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BUREAU OF AIR REGULATION

TITLE V PERMIT APPLICATION FLORIDA POWER & LIGHT COMPANY TURKEY POINT FOSSIL PLANT FLORIDA CITY, FLORIDA

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

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

July 2003 0237560

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



# Department of Environmental Protection

**Division of Air Resources Management** 

### APPLICATION FOR AIR PERMIT - TITLE V SOURCE I. APPLICATION INFORMATION

#### **Identification of Facility**

1.	Facility Owner/Company Name:	Fle	orida Power & I	Light Company				
2.	Site Name:	Tu	irkey Point Plan	nt				
3.	Facility Identification Number:	02	50003 [	] Unknown				
4.	Facility Location: 9.5 miles east of Florida City on SW 344 Street Street Address or Other Locator:							
	City:Florida City	County:M	iami-Dade	Zip Code: 33034				
5.	Relocatable Facility? [ ] Yes [ X ] No		6. Existing Pe [X] Yes	rmitted Facility? [ ] No				
Aŗ	oplication Contact							
	1. Name and Title of Application Contact: John C. Hampp Sr. Environmental Specialist							
2.	Application Contact Mailing Address Organization/Firm: Florida Power		nt Co. Environm	ental Services Dept.				
	Street Address: 700 Universe Blv	d.						
	City: Juno Beach	Sta	ate: FL	Zip Code: 33408				
3.	Application Contact Telephone Nu Telephone: (561)- 691-2894	mbers:	Fax: <b>(561</b> )-	- 691-7049				
<u>A</u>	Application Processing Information (DEP Use)							
1.	Date of Receipt of Application:			<u> </u>				
2.	Permit Number:							
3.	PSD Number (if applicable):			1				
4.	Siting Number (if applicable):							

### **Purpose of Application**

### **Air Operation Permit Application**

Th	is	Application for Air Permit is submitted to obtain: (Check one)						
[	]	Initial Title V air operation permit for an existing facility which is classified as a Title V source.						
[	]	Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.						
		Current construction permit number:						
[	)	Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.						
		Current construction permit number:						
		Operation permit number to be revised:						
[	]	Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)						
		Operation permit number to be revised/corrected:						
[ }	( )	Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.						
		Operation permit number to be revised: 0250003-001-AV						
		Reason for revision: TITLE V PERMIT RENEWAL						
Ai	r (	Construction Permit Application						
Th	is	Application for Air Permit is submitted to obtain: (Check one)						
[	]	Air construction permit to construct or modify one or more emissions units.						
[	]	] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.						
[	]	Air construction permit for one or more existing, but unpermitted, emissions units.						

#### Owner/Authorized Representative or Responsible Official

	1.	Name and	Title of 0	Owner/Au	uthorized	Representat	ive or Res	sponsible	Official
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#### H.O. Nunez - Plant Manager

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Florida Power & Light Company Turkey Point Fossil Plant

Street Address: 9.5 miles east of Florida City on SW 344 Street

City: Florida City

State: FL

Zip Code: 33034

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone: (305) 246-6110

Fax: (305) 246-6905

4. Owner/Authorized Representative or Responsible Official Statement:

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

Signature

Date

#### **Professional Engineer Certification**

1. Professional Engineer Name: Kennard F. Kosky

Registration Number:

14996

2. Professional Engineer Mailing Address:

Organization/Firm: Golder Associates, Inc.

Street Address: 6241 NW 23rd Street

City: Gainesville

State: FL

Zip Code: 32653-1500

6/26/03

3. Professional Engineer Telephone Numbers:

Telephone: (352) 336-5600

Fax:(352) 336-6603

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

Effective: 2/11/99

<sup>\*</sup> Attach letter of authorization if not currently on file.

#### 4. Professional Engineer Statement:

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

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

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

Temas A. 19 way	7/2/03	
Signature	Date	
TO THE PARTY OF TH		

\* Attach any exception to certification statement.

Golder Associates Inc. - Board of Professional Engineers Certificate No. 00001670

### **Scope of Application**

Emissions		Permit	Processing
Unit ID	Description of Emissions Unit	Туре	Fee
001	Fossil Fired Steam Generator, Unit #1	AF2A	N/A
002	Fossil Fired Steam Generator, Unit #2	AF2A	N/A
003	Black Start Diesel Generators	AF2A	N/A
004	Unregulated Emission Units	AF2C	N/A
_			
	-		

### **Application Processing Fee**

Check one: [ ] Attached - Amount: \$	[X] Not Applicable
--------------------------------------	--------------------

Construction/Modification Information
1. Description of Proposed Project or Alterations:
2. Projected or Actual Date of Commencement of Construction:
3. Projected Date of Completion of Construction:
Application Comment
Application submittal is for the renewal of the Turkey Point Fossil Power Plant Title V Air Operating permit. This facility is not subject to Compliance Assurance Monitoring (CAM) provisions (see Attachment PTFCAM.doc).
·

#### II. FACILITY INFORMATION

#### A. GENERAL FACILITY INFORMATION

### **Facility Location and Type**

1	1. Facility UTM Coordinates:											
1.	•		*/***	. (1 ) 2010 100								
	Zone: 17	East (km):	: <b>567.230</b> Nor	th (km): <b>2813.192</b>								
2.	Facility Latitude/Lo	ongitude:										
	Latitude (DD/MM/	SS): 25°26' 09" Longit	tude (DD/MM/SS): 80°	19' 52"								
3.	Governmental	4. Facility Status	5. Facility Major	6. Facility SIC(s):								
	Facility Code:	Code:	Group SIC Code:									
	O	A	49	4911								
7.	Facility Comment (	limit to 500 characters):										
	This application is	for the Turkey Point I	Fossil Power Plant which	ch consists of: Two oil								
an		conventional steam elec										
	•	e generator; 5 "Black S	0 0 1	,								
	regulated emission	,		,								

### **Facility Contact**

1.	Name and Title of Facility Contact: Gary Andersen, Environmental Specialist						
2.	Pacility Contact Mailing Address: Organization/Firm: Florida Power & Light Turkey Point Fossil Plant Street Address: 9700 SW 344 Street						
	City: Florida City	State: FL	Zip Code: 33034				
3.	Facility Contact Telephone Numbers: Telephone: (305) 246-6115	Fax: (305	) 246-6905				

### **Facility Regulatory Classifications**

Check	all	that	apply:

1. [ ] Small Business Stationary Source?	[ ] Unknown							
2. [X] Major Source of Pollutants Other than	n Hazardous Air Pollutants (HAPs)?							
3. [ ] Synthetic Minor Source of Pollutants Other than HAPs?								
4. [X] Major Source of Hazardous Air Pollutants (HAPs)?								
5. [ ] Synthetic Minor Source of HAPs?								
6. [X] One or More Emissions Units Subject	t to NSPS?							
7. [X] One or More Emission Units Subject	to NESHAP?							
8. [ ] Title V Source by EPA Designation?								
9. Facility Regulatory Classifications Commer	nt (limit to 200 characters):							
The facility is located in a former non-att designated as a maintenance area and the	cainment area for ozone which is now e generating units are subject to NOx-RACT.							
List of Applicable Regulations								
All applicable FAC regulations are covered under existing Title V permit and there are no additional requirements (see Title V Core List).								
·								

#### **B. FACILITY POLLUTANTS**

### **List of Pollutants Emitted**

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap  lb/hour tons/year		4. Basis for Emissions	5. Pollutant Comment
Emitod	Clussii.			Cap	Comment
SO2	A				
NOx	A				
СО	A				
PM	A				
PM10	A				
VOC	A		,		·
H133	A				
SAM	A				
H106	A		_		
H107	A				
		_			
		٠.			

### C. FACILITY SUPPLEMENTAL INFORMATION

### **Supplemental Requirements**

1.	Area Map Showing Facility Location:
	[X] Attached, Document ID: <u>PTFFS-1.bmp</u> [] Not Applicable [] Waiver
	quested
2.	Facility Plot Plan:
	[X] Attached, Document ID: <u>PTFFS-2.bmp</u>
	[ ] Not Applicable [ ] Waiver Requested
3.	Process Flow Diagram(s):
	[X] Attached, Document ID: <u>PTFFS-3.bmp</u> [] Not Applicable [] Waiver Requested
4.	Precautions to Prevent Emissions of Unconfined Particulate Matter:
	[X] Attached, Document ID: <u>PTFFS-4.txt</u> [] Not Applicable [] Waiver Requested
5.	Fugitive Emissions Identification:
	[X] Attached, Document ID: <u>PTFFS-5.txt</u> [] Not Applicable [] Waiver Requested
6.	Supplemental Information for Construction Permit Application:
	[ ] Attached, Document ID:[ ] Not Applicable
7.	Supplemental Requirements Comment:
	All Attachments are at the end of this application.

### Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities:  [X] Attached, Document ID: <u>PTFFS-8.txt</u>	[X] Not Applicable
9. List of Equipment/Activities Regulated under Title VI:	
[ ] Attached, Document ID:	
[ ] Equipment/Activities On site but Not Required to b	e Individually Listed
[X] Not Applicable	
10. Alternative Methods of Operation:  [ ] Attached, Document ID: [X] Not Appli	cable
11. Alternative Modes of Operation (Emissions Trading):	
[ ] Attached, Document ID: [X] Not Appli	cable
12. Identification of Additional Applicable Requirements:	
[ ] Attached, Document ID: [X] Not Appli	cable
13. Risk Management Plan Verification:	
[ ] Plan previously submitted to Chemical Emergency I Office (CEPPO). Verification of submittal attached previously submitted to DEP (Date and DEP Office)	d (Document ID:) or
[ ] Plan to be submitted to CEPPO (Date required:	)
[X] Not Applicable	
14. Compliance Report and Plan:	
[X] Attached, Document ID: <u>PTFFS-14.txt</u> []	Not Applicable
15. Compliance Certification (Hard-copy Required):  [X] Attached, Document ID: PTFFS-15.txt [	Not Applicable

<b>Emissions Unit Information Section</b>	1	of	4	Fossil Steam	Unit 1	l

#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

### A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

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

		•				
1. Type of Emissions Unit Addressed in Thi	s Section: (Check one)					
[X] This Emissions Unit Information Section process or production unit, or activity, which has at least one definable emission	which produces one or more a					
[ ] This Emissions Unit Information Section process or production units and activities (stack or vent) but may also produce fug	es which has at least one defin					
[ ] This Emissions Unit Information Section process or production units and activities	· · · · · · · · · · · · · · · · · · ·					
2. Regulated or Unregulated Emissions Unit	? (Check one)					
[X] The emissions unit addressed in this Ememissions unit.	nissions Unit Information Sec	ction is a regulated				
[ ] The emissions unit addressed in this En emissions unit.	nissions Unit Information Sec	ction is an unregulated				
3. Description of Emissions Unit Addressed Fossil Fuel Fired Steam Generator # 1	3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):  Fossil Fuel Fired Steam Generator # 1					
4. Emissions Unit Identification Number: ID: 01		[ ] No ID [ ] ID Unknown				
5. Emissions Unit Startup G. Initial Startup Date:  A 04/1967	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]				
9. Emissions Unit Comment: (Limit to 500 Characters)  Emission Unit 01 (Turkey Point Fossil Unit 1) is a nominal 402 MW(electrical) steam generator fired on Natural Gas or using No.2 or No.6 fuel oil and consists of a boiler/steam generator driving a single reheat turbine generator.						

