.430
40 C.F.R. 72.23		40 C.F.R. 75.55(e)	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(3)(i)	40 C.F.R. 75.56	paragraph 2
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.60(a)	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.10(b)	40 C.F.R. 75.60(b)	F.A.C. 62-296.405(1)(c)1.j.
40 C.F.R. 72.30(c)	40 C.F.R. 75.10(c)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.30(d)	40 C.F.R. 75.10(d)		F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.32	40 C.F.R. 75.10(f)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.32 40 C.F.R. 72.33(b)	40 C.F.R. 75.10(g)	40 C.F.R. 75.61(a)(5)	F.A.C.
` '	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(b)	62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.33(c)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.62	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.33(d)	40 C.F.R. 75.11(d)	40 C.F.R. 75.63	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.40(a)	40 C.F.R. 75.12(a)	40 C.F.R. 75.64(a)	F.A.C. 62-296.500(2)(c)
40 C.F.R. 72.40(b)	40 C.F.R. 75.12(b)	40 C.F.R. 75.64(b)	F.A.C. 62-296,570(4)(a)3.
40 C.F.R. 72.40(c)	40 C.F.R. 75.13(a)	40 C.F.R. 75.64(c)	F.A.C. 62-296.570(4)(a)4.
40 C.F.R. 72.40(d)	40 C.F.R. 75.13(b)	40 C.F.R. 75.64(d)	F.A.C. 62-296.570(4)(b)3.
40 C.F.R. 72.51	40 C.F.R. 75.14(a)	40 C.F.R. 75.65	F.A.C. 62-296.570(4)(c)
40 C.F.R. 72.90	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.66(a)	F.A.C. 62-297.310(1)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(b)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.20(c)	40 C.F.R. 75.66(c)	F.A.C. 62-297.310(2)(8)
40 C.F.R. 72.9(a)(2)	40 C.F.R. 75.20(d)	40 C.F.R. 75.66(d)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(b)	40 C.F.R. 75.20(f)	40 C.F.R. 75.66(g)	F.A.C. 62-297.310(4)(a)1.
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.20(g)	40 C.F.R. 75.66(h)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.21(a)	40 C.F.R. 76.13	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(b)	40 C.F.R. 77.3	
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.21(c)	40 C.F.R. 77.5(b)	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(d)	40 C.F.R. 75.21(d)	40 C.F.R. 77.6	F.A.C. 62-297.310(4)(e)
40 C.F.R. 72.9(e)	40 C.F.R. 75.21(e)	F.A.C. 62-204.800(12)	F.A.C. 62-297.310(5)
40 C.F.R. 72.9(f)	40 C.F.R. 75.21(f)	(state only)	F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.22	F.A.C. 62-204.800(13)	F.A.C. 62-297.310(6)(c)
40 C.F.R. 73.33	40 C.F.R. 75.24	(state only)	F.A.C. 62-297.310(6)(d)
40 C.F.R. 73.35	40 C.F.R. 75.30(a)(1)	F.A.C. 62-204.800(14)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.30(a)(1) 40 C.F.R. 75.30(a)(2)	(state only)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(2) 40 C.F.R. 75.30(a)(3)	F.A.C. 62-210.650	F.A.C. 62-297.310(6)(g)
40 C.F.R. 75 Appendix A-3		F.A.C. 62-210.700 (1)	F.A.C. 62-297.310(7)(a)1.
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.31	F.A.C. 62-210.700 (1)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.32	F.A.C. 62-210.700 (2)	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.33	F.A.C. 62-210.700 (4)	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix B	40 C.F.R. 75.35	F.A.C. 62-210.700 (4) F.A.C. 62-210.700 (6)	F.A.C. 62-297.310(7)(a)5.
40 O.I.R. 15 Appellals B	40 C.F.R. 75.36	F.A.C. 62-214.300	F.A.C. 62-297.310(7)(a)9.
		F.A.C. 62-214.300 F.A.C. 62-214.330	F.A.C. 62-297.310(7)(c)
		F.A.C. 62-214.350 (2)	F.A.C. 62-297.310(8)
		F.A.C. 02-214.330 (2)	Table 62-297.310-1
	İ		1 auto 02-27/.310-1

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

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

Information for Facility-ID 1 Emission Unit #:1

Identification of Point on Plot Plan or Flow Diagram:     Unit 3 boiler				
2. Emission Point Type Code (1,2,3,4): 1				
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): Unit 3 boiler has one emission point which is the stack.				
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission unit 1, Riviera Unit 3 boiler.				
5. Discharge Type Code (D, F, H, P, R, V, W): V				
6. Stack Height: 298 ft				
7. Exit Diameter: 16 ft				
8. Exit Temperature: 263 °F				
9. Actual Volumetric Flow Rate: 1063401.3 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: 594.24 North: 2960.801				
14. Emission Point Comment (limit to 200 characters): Information in items 8 & 9 was collected during the February 1994 particulate test for this unit. Temp was taken @ mid-stack @ ~ 90% of max heat input. Flow rates & temps at other times may vary.				

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Emission U	nit In	formation	Section	of
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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 3 boiler firing number 6 oil
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 20.07
5. Maximum Annual Rate: 175776.3
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash: 0.1
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 #: 1 Segment #: 2

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Unit 3 boiler firing natural gas
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.1
5. Maximum Annual Rate: 27197.7
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 or on-specification used oil from FPL operations.

<b>Emission</b>	Unit	Informati	on Section	of

Segment	Descript	ion and	Rate:

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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Unit 3 boiler firing on-specification used oil
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 22.43
5. Maximum Annual Rate: 100
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
Segment Comment (limit to 200 characters):     The maximum annual rate of on-specification used oil burned in the Riviera boiler unit 3 is based on historical data.

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**Segment Description and Rate:** 

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

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 3 Boiler burning Number 2 fuel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 22.43
5. Maximum Annual Rate: 196455.9
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 0.5
8. Maximum Percent Ash: 0.01
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 Se</b>	ection o	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 #: 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 3 boiler firing propane
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.26
5. Maximum Annual Rate: 28557.6
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

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

Segment Description and Rat	e:
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Information for Facility\_ID:1 Emission Unit #: 1 Segment #: 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 3 Boiler co-firing all possible combinations of natural gas, No. 6 fuel oil, No. 2 fuel oil, propane, on specification used oil and landfill-derived methane gas.
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: thousand gallons
4. Maximum Hourly Rate: 20.07
5. Maximum Annual Rate: 175776.3
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):  This segment information page represents cofiring. The data provided is based on the #6 oil equivalent values for each field.

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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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Unit 3 Boiler chemical cleaning waste evaporation
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).

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

<u>Segment</u>	Descri	ption	and	Rate:

Information for Facility\_ID:1 Emission Unit #: 1 Segment #: 8

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 3 boiler firing methane gas
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.1
5. Maximum Annual Rate: 27197.7
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 plant is exploring the possibility of firing landfill-derived methane gas as a supplemental fuel.  Information given is based on natural gas characteristics.

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

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	NA	NA	EL
NOX	024	NA	EL
СО	NA	NA	NS
voc	NA	NA	NS
PM	077	NA	EL
PM10	077	NA NA	NS
H133	NA	NA	NS
H106	NA	NA	NS
Н107	NA	NA	NS
SAM	NA NA	NA	NS
НАР	NA	NA	NS

<b>Emission</b>	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 #: /

#### **Pollutant Detail Information**

1. Pollutant Emitted: Sulfur Dioxide
2. Total Percent Efficiency of Control: %
3. Potential Emissions: 8387.5 lbs/hr 36737.25 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 *3050mmBtu/hr = 8387.5 lb/hr
(8387.5 lb/hr * 8760 hr/yr) / 2000 lb/ton = 36737.25 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  SO2 emissions are limited by Rule 62-296.405(1)(c)1.j. Equivalent allowable emissions are for liquid fuel.

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

Allowable Emissions (Pollutant identified on front page)

Basis for Allowable Emissions Code:	Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emis	ssions:
3. Requested Allowable Emissions and Uni	ts: 2.75 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 8387.5	lbs/hr 36737.25 tons/yr
5. Method of Compliance: Fuel sampling &	analysis
6. Pollutant Allowable Emissions Commen (limit to 200 characters):	t (Desc. of Related Operating Method/Mode)

2.75 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-295.405(1)(c)1.j.]. Equivalent allowable emissions are given for liquid fuel firing.

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

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

#### Pollutant Detail Information

1. Pollutant Emitted: N	itrogen Oxides		
2. Total Percent Efficiency	of Control:		%
3. Potential Emissions: 18	391 lbs/hr 82	82.58 tons/yr	
4. Synthetically Limited?	(Yes/No): No		
5. Range of Estimated Fug to tons/y		ns: (1, 2, 3):	
6. Emission Factor: 0.62 Reference: DEP R	Units lb/m	ımBtu	
7. Emissions Method Code	: (0, 1, 2, 3, 4, 5):		[ ] 5
8. Calculation of Emissions 0.62 lb/mmBtu * 3050 mm (1891 lb/hr * 8760 hr/yr) / 2000 l	Btu/hr = 1891.0 lb/hr	,	
9. Pollutant Potential/Estim Riviera plant is currently co [30-day rolling average]:			200 characters): to achieve the following target limits
lb/mmBtu	Natural Gas 0.43	Fuel Oil 0.55	
lb/hr	1,402	1,678	

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Emission	Unit i	Information	Section	of
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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: Required or assumed by permittee for other reasons.
- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 0.62 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 1891 lbs/hr 8282.58 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

0.62 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)3] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for liquid fuel firing.