<b>Emissions Unit Control Equipment</b>	
1. Control Equipment/Method Description (Limit to	o 200 characters per device or method):
A = Multiple Cyclone w/o Fly Ash Reinjection B = Low NOx Burners C = Staged Combustion	
•	
•	
2. Control Device or Method Code(s): 077, 024, 02	25
Emissions Unit Details	
1. Package Unit:	Madal Nimitan NI/A
Manufacturer: Foster-Wheeler  2. Generator Nameplate Rating: 402	Model Number: N/A MW
1 0	141 44
3. Incinerator Information:  Dwell Temperature:	· •E
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Information Section 1 of 4 Fossil Steam Unit 1

Emissions	Unit	Information	Section	1	of	4	<b>Fossil Steam</b>	Unit	

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

#### **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:	4,000	mmBtu/hr		
2.	Maximum Incineration Rate:		lb/hr		tons/day
3.	Maximum Process or Throughp	ut Rate:			
4.	Maximum Production Rate:			•	
5.	Requested Maximum Operating	Schedule:			
		hours/day	,		days/week
		weeks/yea	ar	8760	hours/year
	permitting note for purpose of maximum heat input when fir		~		en applicable. The

	<b>Emissions</b>	Unit I	Information	1 Section	1	of	4	Fossil Steam Un	it :
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### **List of Applicable Federal Regulations**

40 CFR 279.72, Analysis and Records	On-Specification Used Oil
40 CFR 72.9 (a), Acid Rain Permits	Permit requirements
40 CFR 72.9 (b), Acid Rain Permits	Monitoring Requirements
40 CFR 72.9 (c)(1), Acid Rain Permits	SO2 Allowance Requirements - Holding
40 CFR 72.9 (c)(2), Acid Rain Permits	SO2 Allowance - Excess Emissions Violations
40 CFR 72.9 (c)(3)(iii), Acid Rain Permits	SO2 Allowance - Phase II Unit applicability
40 CFR 72.9 (c)(4), Acid Rain Permits	SO2 Allowance Tracking System Accounts
40 CFR 72.9 (c)(5), Acid Rain Permits	SO2 Allowance Year of Use Requirement
40 CFR 72.9 (d), Acid Rain Permits	NOx Requirements
40 CFR 72.9 (e), Acid Rain Permits	Excess Emission Requirements & Offsets
40 CFR 72.9 (f), Acid Rain Permits	Recordkeeping and Reporting
40 CFR 72.9 (g), Acid Rain Permits	Liability and Civil Penalty
40 CFR 72.20 (a), Acid Rain Permits	Designated Representative Requirement
40 CFR 72.20 (b), Acid Rain Permits	Designated Representative Legal Binding
40 CFR 72.20 (c), Acid Rain Permits	Designated Representative Certification
40 CFR 72.21, Acid Rain Permits	Submissions by Designated Representative
40 CFR 72.22, Acid Rain Permits	Alternate Designated Representative Requirement
40 CFR 72.23, Acid Rain Permits	Changing Designated Representatives or Owners
40 CFR 72.24, Acid Rain Permits	Designated Representative Certificate of Representation

#### **List of Applicable Federal Regulations**

40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply
40 CFR 72.30 (b) (2), Acid Rain Permits	Acid Rain Permit Requirements to apply for Phase II
40 CFR 72.30 (c), Acid Rain Permits	Acid Rain Permit Renewal application prior to Permit Expiration
40 CFR 72.30 (d), Acid Rain Permits	Acid Rain Permit Submittal Requirements
40 CFR 72.31, Acid Rain Permits	Acid Rain Permit Information Requirements
40 CFR 72.32, Acid Rain Permits	Permit Application Shield
40 CFR 72.33 (b), Acid Rain Permits	Identification of Dispatch System
40 CFR 72.33 (c), Acid Rain Permits	Dispatch System Requirements
40 CFR 72.33 (d), Acid Rain Permits	Changing Dispatch System Identification
40 CFR 72.40, Acid Rain Permits	Compliance Plan Application Requirements
40 CFR 72.50, Acid Rain Permits	General Permit Requirements
40 CFR 72.51, Acid Rain Permits	Permit Shield
40 CFR 72.90, Acid Rain Permits	Annual Compliance Certification
40 CFR 73.30, SO2 Allowance System	Allowance Tracking System Accounts
40 CFR 73.31, SO2 Allowance System	Establishment of Accounts
40 CFR 73.32, SO2 Allowance System	Allowance Account Contents
40 CFR 73.33, SO2 Allowance System	Authorized Account Representative
40 CFR 73.35 (a), SO2 Allowance System	Compliance and Allowance Transfer Deadline
40 CFR 73.35 (b), SO2 Allowance System	Allowance Deductions for Compliance

Emissions	Unit	Information	Section	1	of	4	Fossi	l Steam	Unit	1

### **List of Applicable Federal Regulations**

40 CFR 73.35 (c), SO2 Allowance System	Identification of Allowances by Serial Number
40 CFR 73.35 (d), SO2 Allowance System	Deductions for Excess Emissions
40 CFR 75.4, CEMS	Compliance Dates
40 CFR 75.5, CEMS	Prohibitions
40 CFR 75.10 (a) (1), CEMS	Primary Measurement - SO2
40 CFR 75.10 (a) (2), CEMS	Primary Measurement - NOx
40 CFR 75.10 (a) (3) (iii), CEMS	Primary Measurement - CO2 & O2 Monitor
40 CFR 75.10 (b), CEMS	Primary Equipment Performance Requirements
40 CFR 75.10 (c), CEMS	Heat Input Measurement Requirement
40 CFR 75.10 (e), CEMS	Optional Backup Monitor Requirements
40 CFR 75.10 (f), CEMS	Minimum Measurement Capability
40 CFR 75.11 (d), CEMS	SO2 Emission Monitoring Requirements for Gas-Fired Units
40 CFR 75.11 (e), CEMS	SO2 Emissions Monitoring Gas-Fired Units
40 CFR 75.12 (a), CEMS	NOx Monitoring
40 CFR 75.12 (b), CEMS	NOx Monitoring Moisture Correction
40 CFR 75.12 (c), CEMS	NOx Monitoring Determination of NOx Emission Rate - Appendix F
40 CFR 75.13 (b), CEMS	CO2 Emissions Monitoring Appendix G
40 CFR 75.13 (c), CEMS	CO2 Mass Emissions Monitoring Appendix F

<b>Emissions Unit Information Section</b> 1	of	4	Fossil Steam U	Unit 1
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### **List of Applicable Federal Regulations**

40 CFR 75.14 (c), CEMS	Opacity Monitoring Gas Unit Exemption
40 CFR 75.20 (a), CEMS	Initial Certification & Loss of Certification
40 CFR 75.20 (b), CEMS	Recertification Approval Process
40 CFR 75.20 (c), CEMS	Certification Procedures
40 CFR 75.20 (d), CEMS	Certification and QA/QC for Backup Monitors
40 CFR 75.20 (f), CEMS	Certification of Alternative Monitoring Systems
40 CFR 75.21 (a), CEMS	CEMS QA/QC
40 CFR 75.21 (c), CEMS	Calibration Gasses for CEMS QA/QC
40 CFR 75.21 (d), CEMS	QA/QC RATA Periodic Notification
40 CFR 75.21 (e), CEMS	QA/QC Audit Consequences
40 CFR 75.22 , CEMS	Reference Test Methods
40 CFR 75.24 , CEMS	Out of Control Periods and Bias Adjustment
40 CFR 75.30 (a)(3), CEMS	NOx Missing Data Substitution Procedures
40 CFR 75.30 (a)(4), CEMS	SO2 Missing Data Substitution Procedures
40 CFR 75.30 (b), CEMS	Missing Data Substitution Procedures for Backup Monitors
40 CFR 75.30 (c), CEMS	Missing Data Substitution using Backup Monitors
40 CFR 75.30 (d), CEMS	SO2 Missing Data Substitution - Gas Units
40 CFR 75.31 , CEMS	Initial Missing Data Procedures
40 CFR 75.32 , CEMS	Monitoring Data Availability for Missing Data

Emissions Unit Information Secti	ion 1	of	4	Fossil Steam	Unit 1
Dimissions Chie aniormation Secti	1011 1	O I	-	I OSSII Oteanii	

### **List of Applicable Federal Regulations**

40 CFR 75.33, CEMS	Standard Missing Data Procedures
40 CFR 75.36, CEMS	Missing Data for Heat Input
40 CFR 75.40, CEMS	Alternate Monitoring Systems General Demonstration Requirements
40 CFR 75.41 , CEMS	Alternate Monitoring Systems Precision Criteria
40 CFR 75.42 , CEMS	Alternate Monitoring Systems Reliability Criteria
40 CFR 75.43 , CEMS	Alternate Monitoring Systems Accessibility Criteria
40 CFR 75.44 , CEMS	Alternate Monitoring Systems Timeliness Criteria
40 CFR 75.45 , CEMS	Alternate Monitoring Systems Daily QA
40 CFR 75.46 , CEMS	Alternate Monitoring Systems Missing Data Substitution Criteria
40 CFR 75.47 , CEMS	Alternate Monitoring Systems Criteria For a Class of Affected Unit
40 CFR 75.48, CEMS	Petition for Alternate Monitoring Systems
40 CFR 75.53 , CEMS	Monitoring Plan
40 CFR 75.54 , CEMS	General Recordkeeping Provisions
40 CFR 75.55 (c), CEMS	Specific Recordkeeping Provisions - Fired units using SO2 Appendix D Gas
40 CFR 75.55 (e) , CEMS	Specific Recordkeeping Provisions -SO2 for Gas Fired units
40 CFR 75.56 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.57 , CEMS	General Recordkeeping Provisions
40 CFR 75.58 (c), CEMS	Specific Recordkeeping Provisions - Fired units using SO2 Appendix D Gas
40 CFR 75.58 (e), CEMS	Specific Recordkeeping Provisions -SO2 for Gas Fired units

Emissions	Unit Information Section	1	of	4	Fossil Steam Unit 1

### **List of Applicable Federal Regulations**

40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements
40 CFR 75.61 , CEMS	Reporting Requirements Notifications
40 CFR 75.62 , CEMS	Monitoring Plan Reporting Requirements
40 CFR 75.63 , CEMS	Certification Reporting Requirements
40 CFR 75.64 (a), CEMS	Quarterly Reports Submission
40 CFR 75.64 (b), CEMS	Quarterly Reports Designated Representative Statement
40 CFR 75.64 (c), CEMS	Quarterly Reports Compliance Certification
40 CFR 75.64 (d), CEMS	Quarterly Reports Electronic Submittal
40 CFR 75.66, CEMS	Petitions to the Administrator (if required)
40 CFR Part 75 - Appendix A-1	Installation and Measurement Locations
40 CFR Part 75 - Appendix A-2	Equipment Specifications
40 CFR Part 75 - Appendix A-3	Performance Specifications
40 CFR Part 75 - Appendix A-4	Data Handling and Acquisition Systems
40 CFR Part 75 - Appendix A-5	Calibration Gasses
40 CFR Part 75 - Appendix A-6	Certification Tests and Procedures
40 CFR Part 75 - Appendix A-7	Calculations
40 CFR Part 75 - Appendix B	QA/QC Procedures
40 CFR Part 75 - Appendix C-1	Missing Data; SO2 & NOx for controlled sources

### **List of Applicable Federal Regulations**

Missing Data ; Load Based Procedure; NOx & Flow
Optional SO2 Emissions Protocol for Gas Fired Units
Conversion Procedures
Conversion Procedures
Conversion Procedures
Conversion Procedures
Future SO2 Offset Plans
Future Deduction of SO2 Allowances for Excess SO2 Emissions
Future Penalties for Excess Emissions of SO2 and NOx
Acid Rain Program
Allowances
Acid Rain Program Monitoring
Excess Emissions
Circumvention; EU's with control device
Excess Emissions
Excess Emissions & Poor Maintenance
Excess Emissions Notification
Acid Rain Unit Applicability
Acid Rain Unit Application Shield

Emissions U	J <mark>nit Informat</mark>	ion Section	1	of	4	Fossil Steam Unit 1	ı

### **List of Applicable Federal Regulations**

FAC 62-210.330 (1)(a)1., Acid Rain	Acid Rain Unit Compliance Options
FAC 62-210.340 , Acid Rain	New and Retired Unit Exemptions
FAC 62-210.350(2);(3);(6), Acid Rain	Acid Rain Unit Certification
FAC 62-210.370 , Acid Rain	Acid Rain Unit Revisions & Corrections
FAC 62-204.800(12) (State Only)	Acid Rain Program
FAC 62-204.800(13) (State Only)	Allowances
FAC 62-204.800(14) (State Only)	Acid Rain Program Monitoring
FAC 62-204.800(16) (State Only)	Excess Emissions
FAC 62-210.650, Stationary Sources	Circumvention; EU's with control device
FAC 62-210.700 (1), Stationary Sources	Excess Emissions
FAC 62-210.700 (4), Stationary Sources	Excess Emissions & Poor Maintenance
FAC 62-210.700 (6), Stationary Sources	Excess Emissions Notification
FAC 62-210.300 , Acid Rain	Acid Rain Unit Applicability
FAC 62-210.320 (1)(a),(2), Acid Rain	Acid Rain Unit Application Shield
FAC 62-210.330 (1)(a)1., Acid Rain	Acid Rain Unit Compliance Options
FAC 62-210.340 , Acid Rain	New and Retired Unit Exemptions
FAC 62-210.350(2);(3);(6), Acid Rain	Acid Rain Unit Certification
FAC 62-210.370 , Acid Rain	Acid Rain Unit Revisions & Corrections

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0237560/4/4.3/4.3.1 TP Fossil/FPLTP\_KFK\_Form1\_EU4 15 7/2/2003

Emissions Unit Information Section 1 of 4 Fossil Steam U	En	miss	ions	Unit	Informa	tion Se	ction	1	of	4	Fossi	Steam	Un	it
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### **List of Applicable State Regulations**

FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.405(1), Existing FFSG	PM and SO <sub>2</sub> Limits
FAC 62-296.570(4)(b)3	NO <sub>x</sub> RACT
FAC 62-297.310(1), Emiss. Monitoring	Test Runs - Mass Emissions
FAC 62-297.310(2)(b), Emiss. Monitoring	Operating Rate
FAC 62-297.310(3), Emiss. Monitoring	Calculation of Emissions
Table 62-297.310-1, Emiss. Monitoring	
FAC 62-297.310(7)(a)9, Emiss. Monitoring	FDEP Notification 15 days prior to tests
FAC 62-297.310(7)(c), Emiss. Monitoring	Waiver for Compliance Tests for Fuel Sampling
	, 0

<b>Emissions Unit Information Section</b>	1_	of	4	Fossil Steam Unit 1
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## D. EMISSION POINT (STACK/VENT) INFORMATION (Regulated Emissions Units Only)

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

Identification of Point on Pl     Flow Diagram? Unit 1 boil		r 2. Emission Point Type Code: 1			
3. Descriptions of Emission Po 100 characters per point):	oints Comprising	g this Emissions (	Jnit for VE Tracking (	limit to	
Unit exhaust through sing	le stack				
	·				
4. ID Numbers or Descriptions	s of Emission Ui	nits with this Emi	ssion Point in Commo	on:	
5. Discharge Type Code:	6. Stack Heig		7. Exit Diameter:		
V		<b>400</b> feet	18.	1 feet	
8. Exit Temperature:	9. Actual Vol	umetric Flow	10. Water Vapor:		
<b>287</b> °F	Rate: 1,	241,257.5		%	
11. Maximum Dry Standard Flo	ow Rate: dscfm	12. Nonstack Er	mission Point Height:	feet	
13. Emission Point UTM Coord	linates:				
Zone: 17 E	Zone: 17 East (km): 567.2 North (km): 2813.2				
14. Emission Point Comment (l	imit to 200 char	acters):			
Values for fields 8 and 9 derived from compliance tests (EPA Method 17) at approximately 90% max. heat input.  (February, 1995)					

Emissions Unit Information	Section 1	of 4 Forei	il Stoom Unit 1			
	MENT (PROCES					
Segment Description and Ra	•	,				
1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Firing Natural Gas						
2. Source Classification Code	e (SCC):	3. SCC Units				
1-01-006-01 4. Maximum Hourly Rate:	5. Maximum A	Million Cu	bic Feet  6. Estimated Annual Activity			
3.98	34,873	amidai Rate.	Factor:			
7. Maximum % Sulfur: <b>0.0031</b>	8. Maximum %	6 Ash:	9. Million Btu per SCC Unit: 1,050			
10. Segment Comment (limit to 200 characters):  %S = [10gr of S/1000 CF gas] * [1 lb S/7000 gr] [CF gas/0.046 lb gas]*100 = 0.0031%S						
Segment Description and Ra	ite: Segment2	of <u>7</u>				
Segment Description (Process/Fuel Type ) (limit to 500 characters):     Unit 1 Firing No. 6 Residual Fuel Oil						
2. Source Classification Code (SCC): 3. SCC Units:						
_	c (800).					
1-01-004-01		Thousand	Gallons			
1-01-004-01 4. Maximum Hourly Rate: 26.3	5. Maximum A 230,520	Thousand Annual Rate:				

This emission unit may burn up to 2.5% sulfur oil.

10. Segment Comment (limit to 200 characters):

Emissions Unit Information Section _	1_	_ of _	4	Fossil Steam Unit 1
`		ESS/F		L) INFORMATION

	(All Emi	ssions Units)	
Segment Description and Ra	ate: Segment	<u>3</u> of <u>7</u>	
1. Segment Description (Pro- Unit 1 Firing Propane	cess/Fuel Type)	(limit to 500 ch	aracters):
	(7.0.0)		
2. Source Classification Cod 1-01-006-01	e (SCC):	3. SCC Units Million C	
4. Maximum Hourly Rate: 4.18	5. Maximum <b>36,617</b>	L	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum	% Ash:	9. Million Btu per SCC Unit: 1,000
lighting off the boiler for sta	·	4_ of <u>7_</u>	
1. Segment Description (Pro Unit 1 Firing No. 2 Fuel	• • • •	(limit to 500 cl	haracters):
2. Source Classification Cod	e (SCC):	3. SCC Uni	
1-01-005-01 4. Maximum Hourly Rate: 29.4	5. Maximum <b>257,6</b> 4	Thousand Annual Rate: 47	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: <b>0.5</b>	8. 8. Maxim	um % Ash: <b>0.01</b>	9. Million Btu per SCC Unit: 136
· -	itted to burn a r ed oil from FPL	nixture of natu	aral gas, No. 6 oil, No. 2 oil, o. 2 oil is primarily used for

<b>Emissions Unit Information Section</b>	1	of_	4	Fossil Steam Unit 1
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### E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)

Seg	gment Description and Ra	te: Segment <u>5</u>	of <u>7</u>				
1.	Segment Description (Proc Unit 1 Co-Firing On-Spe	• • • • •		,			
2.	Source Classification Code	e (SCC):	3. SCC Units: Thousand				
4.	Maximum Hourly Rate: 28.0	5. Maximum A	nnual Rate:	6. Estimated Annual Activity Factor:			
7.	Maximum % Sulfur: 1.0	8. Maximum % <b>0.007</b>	6 Ash:	9. Million Btu per SCC Unit: 143			
Unit 1 is currently permitted to burn a mixture of natural gas, No. 6 oil, No. 2 oil, propane, or on-spec. used oil from FPL operations. Annual amount for both Units 1 and 2 based on Condition A.22.b of the current Title V permit.  Segment Description and Rate: Segment 6 of 7  1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Co-Firing all possible combinations of Natural Gas, No. 6 Residual Oil, No. 2 Fuel Oil, On-Spec. Used Oil, and Propane							
2.	2. Source Classification Code (SCC): 3. SCC Units: Million Cubic Ft. and Thousand Gallons						
4.	Maximum Hourly Rate:	5. Maximum A		6. Estimated Annual Activity Factor: %			
7.	Maximum % Sulfur: 8. Maximum % Ash: 9. Million Btu per SCC Uni						
10	10. Segment Comment (limit to 200 characters):  Unit 1 is permitted to burn a mixture of nat. gas, No.6 oil, No.2 oil, propane, or onspec. used oil. Permit allows Unit 1 to burn a mixture of the above fuels provided max. SO2 rate is 2.75 lbs/mmBtu.						