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

Allowable Emissions (Pollutant identified on front page)

Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.5 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 1630 lbs/hr 7139.4 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

 $0.50\ lb/mmBtu$  is the current reg. limit [Rule 62-296.570(4)(b)3] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

# 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: 381.25 lbs/hr 1669.88 tons/yr
4. Synthetically Limited? (Yes/No): No
5. Range of Estimated Fugitive/Other Emissions: (1, 2, 3): to tons/yr
6. Emission Factor: 0.125 Units lb/mmBtu Reference: DEP Rule 62-296.405(1)(b) and Rule 62-210.700(3)
7. Emissions Method Code: (0,1, 2, 3, 4, 5): 0 [ ] 1
8. Calculation of Emissions (limit to 600 characters): 0.125 lb/mmBtu * 3050 mmBtu/hr =381.25 lb/hr
(381.25 lb/hr * 8760 hr/yr) / 2000 lb/ton = 1669.88 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  A particulate matter emissions limit of 3 hours /24 hours at 0.3 lb/mmBtu and 21 hours/24 hours at 0.1 lb/mmBtu is equivalent to an average of 0.125 lb/mmBtu

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

#### A.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions	
3. Requested Allowable Emissions and Units:	Units:

Emission U	nit Informa	tion Section	of
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Information for Facility\_ID: / Emission Unit #: / Pollutant #: / Basis For Allowable Emission #: 1 1

Allowable Emissions (Pollutant identified on front page)

based on steady-state operation 21 hours per 24-hour period.

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 305 lbs/hr 1168.9 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) (limit to 200 characters):  167

Data is for steady-state conditions firing liquid fuel. The equivalent allowable emissions given above are

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

Allowable Emissions (Pollutant identified on front page)

1.	Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units: 0.3 Units: lb/mmBtu
4.	Equivalent Allowable Emissions: 915 lbs/hr 501 tons/yr
5.	Method of Compliance: DEP Rule 62-296.405(1)(e)2.
	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) mit to 200 characters):

178

Data is for soot-blowing and load-changing conditions firing fuel oil. Equivalent allowable emissions based on 3 hours of sootblowing per 24-hour period [DEP Rule 62-210.700(3)].

<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 #: 1 Visible Emissions Limitation #: 1

Visible Emissions Subtype: VE40
 Basis for Allowable Opacity Code(R/O): RULE [] Rule [] Other
 Allowable Opacity:
 Normal Conditions: 40 % Exceptional Conditions: %
 Maximum Period of Excess Opacity Allowed: min/hr
 Method of Compliance Code: EPA Method 9
 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>Emissi</b>	ion i	Unit	Infor	mation	Section	of

#### 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
Allowable Opacity:     Normal Conditions: 60	%
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 to 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
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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:  % 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 shutdown, and up to 2 hrs/24 hrs for malfunctions.	during startup and

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<b>Emission</b>	Unit	Inform:	ation	Section	of	

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

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

Continuous Monitor #: 1

#### **Continuous Monitoring System**

Parameter Code:     Pollutant(s): Sulfur Dioxide		
3. CMS Requirement Code(R/O): RULE	Rule / Other	
4. Monitor Information:  Manufacturer: TECO  Model Number: 43B	Social Number 42D 45442 272	
5. Installation Date (DD-MON-YYYY): 01/31	Serial Number: 43B-45443-273	
6. Performance Specification Test Date (DD-M	ON-YYYY): 07/12/94	
7. Continuous Monitor Comment (limit to 200 ch	aracters):	

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#### 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: 42-44841-272

5. Installation Date (DD-MON-YYYY): 01/31/94

6. Performance Specification Test Date (DD-MON-YYYY): 07/12/94

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

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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: N3H8174T

5. Installation Date (DD-MON-YYYY): 01/31/94

6. Performance Specification Test Date (DD-MON-YYYY): 07/12/94

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

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

<b>Emission</b>	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**

Paramete     Pollutant				
3. CMS Red	quirement Code(R/O): RULE	Rule	/ Other	
	Information: urer: Air Monitor umber: MASSTRON	Serial Numb	er: 5590D	
5. Installatio	on Date (DD-MON-YYYY): 01/3	1/94		
6. Performa	nce Specification Test Date (DD-M	10N-YYYY): 07/12/	94	
	ous Monitor Comment (limit to 200 copy 40 CFR 75.10(a)(1)	haracters):		

DEP Form No. 62-210.900(1)

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 #: 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: 1660

5. Installation Date (DD-MON-YYYY): 01/31/94

6. Performance Specification Test Date (DD-MON-YYYY): 12/08/94

7. Continuous Monitor Comment (limit to 200 characters):
 Required by 40 CFR 70.10(a)(4)

<b>Emission Unit Information</b>	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 #: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.

Emission Unit Information 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. Incre	ment Consuming/Expanding Co	de: (C, E, U- unkown):	
PM	U		
SO2	U		
NO2	U		
4. Base PM SO2 NO2	line Emissions: lbs/hr lbs/hr tons/yr	tons/yr tons/yr	

DEP Form No. 62-210.900(1) Form Effective: 3/21/96 Emission Unit Information Section \_\_\_\_ of \_\_\_\_

5. PSD Comment (limit to 200 characters):
Riviera Unit 3 was constructed in 1962 which pre-dates the major source PSD baseline date of 1/5/75.

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

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

#### Supplemental Requirements for All Applications

- 1. Process Flow Diagram: PRVUI\_1.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- Fuel Analysis or Specification: PRVU1\_2.txt
   Attached Document ID / Not Applicable / Waiver Requested
- 3. Detailed Description of Control Equipment: PRVU1\_3.txt
  Attached Document ID / Not Applicable / Waiver Requested
- 4. Description of Stack Sampling Facilities: PRVU1\_4.bmp
  Attached Document ID / Not Applicable / Waiver Requested
- 5. Compliance Test Report: NA
  Attached Document ID / Previously submitted, Date / Not Applicable
- 6. Procedures for Startup and Shutdown: PRVU1\_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 : PRVUI\_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 : PRVU1\_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: NA Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

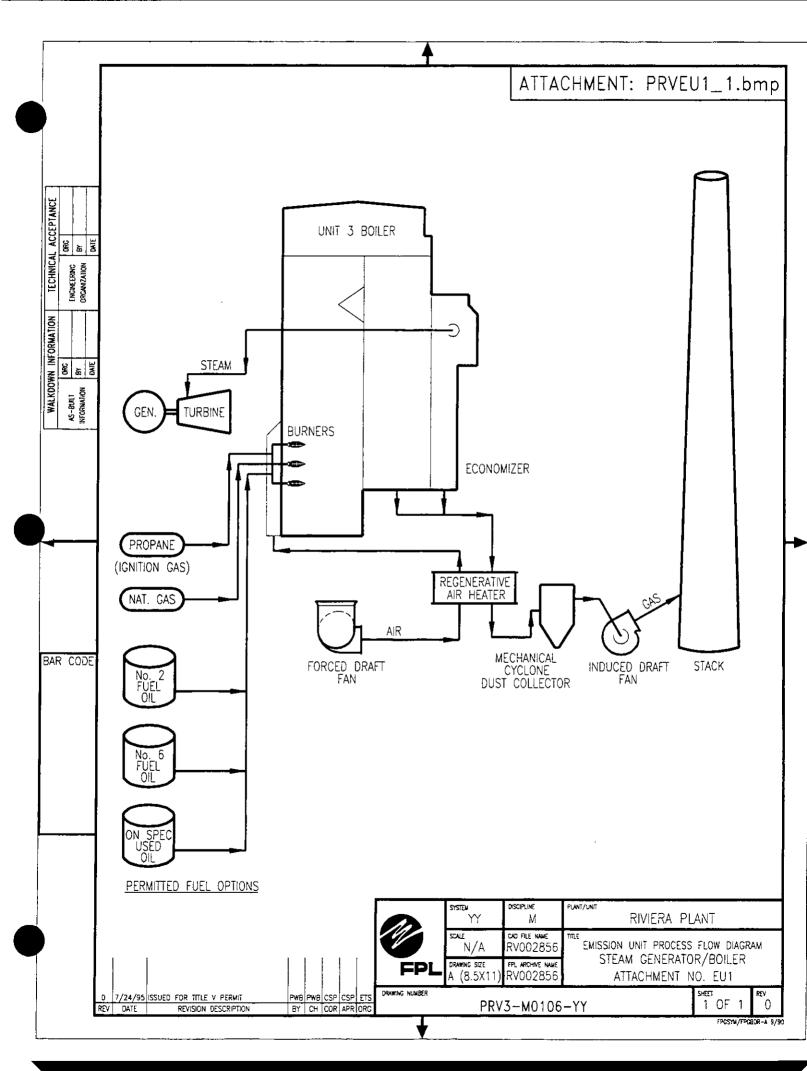
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable



#### PRVU1\_1.BMP

### FOSSIL FUEL STEAM GENERATORS UNITS 3 & 4

STACK SAMPLING FACILITIES RIVIERA

# STACK SPECIFICATIONS STACK DIAGRAM SAMPLING DIAMETER: 216 1/4 in. SAMPLING AREA: 255.1 eq. ft. SAMPLING PORT DEPTH: 50 1/2 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 SAMPLE PORTS & PLATFORM 10 12 3/4" 88 3/4" 15 3/4" 104 1/2"

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.