E. SEG	`	ssions Units)	FORMATION
Segment Description (Pro- Unit 1 Boiler Chemical C while firing natural gas	Cleaning waste e		haracters): his process may be undertaken
2. Source Classification Coc 1-01-013-01	le (SCC):	3. SCC Units	s: nousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum	Annual Rate: 500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum	% Sulfur:	9. Million Btu per SCC Unit:
10. Segment Comment (limit Items 6 - 9 do not apply. accordance with DARM	This activity to	be undertaken	<u>-</u>

### F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	077	Device Code	EL EL
SO2			EL
NOx	024, 025	-	EL
CO		-	NS
VOC			NS
PM10			NS.
H133			. NS
SAM	-		NS
H106			NS
H107			NS
		-	
		-	

Emissions Unit Information Section	1_	_ of _	4	Fossil Steam Unit 1
Pollutant Detail Information Page	1_	_ of _	<u>3</u>	

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive l	Emissions					
1. Pollutant Emitte	d: PM	2. Total Percent Efficiency of Control:				
3. Potential Emissi	ons: 500 lb/hour	<b>2,190</b> tons/year	4. Synthetically Limited? [NO]			
5. Range of Estima	ted Fugitive Emissions:	to to	ns/year			
9	0.125 lb/mmBtu	nd Dula 62, 210, 700/2)	7. Emissions Method Code:			
	P Rule 62-296.405(1)(b) a		0			
0.125 lb/mmBtu	missions (limit to 600 chars 1 *4,000 mmBtu/hr = 500 10 hr/yr) / 2000 lb/ton = 2,	lb/hr				
Emission rate b	9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emission rate based on 3hrs/24hrs at 0.3 lb/mmBtu and 21hrs/24hrs at 0.1 lb/mmBtu which is equivalent to a rate of 0.125 lb/mmBtu					
Allowable Emission	ns Allowable Emissions _	<u>1</u> of <u>1</u>				
	able Emissions Code:	2. Future Effective Da Emissions:	ate of Allowable			
3. Requested Allov 0.1 lb/mm	vable Emissions and Units: nBtu steady state (ss) nBtu sootblow (sb)	385 lb/hour 1,475	ole Emissions: 5.5 tons/year (ss) 2.4 tons/year (sb)			
5. Method of Comp DEP Rule 62-29	Diance (limit to 60 characte 26.405(1)(e)2	ers):				
0.1 lb/mmBtu =	sions Comment (Desc. of Coreg. Limit for PM [Rule sed on 3hr/24hr limit [62-	62-296.340(1)(e)], 0.3 lb/	mmBtu = reg. Limit			

Emissions Unit Information Section 1 of 4 Fossil Steam Unit 1  Pollutant Detail Information Page 2 of 3  G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -					
	struction Review Pollutants Only)				
Potential/Fugitive Emissions					
1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:				
3. Potential Emissions:	4. Synthetically				
<b>4,400</b> lb/hour	19,272 tons/year Limited? [N]				
5. Range of Estimated Fugitive Emissions:					
[ ] 1 [ ] 2 [ ] 3	totons/year				
6. Emission Factor: 1.1 lb/mmBtu;	7. Emissions Method Code:				
Reference: 0250003-001-AC	0				
4,000 mmBtu/hr * 1.1 lb/mmBtu = 4,400 lb/hr (4,400 lb/hr * 8760 hr/yr) / 2000 lb/ton = 19,272 ton/yr					
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The requirement of 1.1 lb/mmBtu is based on Miami-Dade County Department of Environmental Resource Management rules. It is not federally enforceable. Emission unit is federally limited to firing 2.5% sulfur oil while firing 100% oil and is limited by DEP Rule 62-296.405(1)(c)1.j.					
Allowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>				
Basis for Allowable Emissions Code:     Required or assumed by permittee	Future Effective Date of Allowable Emissions:				
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:				
1.1 lb/mmBtu	4,400 lb/hour 19,272 tons/year				
<ul> <li>Method of Compliance (limit to 60 characters):         Fuel Specifications and vendor sampling and analysis     </li> <li>Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):</li> </ul>					

Equivalent allowable emissions for liquid fuel firing. Title V Permit No. 0250003-001-AV. Final requirement of 1.1 lb/mmBtu should state that it is not federally enforceable. This unit is subject to DEP Rule 62-296.405(1)(c)1.j. limiting SO<sub>2</sub>

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emissions to 2.75 lb/mmBtu.

<b>Emissions Unit Information Section</b>	1_	of _	4	Fossil Steam Unit 1
Pollutant Detail Information Page	3	_ of _	3	

### G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive Emissions	
1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control:
3. Potential Emissions: 2,120 lb/hour	9,285.6 tons/year 4. Synthetically Limited? [No]
5. Range of Estimated Fugitive Emissions:  [ ] 1 [ ] 2 [ ] 3	to tons/year
6. Emission Factor: 0.53 lb/mmBtu	7. Emissions
Reference: <b>DEP Rule 62-296.570(4)</b> (a	Method Code: 0
8. Calculation of Emissions (limit to 600 chara 0.53 lb/mmBtu * 4,000 mmBtu/hr = 2,120 (2,120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9 0.4 lb/mmBtu * 4,180 mmBtu/hr = 1,672 l (1,672 lb/hr * 8,760 hr/yr)/2,000 lb/ton = 7	lb/hr (oil) 0,285.6 tons/year (oil) b/hr (gas)
9. Pollutant Potential/Fugitive Emissions Com Emission limit calculated for oil and gas o	·
Allowable Emissions	<u>1</u> of <u>1</u>
Basis for Allowable Emissions Code:     RULE	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.53 lb/mmBtu (oil); 0.4 lb/mmBtu (gas)	4. Equivalent Allowable Emissions: oil 2,120 lb/hour 9,285.6 tons/year gas 1,672 lb/hour 7,323 tons/year
5. Method of Compliance (limit to 60 characte CEM Part 75, 30 day rolling average Rul	rs):
6. Allowable Emissions Comment (Desc. of O This emission unit utilizes Low NOx burn to control emissions of NOx.	perating Method) (limit to 200 characters):  ners as well as off-stoichoimetric combustion

	<b>Emissions Unit Information Section</b>	1	of	4	Fossil Steam Unit 3
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### H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

(Only Regulated Emissions	Units Subject to a VE Limitation			
<u>Visible Emissions Limitation:</u> Visible Emissions Limitation <u>1</u> of <u>3</u>				
1. Visible Emissions Subtype: VE40	2. Basis for Allowable Opacity: [X] Rule [ ] Other			
3. Requested Allowable Opacity:				
Normal Conditions: 40 % I Maximum Period of Excess Opacity Allow	Exceptional Conditions: % wed: see comment below min/hour			
4. Method of Compliance:  VE Test (EPA Method 9)				
5. Visible Emissions Comment (limit to 200 Visible emissions limited to 40% opacit				
Visible Emissions Limitation: Visible Emis	osions Limitation <u>2</u> of <u>3</u>			
1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:			
VE60	[X] Rule [] Other			
3. Requested Allowable Opacity:	Francisco Conditioner 100 0/			
	Exceptional Conditions: 100 % wed: 24 min/hour			
Maximum Period of Excess Opacity Allov	wed: 24 min/nour			
5. Method of Compliance:  VE Test (EPA Method 9)				
. , ,	characters): 60% opacity for 3 hours/24 hour period for c-minute periods of up to 100% opacity.			
Visible Emissions Limitation: Visible Emis	ssions Limitation <u>3</u> of <u>3</u>			
<ol> <li>Visible Emissions Subtype: VE99</li> </ol>	2. Basis for Allowable Opacity: [X] Rule [] Other			
3. Requested Allowable Opacity: Normal Conditions: 100 % Maximum Period of Excess Opacity Allowable	Exceptional Conditions: 100 % wed: 60 min/hour			
4. Method of Compliance:  VE Test (EPA Method 9)				
5. Visible Emissions Comment (limit to 200 FDEP Rule 62-210.700(1) & (2) allows from start-up & shut-down, and 2 hour	up to 100% opacity for unlimited time during			

<b>Emissions Unit Information Section</b>	1	of 1	Fossil Steam Unit 3
emissions onit miormation section	1	01. 4	rossii Steam Unit 5

(Only Regulated Emissions Units Subject to Continuous Monitoring)				
Continuous Monitoring System: Continuous	Monitor <u>1</u> of <u>3</u>			
1. Parameter Code: EM	2. Pollutant(s): NOx			
3. CMS Requirement:	[X] Rule [ ] Other			
4. Monitor Information  Manufacturer: : NOx = TECO  Model Number: NOx = 42C  Serial Number: NOx = 42C-77128-385	$CO_2 = Milton Roy$ $CO_2 = 3300$ $CO_2 = N3H8174T$			
1. Installation Date:	6. Performance Specification Test Date: 2/13/2003			
NOx = 01/23/2003 CO2 = 041/01/1995   2/13/2003  7. Continuous Monitor Comment (limit to 200 characters):  NOx Required by 40 CFR 75.10(a)(2);; CO <sub>2</sub> provides % O <sub>2</sub> data to NOx monitor per  40 CFR 75 Appendix E. CO <sub>2</sub> data is calculated using 40 CFR 75 Appendix G equation  G-4.				
Continuous Monitoring System: Continuou  2. Parameter Code: EM	s Monitor <u>2</u> of <u>3</u> 2. Pollutant(s): SO <sub>2</sub>			
3. CMS Requirement:	[X] Rule [] Other			
4. Monitor Information  Manufacturer: SO <sub>2</sub> Oil Mass Flow = Micromotion  Model Number: SO <sub>2</sub> Oil Mass Flow = D300  Serial Number: SO <sub>2</sub> Oil Mass Flow = 141715				
2. Installation Date: 01/01/2000	6. Performance Specification Test Date: 02/13/2003			
7. Continuous Monitor Comment (limit to 200 characters): SO <sub>2</sub> Required by 40 CFR 75.10(a)(1); SO <sub>2</sub> calculated according to 40 CFR 75 appendix D				

Emissions Only intol mation Section 1 of 4 Possii Steam Only	<b>Emissions Unit Information Sect</b>	tion 1	of	4	Fossil Steam Uni
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### I. CONTINUOUS MONITOR INFORMATION (Only Regulated Emissions Units Subject to Continuous Monitoring)