130 1/2\*

### Fuel Analysis Natural Gas Analysis (typical)<sup>2</sup>

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

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

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

#### Fuel Analysis No.6 Oil Analysis (typical)⁴

Parameter	Typical value	<u>Specifications</u>	
API gravity (@ 60° F)	6 - 12	none	
Heat content(MBtu/bbl)	6,310 - 6420	6,340¹	
% Sulfur	2.0 - 2.4	2.5 max <sup>3</sup>	
% Nitrogen	$0.2 - 0.5^2$	none	
% Ash	$0.06 - 0.09^2$	0.10 max <sup>1</sup>	

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

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

Parameter	Typical value	Specifications
API gravity (@ 60 F)	35.0 <sup>2</sup>	30 - 40 <sup>1</sup>
Heat content (MBtu/bbl)	5,700 - 5,800 <sup>2</sup>	none
% sulfur	0.3 - 0.5 <sup>1</sup>	0.5 maximum¹
% nitrogen	no specification	none
% ash	<0.01 <sup>2</sup>	0.01 <sup>1</sup>

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

### Fuel Analysis <a href="Propane">Propane (typical)<sup>1</sup></a>

Emission unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as No.6 residual oil. The propane fuel is supplied by a commercial vendor and is stored in small tanks located at the bottom of the boiler area. The chemical formula for propane is C<sub>3</sub>H<sub>8</sub>

Parameter	Typical value	Specifications	
Specific gravity (@ 60 F)	0.51 <sup>1</sup>	none	
Heat content (MBtu/bbl)	600 - 1,000	none	
% sulfur	<0.01	none	
% nitrogen	no specification	none	
% ash	no specification	none	

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

### Fuel Analysis On Specification Used Oil

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

Parameter	Typical value	Specifications
API gravity (@ 60 F)	30.0 <sup>1</sup>	none
Heat content (MBtu/bbl)	6,000 <sup>1</sup>	none
% sulfur	0.3 <sup>1</sup>	none
% nitrogen	negligible	none
% ash	0.011	0.01

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

### Attachment PRVU1\_3.txt Detailed Description of Control Equipment

**A Cyclone Separator** - This steam generator (boiler) is supplied with two <u>543-C10 Research Cottrell series 14"</u> tubular mechanical dust collectors with side inlet and universal outlet. Each dust collector consists of 543 tubes and three dust collection hoppers. The control efficiency specified by the boiler design documents is as follows:

"The dust separator shall have a collection efficiency of not less than 88% at a steam output of 2,000,000 lb / hour when burning oil fuel under the conditions specified, with a draft loss not to exceed 2.5 inches of water".

However, it has been FPL's experience that the cyclone separators efficiency is largely dependent upon the particle size of the particulate matter. The following data represents representative collection efficiency for a similar cyclone separator at 2.55 inches of water @ peak load:

Particle Range _(micron)	Mean Diameter <u>(micron)</u>	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 - Because of ozone nonattainment problems in southern Florida, the Riviera plant installed Low NOx burners on the 2 boilers. The plant is performing an 18 month program of testing to demonstrate that the NOx emission reductions achieved by the new burners are the lowest limits achievable by that technology for the Riviera units. The reductions achieved from the baseline are approximately 31% on natural gas, and 33% on residual oil (lb / mmBtu).

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

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

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

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

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

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

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

#### Attachment PRVU1\_10.txt Alternative Methods of Operation

#### Operation at Various Capacities and Heat Input Rates

The Riviera Unit 3 and Unit 4 boilers may each be operated up to 8760 hours per year at heat input rates from zero to 3050 mmBtu per hour on No.#6 oil, and from zero to 3260 mmBtu per hour on natural gas. When a blend of fuel oil and natural gas are burned, the heat input is prorated based upon the percent heat input of each fuel.

#### Different Fuel Types

The units may be fired with a variable combination of No. 6 residual fuel oil, natural gas, or No. 2 fuel oil. The units utilize propane fuel for ignition of the above-listed main fuels. The unit may also burn on-specification used oil meeting EPA specifications under 40 CFR 279.11, or expired fuel oil samples from FPL's Central Laboratory facility.

#### Current emissions limitations are as follows:

PollutantEmission LimitParticulate matter0.1 lb/mmBtuSulfur dioxide2.75 lb/mmBtu

Nitrogen oxide 0.62 lb/mmBtu on oil (1891 lb/hr, 30-day rolling avg)

0.50 lb/mmBtu on gas (1630 lb/hr, 30-day rolling avg))

#### Oil and Gas Co-firing

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

#### Soot blowing

The units may each 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  $Mg(OH)_2$  are added to the boilers on a continuous basis. This material is typically added to the fuel oil just prior to its being fed into the furnace, but it may also be injected into the boiler via the l.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.

#### Landfill-Derived Methane Gas

The plant is exploring the possibility of firing landfill-derived methane gas as a supplemental fuel. The characteristics of this fuel are expected to be substantially similar to natural gas, which is typically over 80% methane, and which the units are already currently permitted to fire.

### Attachment PRVU1\_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) are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

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

If the spent cleaning solution and rinses are determined to be non-hazardous, they are then disposed of by evaporation in one of the facility's boilers. 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).

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.

### Attachment PRVU1\_12.txt

### Identification of Additional Applicable Requirements

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

#### A0 50-206721 Permit contains the following conditions:

- 1. The permitted heat input rates for this boiler is 3,050 mmBtu/hour on fuel oil and 3,260 mmBtu/hour on natural gas (8760 hours per year allowed). FPL uses fuel sampling and analysis plus measurment of fuel flow to calculate the heat input rate to the boiler. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 2. This boiler shall be fired with a variable combination of no.6 residual oil, natural gas, no.2 fuel oil, propane gas, used oil from FPL operations, landfill-derived methane gas, and expired fuel oil samples from the FPL's central laboratory. FPL maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations.

	<del></del>					
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	Oil	2.75	Monthly fuel analysis			
NOx-RACT <sup>(3)</sup> NOx <sup>(2)</sup>	Oil	0.62 or 1,891lbs/hr	CEM			
NOx <sup>(2)</sup>	Gas	0.50 or 1,630 lbs/hr	CEM			

For compliance with each of these emission limits, FPL uses annual stack tests.

(3) At the end of an 18 month study, the Department may revise the NOx limits. See item 6.

<sup>(2)</sup> 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.

To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel onsumption for each boiler and monthly records of heating value for such fuel. All records shall be maintained 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 significant change in the method of operation, fuels or equipment shall be submitted for approval to DER's bureau of Air Regulation. FPL will notify the Department as specified regarding significant changes.
- 6. Following the installation of low NOx burners designed to achieve a 40 percent reduction in NOx emissions (from the 1990 baseline) an 18 month study will be completed during which the plant will strive to obtain the target limits of: 0.43 lbs/mmBtu or 1,402 lbs/hr for natural gas and 0.55 lbs/mmBtu or 1,678 lbs/hr for fuel oil. Quarterly status reports will be submitted summarizing the progress. At the end of the period, the Department may revise the NOx limits.

FPL is nearing completion of the 18-month test program, and will submit a final report to the Department shortly. The quarterly reports required to be submitted by the specific condition have been submitted. This item is expected to have been completed by the time the Title V permit is issued, and thus will become at that time an obsolete permit condition. Therefore FPL requests that it be deleted from the permit.

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

Petitioner.

OGC Case Mos.: \$3-0578 83-0577, 83-0576, 83-0585, 83-0586, 83-0587, 83-0588 83-0581, 83-058A; ED

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

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

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

Each of the units has a heat input exceeding 250 million Bto 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 GRAWIED. 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  $\frac{24}{}$  day of April, 1984.

FM SD, we this take pursuant to \$120.52 (9), builds Salaris, with the designated Department Clerk, receipt of which is nereby acknowledited.

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

> Whency E. Whishof-NANCY E. WRIGHT Assistant General Coumsel

State of Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32301 904/488-9730 In the matter of: Florida Power and Light Co., Inc.

Petitioner

ASP-86-E01



ORDER APPROVING REQUEST FOR ALTERNATIVE PROCEDURES AND REQUIREMENTS

Pursuant to Section 17-2.700 (3), Florida Administrative Code, Petitioner Plorida 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 ( $NO_X$ ) 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 as an approved method on June 11, 1986.
- 4. After review of the petition and supporting documentation, the Department finds that the alternate procedures and requirements would be adequate for the affected air pollution sources to demonstrate compliance with applicable emission limiting standards.