<u>Continuous Monitoring System:</u> Continuous Monitor <u>3</u> of <u>3</u>

3.	Parameter Code: EM	2. Pollutant(s): Visible Emissions
3.	CMS Requirement:	[X] Rule [ ] Other
4.	Monitor InformationPhoenix Instruments Model Number: OPAC 20/20 Serial Number: OPAC-1074	
3.	Installation Date: 03/16/2001	6. Performance Specification Test Date: 01/08/2001
	Required by 40 CFR 70.10(a)(4)	

<b>Emissions Unit Information Section</b>	1	of	4	Fossil Stean	a Unit 3

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

## **Supplemental Requirements**

1.	Process Flow Diagram
	[X] Attached, Document ID: PTFU1-1.bmp [ ] Not Applicable [ ] Waiver Requested
2.	Fuel Analysis or Specification
	[X] Attached, Document ID: PTFU1-2.txt
3.	Detailed Description of Control Equipment
	[X] Attached, Document ID: <u>PTFU1-3.txt</u> [ ] Not Applicable [ ] Waiver Requested
4.	Description of Stack Sampling Facilities
	[X] Attached, Document ID: <u>PTFU1-4.bmp</u> [] Not Applicable [] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[X] Previously submitted, Date: <u>N/A</u>
	[ ] Not Applicable
6.	Procedures for Startup and Shutdown
	[X] Attached, Document ID <u>PTFU1-6.txt</u> [ ] Not Applicable [ ] Waiver Requested
7.	
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[ ] Attached, Document ID: [X] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [X] Not Applicable
10	. Supplemental Requirements Comment:

Emissions Unit Information Section 1 of 4 Fossil Steam Un	Jni	eam l	Fossil Stea		4	of	1	<b>Emissions Unit Information Section</b>
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### Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: PTFU1-11.txt [ ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[X] Attached, Document ID: PTFU1-13.txt
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: PTFU1-15
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[ ] Not Applicable

Emissions	Unit	Information	Section	2	of_	4	Fossil Steam Unit 2	
	<b></b>	inioi mation	Section .		· -	_ <del>-</del>	1 ossii Steami Cini 2	

#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

## A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

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

	<del></del>				
1.	Type of Emission	s Unit Addressed in This	S Section: (Check one)		
[ X	X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).				
[	] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.				
[	-		n addresses, as a single emiss s which produce fugitive em		
2.	Regulated or Unr	egulated Emissions Unit	? (Check one)		
[ X	] The emissions uemissions unit.	unit addressed in this Em	issions Unit Information Sec	ction is a regulated	
[	[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.				
4.			in This Section (limit to 60 c	characters):	
	Fossil Fuel Fired	Steam Generator # 2			
4.	Emissions Unit Id	lentification Number:		[ ] No ID	
	ID: <b>02</b>			[ ] ID Unknown	
5.	5. Emissions Unit Status Code: Date: Group SIC Code: Y ]  A 04/1967 7. Emissions Unit Major Group SIC Code: Y ]				
10.		comment: (Limit to 500 C	•		
	Emission Unit 02 (Turkey Point Fossil Unit 2) is a nominal 402 MW(electrical) steam				
	generator fired on Natural Gas or using No.2 or No.6 fuel oil and consists of a boiler/steam generator driving a single reheat turbine generator.				
	bonerscam gen	crator driving a single	i chicat tui pinte genei atti.		

Emissions Unit Information Section 2 of 4 Possii Steam Unit 2				
Emissions Unit Control Equipment				
2. Control Equipment/Method Description (Limit to 200 characters per device or method):				
A = Multiple Cyclone w/o Fly Ash Reinjection				
B = Low NOx Burners				
C = Staged Combustion				
·				
·				
2. Control Device or Method Code(s): 077, 024, 025				
Emissions Unit Details				

1.	Package Unit:		
	Manufacturer: Foster-Wheeler	Model Number: N/A	
2.	Generator Nameplate Rating: 402	MW	
3.	Incinerator Information:		
	Dwell Temperature:	°F	
	Dwell Time:	seconds	
	Incinerator Afterburner Temperature:	°F	

Emissions	Unit I	Information	Section	2	of	4	Fossil Steam	Unit	2

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

## **Emissions Unit Operating Capacity and Schedule**

	Maximum Heat Input Rate:	4,000	mmBtu/hr		
2.	Maximum Incineration Rate:		lb/hr		tons/day
3.	Maximum Process or Throughpu	ut Rate:			
4.	Maximum Production Rate:				
5.	Requested Maximum Operating	Schedule:			
		hours/day			days/week
		weeks/yea	ar	8760	hours/year
	permitting note for purpose of maximum heat input when firi	-	~		en applicable. The

## **List of Applicable Federal Regulations**

40 CFR 279.72, Analysis and Records	On-Specification Used Oil
40 CFR 72.9 (a), Acid Rain Permits	Permit requirements
40 CFR 72.9 (b), Acid Rain Permits	Monitoring Requirements
40 CFR 72.9 (c)(1), Acid Rain Permits	SO2 Allowance Requirements - Holding
40 CFR 72.9 (c)(2), Acid Rain Permits	SO2 Allowance - Excess Emissions Violations
40 CFR 72.9 (c)(3)(iii), Acid Rain Permits	SO2 Allowance - Phase II Unit applicability
40 CFR 72.9 (c)(4), Acid Rain Permits	SO2 Allowance Tracking System Accounts
40 CFR 72.9 (c)(5), Acid Rain Permits	SO2 Allowance Year of Use Requirement
40 CFR 72.9 (d), Acid Rain Permits	NOx Requirements
40 CFR 72.9 (e), Acid Rain Permits	Excess Emission Requirements & Offsets
40 CFR 72.9 (f), Acid Rain Permits	Recordkeeping and Reporting
40 CFR 72.9 (g), Acid Rain Permits	Liability and Civil Penalty
40 CFR 72.20 (a), Acid Rain Permits	Designated Representative Requirement
40 CFR 72.20 (b), Acid Rain Permits	Designated Representative Legal Binding
40 CFR 72.20 (c), Acid Rain Permits	Designated Representative Certification
40 CFR 72.21, Acid Rain Permits	Submissions by Designated Representative
40 CFR 72.22, Acid Rain Permits	Alternate Designated Representative Requirement
40 CFR 72.23, Acid Rain Permits	Changing Designated Representatives or Owners
40 CFR 72.24, Acid Rain Permits	Designated Representative Certificate of Representation

**List of Applicable Federal Regulations** 

List of Applicable Federal Regulations	
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply
40 CFR 72.30 (b) (2), Acid Rain Permits	Acid Rain Permit Requirements to apply for Phase II
40 CFR 72.30 (c), Acid Rain Permits	Acid Rain Permit Renewal application prior to Permit Expiration
40 CFR 72.30 (d), Acid Rain Permits	Acid Rain Permit Submittal Requirements
40 CFR 72.31, Acid Rain Permits	Acid Rain Permit Information Requirements
40 CFR 72.32, Acid Rain Permits	Permit Application Shield
40 CFR 72.33 (b), Acid Rain Permits	Identification of Dispatch System
40 CFR 72.33 (c), Acid Rain Permits	Dispatch System Requirements
40 CFR 72.33 (d), Acid Rain Permits	Changing Dispatch System Identification
40 CFR 72.40, Acid Rain Permits	Compliance Plan Application Requirements
40 CFR 72.50, Acid Rain Permits	General Permit Requirements
40 CFR 72.51, Acid Rain Permits	Permit Shield
40 CFR 72.90, Acid Rain Permits	Annual Compliance Certification
40 CFR 73.30, SO2 Allowance System	Allowance Tracking System Accounts
40 CFR 73.31, SO2 Allowance System	Establishment of Accounts
40 CFR 73.32, SO2 Allowance System	Allowance Account Contents
40 CFR 73.33, SO2 Allowance System	Authorized Account Representative
40 CFR 73.35 (a), SO2 Allowance System	Compliance and Allowance Transfer Deadline
40 CFR 73.35 (b), SO2 Allowance System	Allowance Deductions for Compliance

40 CFR 73.35 (c), SO2 Allowance System	Identification of Allowances by Serial Number
40 CFR 73.35 (d), SO2 Allowance System	Deductions for Excess Emissions
40 CFR 75.4, CEMS	Compliance Dates
40 CFR 75.5, CEMS	Prohibitions
40 CFR 75.10 (a) (1), CEMS	Primary Measurement - SO2
40 CFR 75.10 (a) (2), CEMS	Primary Measurement - NOx
40 CFR 75.10 (a) (3) (iii), CEMS	Primary Measurement - CO2 & O2 Monitor
40 CFR 75.10 (b), CEMS	Primary Equipment Performance Requirements
40 CFR 75.10 (c), CEMS	Heat Input Measurement Requirement
40 CFR 75.10 (e), CEMS	Optional Backup Monitor Requirements
40 CFR 75.10 (f), CEMS	Minimum Measurement Capability
40 CFR 75.11 (d), CEMS	SO2 Emission Monitoring Requirements for Gas-Fired Units
40 CFR 75.11 (e), CEMS	SO2 Emissions Monitoring Gas-Fired Units
40 CFR 75.12 (a), CEMS	NOx Monitoring
40 CFR 75.12 (b), CEMS	NOx Monitoring Moisture Correction
40 CFR 75.12 (c), CEMS	NOx Monitoring Determination of NOx Emission Rate - Appendix F
40 CFR 75.13 (b), CEMS	CO2 Emissions Monitoring Appendix G
40 CFR 75.13 (c), CEMS	CO2 Mass Emissions Monitoring Appendix F
40 CFR 75.14 (c), CEMS	Opacity Monitoring Gas Unit Exemption
40 CFR 75.20 (a), CEMS	Initial Certification & Loss of Certification
40 CFR 75.20 (b), CEMS	Recertification Approval Process