#### CONCLUSIONS OF LAW

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

#### ORDER

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

The relief requested by Petitioner is granted. Therefore, specific condition No. 1 of permit No. A041-51630 and specific condition 1 of permit No. 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.

Pane 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 Departhunt Clark, receipt at which is hereby acknow-بالمهرجانية

Victoria J. Tschinkel Secretary

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

Telephone: (904) 488-4805

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

#### PROCEDURES AND REQUIREMENTS

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.

Emission	Unit	Information	Section	of

#### III. EMISSIONS UNIT INFORMATION

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

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

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

### Type of Emissions Unit Addressed in This Section

Type of Emissions One 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.

1

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

# 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): Fossil Fuel Steam Generator, Unit 4
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): Y
5.	Emissions Unit Major Group SIC Code: 49

6. Emissions Unit Comment (limit to 500 characters):

The generator nameplate rating given is taken from data provided to the Florida Public Service Commission (PSC) in the 10-Year Site Plan. Actual generator output may exceed the value given, due to changes in unit efficiency, or with fluctuations in system load demand.

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

- A. Control Equipment #: 1
  - 1. Description (limit to 200 characters):
    Multple Cyclone with Fly Ash Reinjection
  - 2. Control Device or Method Code: Multiple Cyclone w/Fly Ash Reinjection

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

**B.** Control Equipment #: 2

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

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

**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): 03/01/63
- 2. Long-term Reserve Shutdown Date (DD-MON-YYYY):
- 3. Package Unit:

Manufacturer: Foster-Wheeler

Model Number: NA

- 4. Generator Nameplate Rating: 310 MW
- 5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

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

- 1. Maximum Heat Input Rate: 3260 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 Rate is based on firing 100% Natural Gas. The Heat Input Rate for #6 fuel oil is 3050 mmBtu/hr. The method of compliance for determining heat input is fuel sampling and analysis.

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

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

Emission	Ilnit	Information	Section	of
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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

<u>Rule Applicability Analysis</u> (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	Emission	Unit Informa	tion 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 2

	<del></del>		1
40 C.F.R. 279.72	40 C.F.R. 75 Appendix C-1	40 C.F.R. 75.4(a)(4)(ii)	E 4 C (2 214 250 (2)
40 C.F.R. 72.20(a)	40 C.F.R. 75 Appendix C-2	40 C.F.R. 75.5	F.A.C. 62-214.350 (3)
40 C.F.R. 72.20(b)	• • • • • • • • • • • • • • • • • • • •	40 C.F.R. 75.51(c)	F.A.C. 62-214.350 (5)
40 C.F.R. 72.20(c)	40 C.F.R. 75 Appendix D	40 C.F.R. 75.53(a)	F.A.C. 62-214.350 (6)
40 C.F.R. 72.21(a)	40 C.F.R. 75 Appendix F	40 C.F.R. 75.53(b)	F.A.C. 62-214.370 (1)
40 C.F.R. 72.21(b)	40 C.F.R. 75 Appendix G-2	40 C.F.R. 75.53(c)	F.A.C. 62-214.370 (3)
40 C.F.R. 72.21(d)	40 C.F.R. 75 Appendix G-4	40 C.F.R. 75.53(d)(1)	F.A.C. 62-214,370 (4)
. ,	40 C.F.R. 75 Appendix H		F.A.C. 62-214.370 (7)
40 C.F.R. 72.22(a)	40 C.F.R. 75,10(a)(1)	40 C.F.R. 75.54	F.A.C. 62-214.430
40 C.F.R. 72.22(c)	40 C.F.R. 75.10(a)(2)	40 C.F.R. 75.55(c)	F.A.C. 62-296.405(1)(a)
40 C.F.R. 72.23	40 C.F.R. 75.10(a)(3)(i)	40 C.F.R. 75.55(e)	paragraph 2
40 C.F.R. 72.24(a)	40 C.F.R. 75.10(a)(4)	40 C.F.R. 75.56	F.A.C. 62-296.405(1)(b)
40 C.F.R. 72.30(a)	40 C.F.R. 75.10(b)	40 C.F.R. 75.60(a)	F.A.C. 62-296.405(1)(c)1.j.
40 C.F.R. 72.30(b)(2)	40 C.F.R. 75.10(c)	40 C.F.R. 75.60(b)	F.A.C. 62-296.405(1)(e)(1)
40 C.F.R. 72.30(c)	40 C.F.R. 75.10(d)	40 C.F.R. 75.60(c)(3)	F.A.C. 62-296.405(1)(e)(2)
40 C.F.R. 72.30(d)	40 C.F.R. 75.10(f)	40 C.F.R. 75.61(a)(1)	F.A.C. 62-296.405(1)(e)(3)
40 C.F.R. 72.32	40 C.F.R. 75.10(g)	40 C.F.R. 75.61(a)(5)	F.A.C.
40 C.F.R. 72.33(b)	40 C.F.R. 75.11(b)(1)	40 C.F.R. 75.61(b)	62-296.405(1)(f)1.a.(i)
40 C.F.R. 72.33(c)	40 C.F.R. 75.11(c)(3)	40 C.F.R. 75.62	
40 C.F.R. 72.33(d)	40 C.F.R. 75.11(d)	40 C.F.R. 75.63	F.A.C. 62-296.405(1)(f)1.b.
40 C.F.R. 72.40(a)	40 C.F.R. 75.12(a)	40 C.F.R. 75.64(a)	F.A.C. 62-296.500(2)(a)1.
40 C.F.R. 72.40(b)	40 C.F.R. 75.12(b)	40 C.F.R. 75.64(b)	F.A.C. 62-296.500(2)(c)
40 C.F.R. 72.40(c)	40 C.F.R. 75.13(a)	40 C.F.R. 75.64(c)	F.A.C. 62-296.570(4)(a)3.
40 C.F.R. 72.40(d)	40 C.F.R. 75.13(a) 40 C.F.R. 75.13(b)	40 C.F.R. 75.64(d)	F.A.C. 62-296.570(4)(a)4.
40 C.F.R. 72.51	,	40 C.F.R. 75.65	F.A.C. 62-296.570(4)(b)3.
40 C.F.R. 72.90	40 C.F.R. 75.14(a)	40 C.F.R. 75.66(a)	F.A.C. 62-296.570(4)(c)
40 C.F.R. 72.9(a)(1)(iii)	40 C.F.R. 75.20(a)(5)	40 C.F.R. 75.66(b)	F.A.C. 62-297.310(1)
40 C.F.R. 72.9(a)(1)(i)	40 C.F.R. 75.20(b)	40 C.F.R. 75.66(c)	F.A.C. 62-297.310(2)(b)
40 C.F.R. 72.9(a)(1)(1)	40 C.F.R. 75.20(c)	40 C.F.R. 75.66(d)	F.A.C. 62-297.310(3)
40 C.F.R. 72.9(b)	40 C.F.R. 75.20(d)	, ,	F.A.C. 62-297.310(4)(a)1.
	40 C.F.R. 75.20(f)	40 C.F.R. 75.66(g)	F.A.C. 62-297.310(4)(a)2.c.
40 C.F.R. 72.9(c)(1)(iii)	40 C.F.R. 75.20(g)	40 C.F.R. 75.66(h)	F.A.C. 62-297.310(4)(b)
40 C.F.R. 72.9(c)(2)	40 C.F.R. 75.21(a)	40 C.F.R. 76.13	F.A.C. 62-297.310(4)(c)
40 C.F.R. 72.9(c)(4)	40 C.F.R. 75.21(b)	40 C.F.R. 77.3	F.A.C. 62-297.310(4)(d)
40 C.F.R. 72.9(c)(5)	40 C.F.R. 75.21(c)	40 C.F.R. 77.5(b)	F.A.C. 62-297.310(4)(e)
40 C.F.R. 72.9(d)	40 C.F.R. 75.21(d)	40 C.F.R. 77.6	F.A.C. 62-297.310(5)
40 C.F.R. 72.9(e)	40 C.F.R. 75.21(e)	F.A.C. 62-204.800(12)	F.A.C. 62-297.310(6)(a)
40 C.F.R. 72.9(f)	40 C.F.R. 75.21(f)	(state only)	F.A.C. 62-297.310(6)(c)
40 C.F.R. 72.9(g)(4)	40 C.F.R. 75.22	F.A.C. 62-204.800(13)	F.A.C. 62-297.310(6)(d)
40 C.F.R. 73.33	40 C.F.R. 75.24	(state only)	F.A.C. 62-297.310(6)(e)
40 C.F.R. 73.35	40 C.F.R. 75.30(a)(1)	F.A.C. 62-204.800(14)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-1	40 C.F.R. 75.30(a)(2)	(state only)	F.A.C. 62-297.310(6)(f)
40 C.F.R. 75 Appendix A-2	40 C.F.R. 75.30(a)(3)	F.A.C. 62-210.650	F.A.C. 62-297.310(0)(g)
40 C.F.R. 75 Appendix A-3	40 C.F.R. 75.31	F.A.C. 62-210.700 (1)	
40 C.F.R. 75 Appendix A-4	40 C.F.R. 75.32	F.A.C. 62-210.700 (2)	F.A.C. 62-297.310(7)(a)2.
40 C.F.R. 75 Appendix A-5	40 C.F.R. 75.33	F.A.C. 62-210.700 (3)	F.A.C. 62-297.310(7)(a)3.
40 C.F.R. 75 Appendix A-6	40 C.F.R. 75.35	F.A.C. 62-210.700 (4)	F.A.C. 62-297.310(7)(a)4.
40 C.F.R. 75 Appendix B		F.A.C. 62-210.700 (6)	F.A.C. 62-297.310(7)(a)5.
· F	40 C.F.R. 75.36	F.A.C. 62-214.300	F.A.C. 62-297.310(7)(a)9.
		F.A.C. 62-214.330	F.A.C. 62-297.310(7)(c)
	1	F.A.C. 62-214.350 (2)	F.A.C. 62-297.310(8)
	İ	02 217.000 (2)	Table 62-297.310-1