# C. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

### **List of Applicable Federal Regulations**

40 CFR 75.20 (c), CEMS	Certification Procedures
40 CFR 75.20 (d), CEMS	Certification and QA/QC for Backup Monitors
40 CFR 75.20 (f), CEMS	Certification of Alternative Monitoring Systems
40 CFR 75.21 (a), CEMS	CEMS QA/QC
40 CFR 75.21 (c), CEMS	Calibration Gasses for CEMS QA/QC
40 CFR 75.21 (d), CEMS	QA/QC RATA Periodic Notification
40 CFR 75.21 (e), CEMS	QA/QC Audit Consequences
40 CFR 75.22 , CEMS	Reference Test Methods
40 CFR 75.24 , CEMS	Out of Control Periods and Bias Adjustment
40 CFR 75.30 (a)(3), CEMS	NOx Missing Data Substitution Procedures
40 CFR 75.30 (a)(4), CEMS	SO2 Missing Data Substitution Procedures
40 CFR 75.30 (b), CEMS	Missing Data Substitution Procedures for Backup Monitors
40 CFR 75.30 (c), CEMS	Missing Data Substitution using Backup Monitors
40 CFR 75.30 (d), CEMS	SO2 Missing Data Substitution - Gas Units
40 CFR 75.31 , CEMS	Initial Missing Data Procedures
40 CFR 75.32 , CEMS	Monitoring Data Availability for Missing Data
40 CFR 75.33, CEMS	Standard Missing Data Procedures
40 CFR 75.36, CEMS	Missing Data for Heat Input
40 CFR 75.40, CEMS	Alternate Monitoring Systems General Demonstration Requirements

## **List of Applicable Federal Regulations**

40 CFR 75.41, CEMS	Alternate Monitoring Systems Precision Criteria
40 CFR 75.42 , CEMS	Alternate Monitoring Systems Reliability Criteria
40 CFR 75.43 , CEMS	Alternate Monitoring Systems Accessibility Criteria
40 CFR 75.44 , CEMS	Alternate Monitoring Systems Timeliness Criteria
40 CFR 75.45 , CEMS	Alternate Monitoring Systems Daily QA
40 CFR 75.46, CEMS	Alternate Monitoring Systems Missing Data Substitution Criteria
40 CFR 75.47 , CEMS	Alternate Monitoring Systems Criteria For a Class of Affected Unit
40 CFR 75.48, CEMS	Petition for Alternate Monitoring Systems
40 CFR 75.53, CEMS	Monitoring Plan
40 CFR 75.54 , CEMS	General Recordkeeping Provisions
40 CFR 75.55 (c), CEMS	Specific Recordkeeping Provisions - Fired units using SO2 Appendix D Gas
40 CFR 75.55 (e), CEMS	Specific Recordkeeping Provisions -SO2 for Gas Fired units
40 CFR 75.56, CEMS	Certification, QA/QC record Provisions
40 CFR 75.57, CEMS	General Recordkeeping Provisions
40 CFR 75.58 (c), CEMS	Specific Recordkeeping Provisions - Fired units using SO2 Appendix D Gas
40 CFR 75.58 (e), CEMS	Specific Recordkeeping Provisions -SO2 for Gas Fired units
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements
40 CFR 75.61, CEMS	Reporting Requirements Notifications

## **List of Applicable Federal Regulations**

40 CFR 75.62, CEMS	Monitoring Plan Reporting Requirements
40 CFR 75.63, CEMS	Certification Reporting Requirements
40 CFR 75.64 (a), CEMS	Quarterly Reports Submission
40 CFR 75.64 (b), CEMS	Quarterly Reports Designated Representative Statement
40 CFR 75.64 (c), CEMS	Quarterly Reports Compliance Certification
40 CFR 75.64 (d), CEMS	Quarterly Reports Electronic Submittal
40 CFR 75.66, CEMS	Petitions to the Administrator (if required)
40 CFR Part 75 - Appendix A-1	Installation and Measurement Locations
40 CFR Part 75 - Appendix A-2	<b>Equipment Specifications</b>
40 CFR Part 75 - Appendix A-3	Performance Specifications
40 CFR Part 75 - Appendix A-4	Data Handling and Acquisition Systems
40 CFR Part 75 - Appendix A-5	Calibration Gasses
40 CFR Part 75 - Appendix A-6	Certification Tests and Procedures
40 CFR Part 75 - Appendix A-7	Calculations
40 CFR Part 75 - Appendix B	QA/QC Procedures
40 CFR Part 75 - Appendix C-1	Missing Data; SO2 & NOx for controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NOx & Flow
40 CFR Part 75 - Appendix D	Optional SO2 Emissions Protocol for Gas Fired Units
40 CFR Part 75 - Appendix F	Conversion Procedures

## **List of Applicable Federal Regulations**

40 CFR Part 75 - Appendix G-2	Conversion Procedures
40 CFR Part 75 - Appendix G-4	Conversion Procedures
40 CFR Part 75 - Appendix H	Conversion Procedures
40 CFR 77.3, Excess Emissions	Future SO2 Offset Plans
40 CFR 77.5 (b), Excess Emissions	Future Deduction of SO2 Allowances for Excess SO2 Emissions
40 CFR 77.6, Excess Emissions	Future Penalties for Excess Emissions of SO2 and NOx
FAC 62-204.800(12) (State Only)	Acid Rain Program
FAC 62-204.800(13) (State Only)	Allowances
FAC 62-204.800(14) (State Only)	Acid Rain Program Monitoring
FAC 62-204.800(16) (State Only)	Excess Emissions
FAC 62-210.650, Stationary Sources	Circumvention; EU's with control device
FAC 62-210.700 (1), Stationary Sources	Excess Emissions
FAC 62-210.700 (4), Stationary Sources	Excess Emissions & Poor Maintenance
FAC 62-210.700 (6), Stationary Sources	Excess Emissions Notification
FAC 62-210.300 , Acid Rain	Acid Rain Unit Applicability
FAC 62-210.320 (1)(a),(2), Acid Rain	Acid Rain Unit Application Shield
FAC 62-210.330 (1)(a)1., Acid Rain	Acid Rain Unit Compliance Options
FAC 62-210.340 , Acid Rain	New and Retired Unit Exemptions
FAC 62-210.350(2);(3);(6), Acid Rain	Acid Rain Unit Certification

<b>Emissions Unit Information Section</b> 2	0	t 4	Fossil Steam Unit 2
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## **List of Applicable State Regulations**

FAC 62-210.370 , Acid Rain	Acid Rain Unit Revisions & Corrections
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.405(1), Existing FFSG	PM and SO <sub>2</sub> Limits
FAC 62-296.570(4)(b)3	NO <sub>x</sub> RACT
FAC 62-297.310(1), Emiss. Monitoring	Test Runs - Mass Emissions
FAC 62-297.310(2)(b), Emiss. Monitoring	Operating Rate
FAC 62-297.310(3), Emiss. Monitoring	Calculation of Emissions
Table 62-297.310-1, Emiss. Monitoring	
FAC 62-297.310(7)(a)9, Emiss. Monitoring	FDEP Notification 15 days prior to tests
FAC 62-297.310(7)(c), Emiss. Monitoring	Waiver for Compliance Tests for Fuel Sampling
·	

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

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

<ol> <li>Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking 100 characters per point):</li> <li>Unit exhaust through single stack</li> </ol>	ing (limit to				
Unit exhaust through single stack					
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Cor	mmon:				
6. Discharge Type Code: 6. Stack Height: 7. Exit Diameter V 400 feet	er: 1 <b>8.1</b> feet				
8. Exit Temperature: 287 °F 9. Actual Volumetric Flow Rate: 1,241,257.5 10. Water Vapor	·: %				
11. Maximum Dry Standard Flow Rate: dscfm 12. Nonstack Emission Point Height: feet					
13. Emission Point UTM Coordinates:	_				
Zone: 17 East (km): 567.2 North (km): 2813.2					
14. Emission Point Comment (limit to 200 characters):	_				
Values for fields 8 and 9 derived from compliance tests (EPA Method 17) a approximately 90% max. heat input. (February, 1995)	at				

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

•	(All Emis	sions Units)	
Segment Description and Ra	ite: Segment1	of <u>7</u>	
1. Segment Description (Prod Unit 2 Firing Natural Ga		limit to 500 ch	aracters):
3. Source Classification Cod- 1-01-006-01	e (SCC):	3. SCC Units  Million C	
4. Maximum Hourly Rate: 3.98	6. Maximum A 34,873	Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: <b>0.0031</b>	8. Maximum %	% Ash:	10. Million Btu per SCC Unit: 1,050
10. Segment Comment (limit	to 200 characters)	):	
%S = [10gr of S/1000 CF ga	s  *  1 1b 5//000	gr] [CF gas/0.	046 lb gas *100 = 0.0031%S
Segment Description and Ra	ite: Segment2	of <u>7</u>	
Segment Description (Pro- Unit 2 Firing No. 6 Resid		(limit to 500 c	haracters):
3. Source Classification Cod	e (SCC):	3. SCC Uni	
1-01-004-01		1	d Gallons
6. Maximum Hourly Rate: <b>26.3</b>	7. Maximum A 230,52	Annual Rate:  6	6. Estimated Annual Activity Factor: %
8. Maximum % Sulfur: 2.5	11. Maximum % Ash: <b>0.1</b>		12. Million Btu per SCC Unit: 152
13. Segment Comment (limit	to 200 characters)	):	
This emission unit may b	ourn up to 2.5%	sulfur oil .	

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

<b>Segment Description and Rate:</b>	Segment	3	of	7
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Segment Description (Process/Fuel Type) (limit to 500 characters):     Unit 2 Firing Propane					
3. Source Classification Code (SCC):  1-01-006-01  3. SCC Units:  Million Cubic Feet					
4. Maximum Hourly Rate: 4.18	6. Maximum Ar <b>36,617</b>	nnual Rate:	6. Estimated Annual Activity Factor:		
7. Maximum % Sulfur:	8. Maximum %	Ash:	10. Million Btu per SCC Unit: 1,000		
10. Segment Comment (limit t Unit 2 is currently permi propane, or on-spec. used oi lighting off the boiler for sta	tted to burn a mix il from FPL opera		ral gas, No. 6 oil, No. 2 oil, ne is primarily used for		
Segment Description and Ra	ite: Segment 4	_ of <u>_ 7</u>			
<ol> <li>Segment Description (Process/Fuel Type ) (limit to 500 characters):</li> <li>Unit 2 Firing No. 2 Fuel Oil</li> </ol>					
3. Source Classification Code 1-01-005-01	e (SCC):	3. SCC Unit			
6. Maximum Hourly Rate: 29.4	7. Maximum Ar 257,647		6. Estimated Annual Activity Factor: %		
9. Maximum % Sulfur: 0.5	10. 8. Maximum <b>0.</b> 0		11. Million Btu per SCC Unit: 136		
12. Segment Comment (limit to 200 characters):  Unit 1 is currently permitted to burn a mixture of natural gas, No. 6 oil, No. 2 oil, propane, or on-spec. used oil from FPL operations. No. 2 oil is primarily used for during boiler for start-up.					