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

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

Information for Facility-ID <u>1</u> Emission Unit #: 2

Identification of Point on Plot Plan or Flow Diagram:     Unit 4 boiler
2. Emission Point Type Code (1,2,3,4): 1
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters): The EU-2 emission unit (Unit 4 boiler) has one emission point which is the stack.
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Emission unit 2, Riviera Unit 4 boiler.
5. Discharge Type Code (D, F, H, P, R, V, W): V
6. Stack Height: 298 ft
7. Exit Diameter: 16 ft
8. Exit Temperature: 263 °F
9. Actual Volumetric Flow Rate: 1052646.3 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: 594.187 North: 2960.803
14. Emission Point Comment (limit to 200 characters): Information in items 8 & 9 was collected during the February 1994 particulate test for this unit. Temp was taken @ mid-stack @ ~ 90% of max heat input. Flow rates & temps at other times may vary.

<b>Emission</b>	Unit I	nformation	Section	of
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Segment Description and Nate	<u>Segment</u>	Description	and Rate:
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Information for Facility\_ID :1 Emission Unit #: 2 Segment #: 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 4 boiler firing number 6 oil
2. Source Classification Code (SCC): 1-01-004-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 20.07
5. Maximum Annual Rate: 175776.3
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash: 0.1
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.

Segment Description and Rate:
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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 4 boiler firing natural gas
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.1
5. Maximum Annual Rate: 27197.7
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 or on-specification used oil from FPL operations.

	<b>Emission</b>	Unit	Informa	tion	Section	of
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Segment	Des	scrip	tion	and	Rate:

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

<ol> <li>Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 4 boiler firing on-specification used oil</li> </ol>
2. Source Classification Code (SCC): 1-01-013-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 22.43
5. Maximum Annual Rate: 100
6. Estimated Annual Activity Factor:
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 136
Segment Comment (limit to 200 characters):     The maximum annual rate of on-specification used oil burned in the Riviera boiler unit 4 is based on historical data.

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 4 Boiler burning Number 2 fuel oil
2. Source Classification Code (SCC): 1-01-005-01
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 22.43
5. Maximum Annual Rate: 196455.9
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.

Emission	Unit	Information	Section	of
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<u>Segmen</u>	t Desci	ription	and	Rate:

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

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Unit 4 boiler firing propane
2. Source Classification Code (SCC): 1-01-006-01
3. SCC Units: Million cubic feet burned
4. Maximum Hourly Rate: 3.26
5. Maximum Annual Rate: 28557.6
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.

Emission	Unit	Informa	tion	Section	of

Segmen	t Des	<u>criptio</u> i	n and	Rate:

values for each field.

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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):
 Unit 4 Boiler co-firing all possible combinations of natural gas, No. 6 fuel oil, No. 2 fuel oil, propane, on specification used oil and landfill-derived methane gas.
 Source Classification Code (SCC): 1-01-006-01
 SCC Units: thousand gallons
 Maximum Hourly Rate: 20.07
 Maximum Annual Rate: 175776.3
 Estimated Annual Activity Factor:
 Maximum Percent Sulfur: 2.5
 Maximum Percent Ash:
 Million Btu per SCC Unit: 152
 Segment Comment (limit to 200 characters):

This segment information page represents cofiring. The data provided is based on the #6 oil equivalent

1

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

Segment	Descri	ption	and	Rate:

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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Unit 4 Boiler chemical cleaning waste evaporation
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).

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

<u>Segment</u>	Descrip	tion and	Rate:

Information for Facility\_ID:1 Emission Unit #: 4 Segment #: 8

# 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	i NA	NA	NS
H107	NA	NA	NS
SAM	NA	NA	NS
НАР	NA	NA	NS

Emission	Unit	Informa	tion	Section	0	f

# 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: 8387.5 lbs/hr 36737.25 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 *3050mmBtu/hr = 8387.5 lb/hr
(8387.5 lb/hr * 8760 hr/yr) / 2000 lb/ton = 36737.25 tons/yr
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters):  SO2 emissions are limited by Rule 62-296.405(1)(c)1.j. Equivalent allowable emissions are for liquid fuel.

Emission Unit Information Section of	<b>Emission</b>	Unit Int	formation	Section	of
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Information for Facility\_ID: / Emission Unit #: 2 Pollutant #: / Basis For Allowable Emission #: 1

Allowable Emissions (Pollutant identified on front page)

allowable emissions are given for liquid fuel firing.

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 2.75 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 8387.5 lbs/hr 36737.25 tons/yr
5. Method of Compliance: Fuel sampling and analysis
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):  156  2.75 lb/mmBtu is the current regulatory limit on SO2 emissions [Rule 62-295.405(1)(c)1.j.]. Equivalent

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

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

### **Pollutant Detail Information**

1. Pollutant Emitted: N	itrogen Oxides				
2. Total Percent Efficiency	of Control:		%		
3. Potential Emissions: 18	891 lbs/hr 82	282.58 tons/yr			
4. Synthetically Limited?	(Yes/No): No				
5. Range of Estimated Fug to tons/y		ons: (1, 2, 3):			
6. Emission Factor: 0.62 Units lb/mmBtu Reference: DEP Rule 62-296.570(4)(b)3.					
7. Emissions Method Code	: (0, 1, 2, 3, 4, 5): [ ] 2 [ ]		[ ] 5		
8. Calculation of Emissions (limit to 600 characters): 0.62 lb/mmBtu * 3050 mmBtu/hr = 1891.0 lb/hr  (1891 lb/hr * 8760 hr/yr) / 2000 lb/ton = 8282.58 tons/yr					
9. Pollutant Potential/Estimated Emissions Comment (limit to 200 characters): Riviera plant is currently conducting an 18-month program to attempt to achieve the following target limits [30-day rolling average]:					
lb/mmBtu	Natural Gas 0.43	Fuel Oil 0.55			
lb/hr	1,402	1,678			

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

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

Allowable Emissions (Pollutant identified on front page)

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

194

0.62 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)3] 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	<b>Emission</b>	Unit	Information	Section	of
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Information for Facility\_ID: / Emission Unit #: 2 Pollutant #: 2 Basis For Allowable Emission #: 2

Allowable Emissions (Pollutant identified on front page)

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.5 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 1630 lbs/hr 7139.4 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

0.50 lb/mmBtu is the current reg. limit [Rule 62-296.570(4)(b)3] on NOx emissions [30-day rolling avg - Rule 62-296.570(4)(a)4.]. Equivalent allowable emissions are given for natural gas firing.

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

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

<b>Pollutant</b>	Detail	Infor	mation

1. Pollutant Emitted: Particulate Matter - Total	al
2. Total Percent Efficiency of Control:	%
3. Potential Emissions: 381.25 lbs/hr	1669.88 tons/yr
4. Synthetically Limited? (Yes/No): No	
5. Range of Estimated Fugitive/Other Emissi to tons/yr	ions: (1, 2, 3):
6. Emission Factor: 0.125 Units II Reference: DEP Rule 62-296.405(1)(b)	b/mmBtu and Rule 62-210.700(3)
7. Emissions Method Code: (0,1, 2, 3, 4, 5):  [ ] 1	0 []4 []5
8. Calculation of Emissions (limit to 600 chan 0.125 lb/mmBtu * 3050 mmBtu/hr =381.25 lb/hr	,
(381.25 lb/hr * 8760 hr/yr) / 2000 lb/ton = 1669.88 ton	ns/yr
9. Pollutant Potential/Estimated Emissions Co A particulate matter emissions limit of 3 hours /2 lb/mmBtu is equivalent to an average of 0.125 lb/mmB	24 hours at 0.3 lb/mmBtu and 21 hours/24 hours at 0.1

#### A.

1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions	
3. Requested Allowable Emissions and Units:	Units :

Emission	Unit	Informat	ion Section	of

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

Allowable Emissions (Pollutant identified on front page)

based on steady-state operation 21 hours per 24-hour period.