<b>Emissions</b>	Unit In	nformation	Section	2	of	4	Fossi	l Steam	Unit	: 2

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

Segment Descri	ption and Rate:	Segment	5	of	7

Segment Description and Ra	te: Segment <u>5</u> of <u>1</u>	<u> </u>					
1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Co-Firing On-Specification Used Oil from FPL Operations							
4. Source Classification Code (SCC): 3. SCC Units:							
1-01-013-01	` '	sand Gallons					
4. Maximum Hourly Rate: 28.0	6. Maximum Annual Ra 750						
7. Maximum % Sulfur: 1.0	9. Maximum % Ash: <b>0.007</b>	10. Million Btu per SCC Unit: 143					
10. Segment Comment (limit to 200 characters):							
Unit 1 is currently permitted to burn a mixture of natural gas, No. 6 oil, No. 2 oil,							
T.	propane, or on-spec. used oil from FPL operations. Annual amount for both Units 1 and						
2 based on Condition A.22.b of the current Title V permit.							
		•					
·							
Segment Description and Rate: Segment 6 of 7							
1. Segment Description (Process/Fuel Type ) (limit to 500 characters):							
Unit 2 Co-Firing all possible combinations of Natural Gas, No. 6 Residual Oil, No. 2							
Fuel Oil, On-Spec. Used Oil, and Propane							
	•	•					
3. Source Classification Cod	• •						
1-01-006-01		Cubic Ft. and Thousand Gallons					
6. Maximum Hourly Rate:	7. Maximum Annual Ra	Factor: %					
8. Maximum % Sulfur: 2.5	11. Maximum % Ash: <b>0.1</b>	12. Million Btu per SCC Unit:					
13. Segment Comment (limit	to 200 characters):						
_ ·		No.6 oil, No.2 oil, propane, or on-					
		ure of the above fuels provided					
max. SO2 rate is 2.75 lbs	/mmBtu.						
	·						

Emissions	<b>Unit Information S</b>	ection 2	of	4	Fossil Steam	Unit 2

Segment Description and Rate: Segment 7 of 7

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

Segment Description (Process/Fuel Type) (limit to 500 characters):
 Unit 2 Boiler Chemical Cleaning waste evaporation. This process may be undertaken while firing natural gas or residual oil

4.	Source Classification Code	e (SCC):	5. SCC Units:		
	1-01-013-01		Tho	usa	nd Gallons
6.	Maximum Hourly Rate:	7. Maximum	Annual Rate:	6.	<b>Estimated Annual Activity</b>
	3	5	500		Factor:
9.	Maximum % Sulfur:	10. Maximum <sup>o</sup>	% Sulfur:	9.	Million Btu per SCC Unit:

11. Segment Comment (limit to 200 characters):

Items 6 - 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)

c

# F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	077	Device Code	EL EL
SO2			EL
NOx	024, 025		EL
СО			NS
VOC			NS
PM10			NS
H133			NS
SAM			NS
H106			NS
H107			NS
	,		
· · · · · · · · · · · · · · · · · · ·			
		-	_
11.44			

<b>Emissions Unit Information Section</b>	2	_ of	_4	Fossil Steam Unit 2
Pollutant Detail Information Page	1_	of_	<u>3</u>	

## G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

### **Potential/Fugitive Emissions**

1. Pollutant Emitted: PM	2. Total Percent Efficient	ency of Control:
3. Potential Emissions:		4. Synthetically
<b>500</b> lb/hour	2,190 tons/year	Limited? [NO]
5. Range of Estimated Fugitive Emissions:		
[ ] 1 [ ] 2 [ ] 3	to to	ns/year
6. Emission Factor: 0.125 lb/mmBtu		10. Emissions
Reference: <b>DEP Rule 62-296.405(1)(b) an</b>	nd Rule 62-210.700(3)	Method Code:  0
11. Calculation of Emissions (limit to 600 chara 0.125 lb/mmBtu *4,000 mmBtu/hr = 500 (500 lb/hr * 8760 hr/yr) / 2000 lb/ton = 2,  12. Pollutant Potential/Fugitive Emissions Com Emission rate based on 3hrs/24hrs at 0.3	lb/hr 190 tons/yr ament (limit to 200 charac	,
which is equivalent to a rate of θ.125 lb/n	nmBtu	
Allowable Emissions Allowable Emissions	<u>1</u> of <u>1</u>	
Basis for Allowable Emissions Code:     Required or assumed by permittee	2. Future Effective D Emissions:	ate of Allowable
5. Requested Allowable Emissions and Units:	_	
0.2 lb/mmBtu steady state (ss)		5.5 tons/year (ss)
<ul><li>0.3 lb/mmBtu sootblow (sb)</li><li>5. Method of Compliance (limit to 60 characters)</li></ul>	_ <u>-</u>	2.4 tons/year (sb)
DEP Rule 62-296.405(1)(e)2	118 j.	
6. Allowable Emissions Comment (Desc. of C	perating Method) (limit t	o 200 characters):
0.1 lb/mmBtu = reg. Limit for PM [Rule for sootblow based on 3hr/24hr limit [62-	. , . , . ,	0
•		

Emissions Unit Information Section 2 of 4 Fossil Steam Unit 2								
Pollutant Detail Information Page 2 0	f_3							
G. EMISSIONS UNIT POLLUT		MATION						
(Regulated Emissions Units - Emissions-Limited and Preconstruction Review Pollutants Only)								
Potential/Fugitive Emissions								
1. Pollutant Emitted: SO <sub>2</sub> 2. Total Percent Efficiency of Control:								
2. Total Forest Efficiency of Control.								
3. Potential Emissions:		4. Synthetically						
4,400 lb/hour	19,272 tons/year	Limited? [N]						
5. Range of Estimated Fugitive Emissions:  [ ] 1								
[ ] 1 [ ] 2 [ ] 3totons/year  6. Emission Factor: 1.1 lb/mmBtu;								
Reference: 0250003-001-AC	Method Code:							
0								
11. Calculation of Emissions (limit to 600 characters):								
4,000 mmBtu/hr * 1.1lb/mmBtu = 4,400 lb/hr (4,400 lb/hr * 8760 hr/yr) / 2000 lb/ton = 19,272 ton/yr								
(4,400 m/mr " 8/80 mr/yr) / 2000 m/ton — 19,2/2 ton/yr								
12. Pollutant Potential/Fugitive Emissions Com	•	•						
Emission unit is federally limited to firing 2.5% sulfur oil while firing 100% oil (2.75 lb/mmBtu) and is limited by DEP Rule 62-296.405(1)(c)1.j. The requirement of								
1.1 lb/mmBtu is based on Miami-Dade County Department of Environmental								
Resource Management rules. It is not federally enforceable.								
Allowable Emissions 1 of 1								
1. Basis for Allowable Emissions Code:	2. Future Effective Da	te of Allowable						
Required or assumed by permittee	Emissions:	1 5						
4. Requested Allowable Emissions and Units:  1.1 lb/mmBtu	4. Equivalent Allowal							
1.1 io/minotu	<b>4,400</b> lb/hour 19	,272 tons/year						
5. Method of Compliance (limit to 60 characters):								

Fuel Specifications and vendor sampling and analysis

6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):
Equivalent allowable emissions for liquid fuel firing. Final Title V Permit No.
0250003-001-AV requirement of 1.1 lb/mmBtu should state that it is not federally enforceable. This unit is subject to DEP Rule 62-296.405(1)(c)1.j limiting SO<sub>2</sub> to 2.75 lb/mmBtu.

<b>Emissions Unit Information Section</b>		_ of _	4	Fossil Steam Unit 2
Pollutant Detail Information Page	3	of_	3	

# G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

Potential/Fugitive Emissions						
1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control:					
3. Potential Emissions:	4. Synthetically					
2,120 lb/hour	9,285.6 tons/year Limited? [No]					
5. Range of Estimated Fugitive Emissions:	·					
[ ] 1 [ ] 2 [ ] 3	to tons/year					
6. Emission Factor: 0.53 lb/mmBtu	10. Emissions					
Reference: <b>DEP Rule 62-296.570(4)(</b>	Method Code: 0					
0.53 lb/mmBtu * 4,000 mmBtu/hr = 2,120 lb/hr (oil) (2,120 lb/hr * 8760 hr/yr) / 2000 lb/ton = 9,285.6 tons/year (oil) 0.4 lb/mmBtu * 4,180 mmBtu/hr = 1,672 lb/hr (gas) (1,672 lb/hr * 8760 hr/yr)/2000 lb/ton = 7.323 (gas)  12. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emission limit calculated for oil and gas combustion.						
Allowable Emissions 1 of 1						
Basis for Allowable Emissions Code:     RULE	2. Future Effective Date of Allowable Emissions:					
4. Requested Allowable Emissions and Units: 0.53 lb/mmBtu (oil)	4. Equivalent Allowable Emissions: oil 2,120 lb/hour 9,285.6 tons/year					
0.4 lb/mmBtu (gas)	gas 1,672 lb/hour 7,323 tons/year					
5. Method of Compliance (limit to 60 characters):  CEM Part 75, 30 day rolling average Rule 62-296.570(4)(a)4						
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):  This emission unit utilizes Low NOx burners as well as off-stoichoimetric combustion to control emissions of NO <sub>x</sub> .						