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 Units: lb/mmBtu
4. Equivalent Allowable Emissions: 305 lbs/hr 1168.9 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) (limit to 200 characters):  167  Data is for steady-state conditions firing liquid fuel. The equivalent allowable emissions given above are
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

<b>Emission</b>	Unit	Informatio	n Section	of

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

Allowable Emissions (Pollutant identified on front page)

- 1. Basis for Allowable Emissions Code: Required or assumed by permittee for other reasons.
- 2. Future Effective Date of Allowable Emissions:
- 3. Requested Allowable Emissions and Units: 0.3 Units: lb/mmBtu
- 4. Equivalent Allowable Emissions: 915 lbs/hr 501 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) (limit to 200 characters):

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Data is for soot-blowing and load-changing conditions firing fuel oil. Equivalent allowable emissions based on 3 hours of sootblowing per 24-hour period [DEP Rule 62-210.700(3)].

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

# 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
Allowable Opacity:     Normal Conditions: 40
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 In	formation	Section	of
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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Information for Facility-ID: / 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 < 4, 6-minute pds of up to 100% opac. if unit has an operational CEM.	up to 3 hrs/24 hrs, with

<b>Emission Unit</b>	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 of shutdown, and up to 2 hrs/24 hrs for malfunctions.	during startup and

<b>Emission Un</b>	it Informa	tion Section	of
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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

Continuous Monitor #: 1

### **Continuous Monitoring System**

Parameter Code:     Pollutant(s): Sulfur Dioxide		
3. CMS Requirement Code(R/O): RULE	Rule	/ Other
4. Monitor Information:		
Manufacturer: TECO Model Number: 43B	Serial Numb	per: 43B-45440-273
5. Installation Date (DD-MON-YYYY): 01/31	./94	
6. Performance Specification Test Date (DD-M	ION-YYYY): 07/13/	/94
7. Continuous Monitor Comment (limit to 200 cl	haracters):	·

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

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

Continuous Monitor #: 2

### **Continuous Monitoring System**

	····	· ·· · · · · · · · · · · · · · · · · ·	
<ol> <li>Parameter Code:</li> <li>Pollutant(s): Nitrogen Oxides</li> </ol>			
3. CMS Requirement Code(R/O): RULE	Rule	/ Other	
4. Monitor Information:  Manufacturer: TECO  Model Number: 42	Serial Numb	per: 42-44845-272	
5. Installation Date (DD-MON-YYYY): 01/31.	/94		
6. Performance Specification Test Date (DD-M	ON-YYYY): 07/13/	/94	
7. Continuous Monitor Comment (limit to 200 ch Required by 40 CFR 75.10(a)(2)	aracters):		

Emission Unit Information Section of	ion Section of
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### J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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

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

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

Continuous Monitor #: 3

### **Continuous Monitoring System**

Parameter Code:
 Pollutant(s): Carbon dioxide
 CMS Requirement Code(R/O): RULE Rule / Other
 Monitor Information:
 Manufacturer: Milton Roy
 Model Number: 3300 Serial Number: N3H8186T
 Installation Date (DD-MON-YYYY): 01/31/94
 Performance Specification Test Date (DD-MON-YYYY): 07/13/94

### 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: 5591D

5. Installation Date (DD-MON-YYYY): 01/31/94

6. Performance Specification Test Date (DD-MON-YYYY): 07/13/94

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 #: 2

Continuous Monitor #: 5

### **Continuous Monitoring System**

<ol> <li>Parameter Code:</li> <li>Pollutant(s): Visible emissions (opacity)</li> </ol>		
3. CMS Requirement Code(R/O): RULE	Rule	/ Other
4. Monitor Information:  Manufacturer: Lear Siegler  Model Number: RM41	Serial Num	ber: 1673
5. Installation Date (DD-MON-YYYY): 01/31	/94	
6. Performance Specification Test Date (DD-M	(ON-YYYY): 12/0	8/94
7. Continuous Monitor Comment (limit to 200 ch Required by 40 CFR 75.10(a)(4)	naracters):	

Emission	Unit	Informa	tion	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.

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<b>Emission</b>	Unit	iniormatic	on Section	01

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.
- 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	ment Consuming/Expanding Co	de: (C, E, U- unkown):	
PM	U		
SO2	U		
NO2	U		
4. Basel PM SO2 NO2	line Emissions: lbs/hr lbs/hr tons/yr	tons/yr tons/yr	

DEP Form No. 62-210.900(1) Form Effective: 3/21/96

Emission Unit Information Section of	<b>Emission</b>	Unit Information Section	of
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5. PSD Comment (limit to 200 characters):
Riviera Unit 4 commenced operation in 1963 which pre-dates the major source PSD baseline date of 1/5/75.

	<b>Emission</b>	Unit	Informa	ation	Section	of	Ī
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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

Attached Document ID / Not Applicable

1. Process Flow Diagram: PRVU2 1.bmp Attached Document ID / Not Applicable / Waiver Requested 2. Fuel Analysis or Specification: PRVU1 2.txt Attached Document ID / Not Applicable / Waiver Requested 3. Detailed Description of Control Equipment: PRVU1 3.txt Attached Document ID / Not Applicable / Waiver Requested 4. Description of Stack Sampling Facilities: PRVU2 4.bmp Attached Document ID / Not Applicable / Waiver Requested 5. Compliance Test Report: NA Attached Document ID / Previously submitted, Date / Not Applicable 6. Procedures for Startup and Shutdown: PRVU1 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

### Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: PRVU1\_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: PRVU1\_12.txt Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: NA
  Attached Document ID / Not Applicable
- 14. Acid Rain Permit Application

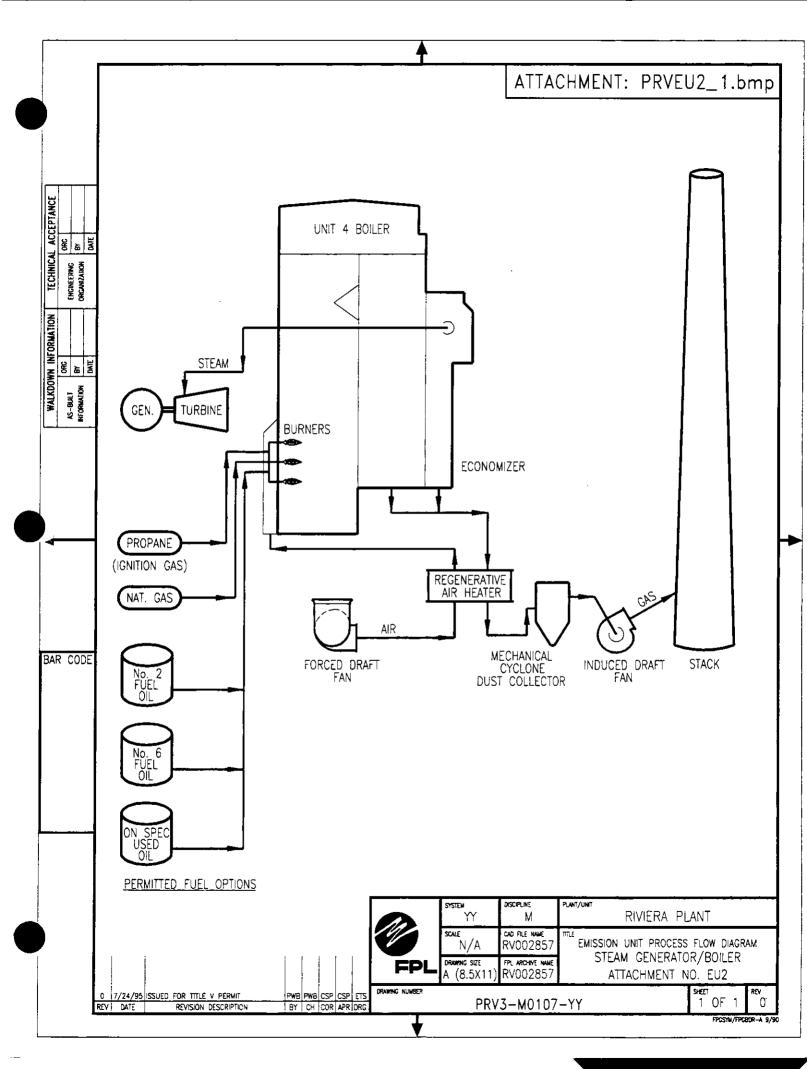
Acid Rain Application - Phase II (Form No. 17-210.900(1)(a))
Attached Document ID: Not Applicable

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable



#### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES **RIVIERA**

### FOSSIL FUEL STEAM GENERATORS UNITS 3 & 4

# STACK SPECIFICATIONS STACK DIAGRAM SAMPLING DIAMETER: 216 1/4 in. SAMPLING AREA: 255.1 mg. ft. SAMPLING PORT DEPTH: 60 1/2 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 SAMPLE PORTS & PLATFORM 55" 11" 12 3/4" 88 3/4" 15 3/4" 104 1/2"

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.

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130 1/2"

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

Petitioner.

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

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

On September 16, 1983, the Petitioner, PLORIDA 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 Stu 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

### 00036

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, Plorida 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, Plorida Statutes.

DONE and ORDERED this 24 day of April, 1984.

\*\*\*\*\*\* A YSEMENT FMSJ, will this called pursuant to \$120.52 (9). Figure Size of the with the designated Department Clark, receipt of which is hereby acknowk-C.red.

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

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 PACT

- 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. A041-64792 are hereby amended to reflect that Petitioner, Florida Power and Light Company is authorized to utilize EPA Reference Method 7E to demonstrate compliance at Manatee Plant Units 1 and 2.

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

Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this data, pursuant to \$120.52 (9), Figrica Statutes, with the designated Denoiting to Clock, receipt of which is hereby acknowledged.

C. A. Hitch. 9.5.7L

Victoria J. Tschinkel Secretary

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

Telephone: (904) 488-4805

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

### PROCEDURES AND REQUIREMENTS

Florida Power and Light Co., Incorporation

#### REQUEST FOR EXCEPTION

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

Electric and A041-64792 (Unit 2)

Generating - EMISSION LIMITING STANDARD:

850 megawatts 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	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.

<b>Emission</b>	Unit.	Inform	ation	Section	of
				CCCLIOII	

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

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

i .	Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unregulated Emission Units
1	missions Unit Identification Number: Unk No Corresponding ID or Unknown)
3. E	mission Unit Status Code: (A or C): A
4. A	cid Rain Unit? (Y/N): N
5. E	missions Unit Major Group SIC Code: 49
	missions Unit Comment (limit to 500 characters):  This Emission Unit section comprises all unregulated sources at the Riviera facility, including the gency diesel generator. Attachment PRV-FW presents a list of all sources included in this emission unit in.

### **Emissions Unit Control Equipment**

A. Control Equipment #:

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): 01/06/78

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

3. Package Unit:

Manufacturer: Detroit Diesel

Model Number: 7124-0300 & 7124-9300

4. Generator Nameplate Rating: 0.5 MW

5. Incinerator Information:

Dwell Temperature: °F

Dwell Time: seconds

Incinerator Afterburner Temperature: °F

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 7.34 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):

Information provided is for the diesel generator which will be limited to 400 hpy of operation. Other sources in this emission unit section may operate up to 8760 hours per year.

### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:

hours/day

days/week

weeks/yr

8760 hours/yr

Emission Unit Information Sec	ction of
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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

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

Not	Applicable				
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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. 62-296.320(4)(c) F.A.C. 62-297.310(2)(b)	F.A.C. 62-297.310(4)(a)2. F.A.C. 62-297.310(5) F.A.C. 62-297.310(7)(a)9. F.A.C. 62-297.310(8)
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Emission	Unit	Information	Section	of
2,1111231011	OHILL	************	Section	VI.

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

Emission Point Description and Type
Information for Facility-ID <u>1</u> Emission Unit #:3

Identification of Point on Plot Plan or Flow Diagram:     Unregulated Emission Units
2. Emission Point Type Code (1,2,3,4): 3
3. Descriptions of Emissions Points Comprising this Emissions Unit (limit to 100 characters):
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: NA
5. Discharge Type Code (D, F, H, P, R, V, W): H
6. Stack Height: 17 ft
7. Exit Diameter: 0.5 ft
8. Exit Temperature: 870 °F
9. Actual Volumetric Flow Rate: 2800 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: 2960792 North: 594147
14. Emission Point Comment (limit to 200 characters): Information provided is for the emergency diesel generator. Note that there are 2 diesel engines and 2 exhaust stacks.

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Emission out this mation occion	<b>Emission</b>	Unit In	iformation	Section	of
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Segment	Description	and	Rate:

Information for Facility\_ID:1 Emission Unit #: 3 Segment #: 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Emergency Diesel Generator burning Number 2 fuel oil
2. Source Classification Code (SCC): 2-02-001-02
3. SCC Units: thousand gallons burned
4. Maximum Hourly Rate: 0.054
5. Maximum Annual Rate: 473
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):

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

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

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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Above-ground tank #A - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 351577556
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 14.17 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 64.25 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.04 TPY, using estimated activity factor given above.

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

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

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Above-ground tank #B - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 351577556
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 14.17 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 64.25 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.04 TPY, using estimated activity factor given above.

	Emission	Unit l	Informa	ition	Section	of
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<u>Segment</u>	Descrip	tion an	d Rate:

Information for Facility\_ID:1 Emission Unit #: 3 Segment #: 4

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Above-ground tank #C - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 351560644
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 37.22 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 123.36 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.08 TPY, using estimated activity factor given above.

<b>Emission</b>	Unit In	formation	Section	of	
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Segment	Description	and Rate:

Information for Facility\_ID:1 Emission Unit #: 3 Segment #: 5

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):     Above-ground tank #D - Working and breathing loss
2. Source Classification Code (SCC): 4-03-010-21
3. SCC Units: Thousand gallons transferred or handled
4. Maximum Hourly Rate:
5. Maximum Annual Rate:
6. Estimated Annual Activity Factor: 351983736
7. Maximum Percent Sulfur: 2.5
8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters):  Breathing loss = 66.18 lbs VOC / yr (per EPA Tanks2 program)  Working loss = 174.40 lbs VOC / yr (per EPA Tanks2 program)  Total estimated losses = 0.12 TPY, using estimated activity factor given above.

Emission Unit Information S	Section	of
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# G. EMISSIONS UNIT POLLUTANTS (Regulated Emissions Units Only)

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

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

<b>Emission Unit Information S</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 #:

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: 60 min/hr	%
4. Method of Compliance Code:	
5. Visible Emissions Comment (limit to 200 characters):  The equipment in this EU may be subject to the general visible emission standard, if the 62-210.700(1) allows 2 hrs / 24 hrs of excess emissions for startup, shutdown & malfunctions are shown as the following shutdown as	=

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<b>Emission Unit Information So</b>	ection 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</b>	Information	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.
- 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 Consuming/Expanding C	Code: (C, E, U- unkown):	
PM	U		
SO2	U		
NO2	U		
4. Base PM SO2 NO2	eline Emissions: lbs/hr lbs/hr tons/yr	tons/yr tons/yr	

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

5. PSD Comment (limit to 200 characters):
The Emergency Diesel Generator was constructed in June 1978.

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

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

### Supplemental Requirements for All Applications

Process Flow Diagram: PRVU3\_1.bmp
 Attached Document ID / Not Applicable / Waiver Requested
 Fuel Analysis or Specification: PRVU3\_2.txt
 Attached Document ID / Not Applicable / Waiver Requested
 Detailed Description of Control Equipment: NA
 Attached Document ID / Not Applicable / Waiver Requested
 Description of Stack Sampling Facilities: NA
 Attached Document ID / Not Applicable / Waiver Requested
 Compliance Test Report: NA
 Attached Document ID / Previously submitted, Date / Not Applicable
 Procedures for Startup and Shutdown: PRVU3\_6.txt
 Attached Document ID / Not Applicable
 Operation and Maintenance Plan: NA
 Attached Document ID / Not Applicable

8. Supplemental Information for Construction Permit Application: NA

Attached Document ID / Not Applicable

Attached Document ID / Not Applicable

9. Other Information Required by Rule or Statute: NA

# Additional Supplemental Requirements for Category I Applications Only

- 10. Alternative Methods of Operation: NA Attached Document ID / Not Applicable
- 11. Alternative Modes of Operation (Emissions Trading): NA Attached Document ID / Not Applicable
- 12. Identification of Additional Applicable Requirements : NA Attached Document ID / Not Applicable
- 13. Enhanced Monitoring Plan: NA
  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: NA

Repowering Extension Plan (Form No. 17-210.900(1)(b))
Attached Document ID: NA

New Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Retired Unit Exemption (Form No. 17-210.900(1)(c))
Attached Document ID: NA

Not Applicable

Form Effective: 3/21/96

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

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

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

#### UNITS 3 & 4 BOILER/STEAM GENERATOR POWER BLOCK

Steam Systems

Steam Drum Relief Valves w/Silencers

Steam Drum - 11/2" Maintenance Valves

Super Heater Inlet Header - 1 1/2" Maintenance Valves

Main Steam Relief Valves w/Silencers

Economizer Inlet Header - 1" Maintenance Vents

Desuperheater - 4" Relief Valve w/Silencer & Exhaust Hood

Extraction Heaters Relief Valves

Extraction Heaters Maintenance Vents

Continuous Blowdown Flash Tank Relief Valve

Blowdown Flash Pipe - 14 Vent w/Silencer & Exhaust Hood

Steam Seal Regulator Relief Valves

Hogging Ejector 8" Vent w/Silencer & Exhaust Hood

Priming Ejector 8" Vent w/Silencer & Exhaust Hood

After Condenser Maintenance Vent

Priming Ejector Relief Valve

Main Steam at Stop Valves - 11/2" Maintenance Vents

Boiler Feed, Condensate & Heater Drains

Extraction Heater - 3/4" Feedwater Maintenance Vents

Extraction Heaters - 3/4" Feedwater Relief Valves

Feedwater at Boiler Feed Pumps - 3/4" Safety Valves

Condensate Collecting Cooler - 3/4" Vent

Flash Tank - 3" Relief Valve

Vent Condenser - 3/4" Maintenance Vent

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Boiler Feed, Condensate & Heater Drains (continued)
Condensate Storage Tank - Continuous Vent

Gland Steam Condenser 8" Continuous Vent

Gland Steam Condenser 1" Relief Valve

After Condenser Maintenance Vent

Intercondenser Maintenance Vent

Hydrazine Pumps Relief Valve

Phosphate Pumps Relief Valves

Cooling Water

Cooling Water Surge Tank - 3 Continuous Vent

Turbine Lube Oil Coolers - Maintenance Vent

Evaporator Relief Valve

**Evaporator Continuous Vent** 

Fuel Oil

268,000 BBL Storage Tank 12" Vent

150,000 BBL Storage Tank Vent

55,000 BBL Storage Tank Vent

55,000 BBL Storage Tank Vent

4,500 BBL Metering Tank Vent

Diesel Generator Fuel Tank (1500 Gal) 2" Vents

Fuel Oil Additive Tanks (3700 Gal & 1700 Gal)

Burner Booster Pumps - Maintenance Vents

Oil Recovery Blow Back Tank - Relief Valve

Oil Recovery Blow Back Tank - 1" Maintenance Vent

Service Air at Blow Back Tank - Maintenance Vent

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Lube Oil

Generator Loop Seal Tank - 4" Continuous Vent w / Exhaust Head

Oil Mist Eliminator - 4" Vapor Extractor

Lube Oil Coolers Maintenance Vent

Lube Oil Reservoir Filter Vent

Gas burner header vent valve

Lube Oil Filter-Filter Vent

Lube Oil Filter Water Ejector

Gas Supply

Vent Valve

Ignition GasPropane Tank (500 Gal)

C.E.M. Equipment

Monitoring Gases

Lime Slurry, Caustic Wash & Instrument Air

Lime Slurry Mixing Tank (2000 Gal)

Lime Slurry Service tank

Caustic Wash Storage Tank - (3000 Gal.)- 2" Vent

Caustic Wash Mixing Tank (1690 Gal)

Instrument Air Tanks - Relief Valves

Air Compressors Relief Valves

Separator Relief Valves

Water Treatment Equipment (abandoned in place)

Caustic Service Tank - (4900 Gal) -2" Vent

Sodium Bisulfite Storage Tank (5000 Gal )-4" Vent

Carbon Purifier- 1/2" Vent

Sand Filter- 1/2" Vent

Waste Neutralizing T.E.T.F. (34,000 Gal Tank)- 8" Vent

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

Water Treatment (continued)
Elevated Water Storage Tank Vent

Waste Neutralizing Cement Basin (10,771 Gal)

City Water Basin (94,764 Gal)

Demineralizer Recovery Basin (8025 Gal)

Soda Ash Service Tank (3165 Gal)

Soda Ash Mixing Tank (1690 Gal)

Waste Water & Basins
Oily Waste Water Sumps & Separator

Solids Settling Basins

Miscellaneous Buildings Kitchen Exhaust Training & Conference Facility

Service Bldg.

<u>Miscellaneous Buildings H.V.A.C. (Cooling/Heating)</u> P.G.B.U. Training Bldg.

Conference Facility

Stores Warehouse

Doc. Control Bldg.

Water Treatment Lab

Hightower Storage Bldg.

Maintenance Warehouse Office

Switchyard Control Bldg.

Dry Storage Warehouse

Operations/Overhaul Bldg.

Service Bldg.

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Buildings Vent/Exhaust Systems Conference Facility

Stores Warehouse

Doc. Control Bldg.

Paint/Lube Oil Bldg.

Emergency Spill Bldg.

Miscellaneous Buildings Vent/Exhaust Systems (Continued) Lab/Water Treat. Bldg.

Chem. Storage Bidg.

Chlorination Bldg.

F.O. Pump Pit Endosure

Maint. Warehouse Office

Lube Oil Storage Bldg.

Hazardous Waste Drum Storage Bldg.

Switchyard Control Bldg.

Operations/Overhaul Bldg.

Service Bldg.

Control Bldg. - Relay & Battery Rooms

Miscellaneous Buildings Sanitary Vents/Stacks

Conference facility

Stores Warehouse

Doc. Control Bldg.

Recreation Pavilion

Operations/Overhaul Bldg.

Service Building

Control Building

P.G.B.U. Training Annex

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Activities

Home heating and comfort heating with a gross maximum heat output of less than one million BTU/hr.

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

Vacuum pumps used in laboratory operations Various

Equipment used for steam cleaning

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

Equipment used exclusively for space heating, other than boilers

Laboratory equipment used exclusively for chemical or physical analysis

Bulk Gas Storage Cylinders

Miscellaneous Activities
Plant Grounds Maintenance

Routine Maintenance/Repair Activities
Non-Halogenated Solvent Cleaning Operations

Use of spray cans and 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

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

## LIST OF UNREGULATED TRIVIAL & DE MINIMIS EMISSION UNITS

Miscellaneous Mobile Equipment Operation

Compressors, Chain Saws, Small Generators, (<100KW) Welding Machines Electric Saws & Drills, Etc.

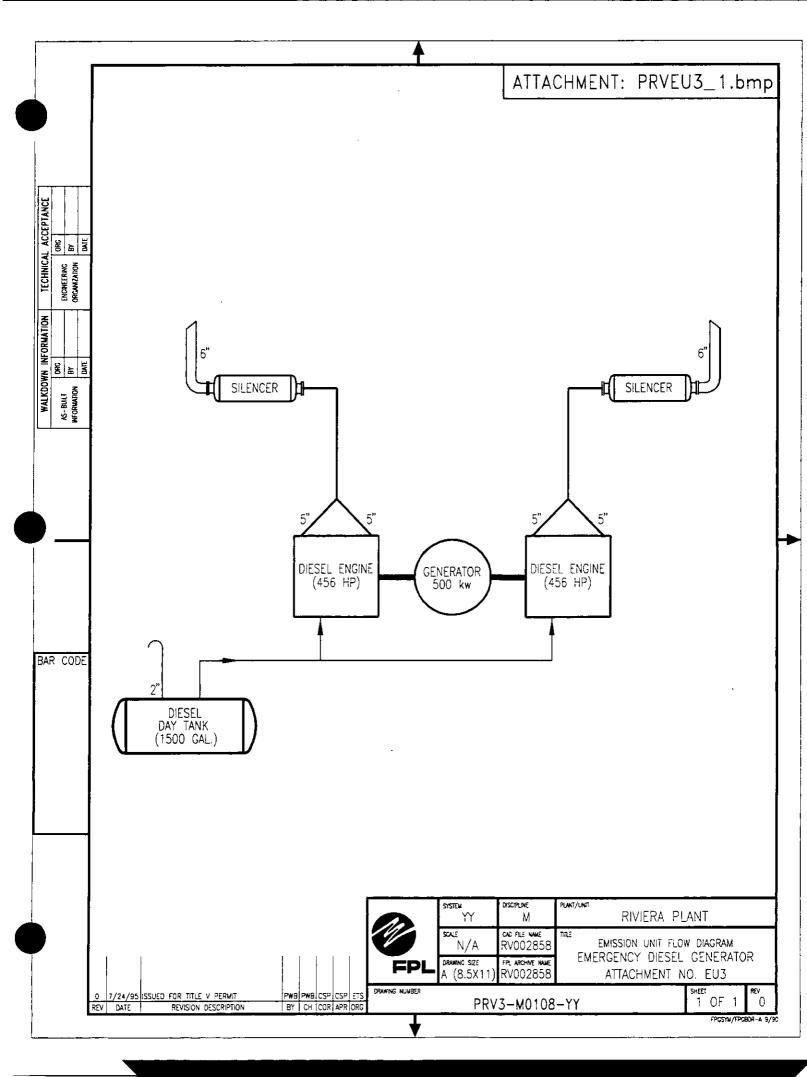
Laundry dryers, extractors, or tumblers for fabrics cleaned with only water solutions of bleach or detergents

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

Use of solvent and spray cans for maintenance activities



## Attachment PRVU3 6.txt

## Procedures for Startup / Shutdown

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

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

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

Best Operating Practices include proper maintenance of the diesel engine on the generating unit, and monitoring the visible emissions from the emergency diesel generator to ensure that the opacity limitation is not exceeded. All efforts to minimize both the level and duration of excess emissions are undertaken.

# Attachment PRVU3\_2.txt

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

<u>Parameter</u>	Typical value	Specifications
API gravity (@ 60 F)	35.0 <sup>2</sup>	30 - 40¹
Heat content (MBtu/bbl)	5,700 - 5,800 <sup>2</sup>	none
% sulfur	0.3 - 0.5 <sup>1</sup>	0.5 maximum <sup>1</sup>
% nitrogen	no specification	none
% ash	<0.01 <sup>2</sup>	0.01 <sup>1</sup>

## Footnotes:

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