Emissions Unit Information Section   2  of  4  Fossil Steam Unit	₫m	nis	ssion	s Unit	Infort	nation	Section	2	of	4	Fossil Steam Un	it 2
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# H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emiss	ions Limitation $\underline{1}$ of $\underline{3}$
2. Visible Emissions Subtype: <b>VE40</b>	2. Basis for Allowable Opacity:  [X] Rule  [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 40 % Ex Maximum Period of Excess Opacity Allow	xceptional Conditions: % ed: see comment below min/hour
6. Method of Compliance:  VE Test (EPA Method 9)	
7. Visible Emissions Comment (limit to 200 over Visible emissions limited to 40% opacity)	•
Visible Emissions Limitation: Visible Emiss	ions Limitation 2 of 3
2. Visible Emissions Subtype: VE60	2. Basis for Allowable Opacity:  [X] Rule  [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Examinum Period of Excess Opacity Allow	ed: 100 % 24 min/hour
7. Method of Compliance:  VE Test (EPA Method 9)	
8. Visible Emissions Comment (limit to 200 of FDEP Rule 62-210.700(3) allows up to 60 soot blow and load changes with < 4 six-	% opacity for 3 hours/24 hour period for
Visible Emissions Limitation: Visible Emiss	ions Limitation <u>3</u> of <u>3</u>
2. Visible Emissions Subtype: VE99	2. Basis for Allowable Opacity:  [X] Rule  [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 100 % E. Maximum Period of Excess Opacity Allow	xceptional Conditions: 100 % 60 min/hour
6. Method of Compliance:  VE Test (EPA Method 9)	
7. Visible Emissions Comment (limit to 200 of FDEP Rule 62-210.700(1) & (2) allows u from start-up & shut-down, and 2 hours	p to 100% opacity for unlimited time during

Emissions	<b>Unit Information Section</b>	2	of	4	Fossil Steam Uni	t 2
E11113310113	Onit initi manon Section	_	VI.	7	I USSII Steam Uni	

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

	ontinuous Monitoring System: Continuous	Monitor $\underline{1}$ of $\underline{3}$
1.	Parameter Code: EM	2. Pollutant(s): NOx
3.	CMS Requirement:	[X] Rule [ ] Other
4.	Monitor Information  Manufacturer: : NOx = TECO  Model Number: NOx = 42C  Serial Number: NOx = 42C-77128-385	$CO_2$ = Milton Roy $CO_2$ = 3300 $CO_2$ = N3H8174T
5.	Installation Date: NOx = 01/23/2003 $CO2 = 041/01/1995$	6. Performance Specification Test Date: 2/13/2003
7.	Continuous Monitor Comment (limit to 200 NOx Required by 40 CFR 75.10(a)(2);; C	
	ontinuous Monitoring System: Continuous	
	ontinuous Monitoring System: Continuous Parameter Code: EM	S Monitor 2 of 3  2. Pollutant(s): SO <sub>2</sub>
1.	Parameter Code:	
1.	Parameter Code:  EM	2. Pollutant(s): SO <sub>2</sub> [X] Rule [ ] Other  Micromotion  300
3.	Parameter Code:  EM  CMS Requirement:  Monitor Information  Manufacturer: SO <sub>2</sub> Oil Mass Flow = N  Model Number: SO <sub>2</sub> Oil Mass Flow = D	2. Pollutant(s): SO <sub>2</sub> [X] Rule [ ] Other  Micromotion  300

Emissions	Unit In	nformation	Section	2	of	4	Fossil	Steam	Unit	1 2

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

Continuous Monitoring System: Continuous	Monitor $3$ of $3$
1. Parameter Code: EM	2. Pollutant(s): Visible Emissions
3. CMS Requirement:	[X] Rule [] Other
4. Monitor InformationPhoenix Instruments Model Number: OPAC 20/20 Serial Number: OPAC-1074	
5. Installation Date: 03/16/2001	6. Performance Specification Test Date: 01/08/2001
Required by 40 CFR 70.10(a)(4)	

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

### **Supplemental Requirements**

	1.	Process Flow Diagram  [V] Attached Document ID: PTFU2 1 hmm [ ] Not Applicable [ ] Weiver Requested
		[X] Attached, Document ID: PTFU2-1.bmp [ ] Not Applicable [ ] Waiver Requested
	2.	Fuel Analysis or Specification [X] Attached, Document ID: PTFU1-2.txt [ ] Not Applicable [ ] Waiver Requested
	3.	Detailed Description of Control Equipment [X] Attached, Document ID: <u>PTFU1-3.txt</u> [ ] Not Applicable [ ] Waiver Requested
	4.	Description of Stack Sampling Facilities [X] Attached, Document ID: <u>PTFU2-4.bmp</u> [ ] Not Applicable [ ] Waiver Requested
ľ	5.	Compliance Test Report
		[ ] Attached, Document ID:
		[X] Previously submitted, Date: N/A
		[ ] Not Applicable
ľ	6.	Procedures for Startup and Shutdown
		[X] Attached, Document ID PTFU1-6.txt [ ] Not Applicable [ ] Waiver Requested
ľ	7.	Operation and Maintenance Plan
		[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
ľ	8.	Supplemental Information for Construction Permit Application
Ì.		[ ] Attached, Document ID: [X] Not Applicable
ľ	9.	Other Information Required by Rule or Statute
		[ ] Attached, Document ID: [X] Not Applicable
r	10.	Supplemental Requirements Comment:
1		

Emissions Un	it Information	Section	2	of	4	Fossil Stear	n Unit 2

## Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: <u>PTFU1-11.txt</u> [ ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[X] Attached, Document ID: PTFU1-13.txt [ ] Not Applicable
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: PTFU1-15
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[ ] Not Applicable

Emissions Unit	t Information Section	3	of	4	Black Start Diesel Gei	nerators

#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

## A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

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

1.	Type of Emission	s Unit Addressed in This	s Section: (Check one)		
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).				
[ <b>X</b>	[X] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.				
[ ]	[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.				
2.	Regulated or Unre	egulated Emissions Unit	? (Check one)		
[ ]	The emissions uemissions unit.	unit addressed in this Em	issions Unit Information Sec	ction is a regulated	
[ X	[X] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.				
	3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unregulated Emission Units				
1	Emissions Unit Id	lentification Number:		[ ] No ID [ X ] ID Unknown	
	Emissions Unit Status Code: <b>A</b>	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [N]	
1		omment: (Limit to 500 (	*		
	Emission unit comprises 5 identical Black Start Diesel Generators				
		·			

. Control Equipment/Method Descri	iption (Lin	nit to 200 characters	per device or method).
	T (		1
	•		
Control Device or Method Code(s	s):		
missions Unit Details	·		<u> </u>
. Package Unit: <b>Detroit Diesel</b> Manufacturer:		Model Number	: 7124-0300 & 7124-930
. Generator Nameplate Rating:	0.5	MW	. / I M T 0500 CC / I M T 750
. Incinerator Information:			
Dwell Temper	ature:		°F
Dwell 7			seconds
Incinerator Afterburner Temper			°F

Emissions Unit Information Section 3 of 4

**Black Start Diesel Generators** 

Emissions only involuntion occion of the Diagnostal School and	<b>Emissions Unit Information Section</b>	3	of	4	Black Start Diesel Generat	tor
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# B. EMISSIONS UNIT CAPACITY INFORMATION (Regulated Emissions Units Only)

## **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:	24.89 mmBtu/hr			
2.	Maximum Incineration Rate:	lb/hr		tons/day	
3.	Maximum Process or Throug	hput Rate:			
4.	Maximum Production Rate:				
5.	Requested Maximum Operat	ing Schedule:			
		hours/day		days/week	
		weeks/year	8760	hours/year	
	generators which may open	ate up to 8760 hours/year.			,

<b>Emissions</b>	<b>Unit Information</b>	Section	3	of	4	Black Start Diesel	Generators

### **List of Applicable State Regulations**

F.A.C. 62-210.300(3)(a)20.	F.A.C. 62-210.700(1)
F.A.C. 62-210.700(4)	F.A.C. 62-210.700(5)
F.A.C. 62-210.700(6)	F.A.C. 62-296.310(2)(a)
F.A.C. 62-297.310(2)(b)	F.A.C. 62-297.310(4)(a)2
F.A.C. 62-297.310(5)	F.A.C. 62-297.310(7)(a)4
F.A.C. 62-297.310(8)	F.A.C. 62-297.310(7)(a)9

Emissions Unit Information Section 3 of 4 Black Start Diesel Gener
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## **Emission Point Description and Type**

1.	Identification of Point on Pl Flow Diagram? Emission Unit 3	ot Plan or	2. Emission Po	oint Type Code: 3					
3.	<ol> <li>Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):</li> <li>EU3-Turkey Point Black Start Diesel Generator – Unit 1</li> </ol>								
	TDM 1	(F) : XI							
4.	ID Numbers or Descriptions	s of Emission Ur	nits with this Emi	ssion Point in Comi	mon:				
5.	Discharge Type Code: V	6. Stack Heigh	ht: 14 feet	7. Exit Diameter:	.83 feet				
8.	Exit Temperature: 735 °F		umetric Flow ,000 acfm	10. Water Vapor:	%				
11.	Maximum Dry Standard Flo	ow Rate: dscfm	12. Nonstack Er	nission Point Heigh	t: feet				
13.	Emission Point UTM Coord	linates:							
	Zone: 17 E	ast (km): 567.	.252 Nort	h (km): 2813.469					
14.	Emission Point Comment (	imit to 200 char	acters):						
	Each of the emergency die nbined consumption is 915 pical. Information is provid	gallons per hou	ur. Less than 400	operating hours/y					

Emissions Unit Information Section 3 of 4 Black Start Diesel Generator	Em:	issions	Unit	Informat	ion Section	on	3_	of	4	Black	Start	Diesel	Generato
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## **Emission Point Description and Type**

1.	Identification of Point on Plot Plan or Flow Diagram? Unregulated Emission Units			4. Emission Point Type Code: 3					
5.	5. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):  EU3-Turkey Point Black Start Diesel Generator – Unit 2								
5.	5. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:								
6.	Discharge Type Code: V	6. Stack Heigh	nt: 14	feet	7. Exit Diameter: 1.83 fee	et			
8.	Exit Temperature: 735 °F	9. Actual Volumente: 23	ımetri ,000	c Flow acfm	10. Water Vapor: %				
11.	Maximum Dry Standard Flo	ow Rate: dscfm	12. N	Jonstack En	nission Point Height: feet				
13.	Emission Point UTM Coord Zone: 17 E	linates: ast (km): 567.	252	North	n (km): 2813.469				
coi	Emission Point Comment (leach of the emergency die mbined consumption is 915 pical. Information is provid	sel generators l gallons per hou	ourns ir. Les	183 gallon ss than 400	operating hours/year is				

<b>Emissions Unit Information Section</b>	3	of	4	Black Start Diesel Ge	nerator

## **Emission Point Description and Type**

Flow Diagram?	Identification of Point on Plot Plan or Flow Diagram? Unregulated Emission Units			oint Type Code: 3					
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):									
EU3-Turkey Point Black Start Diesel Generator – Unit 3									
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:									
5. Discharge Type Code: V	6. Stack Heigh	ht: 14	feet	7. Exit Diameter:	.83 feet				
8. Exit Temperature: 735 °F	9. Actual Vol Rate: 23	umetri ,000	c Flow acfm	10. Water Vapor:	%				
11. Maximum Dry Standard Flo	11. Maximum Dry Standard Flow Rate: dscfm 12. Nonstack Emission Point Height: feet								
13. Emission Point UTM Coord Zone: 17 E	dinates: East (km): <b>567</b> .	.252	Nortl	h (km): 2813.469					
14. Emission Point Comment (	limit to 200 char	acters)	):	_					
Each of the emergency discombined consumption is 915 typical. Information is provide	gallons per hou	ır. Le	ss than 400	operating hours/y					

<b>Emissions Unit Information Section</b>	3	of	4	<b>Black Start Diesel Generators</b>
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### **Emission Point Description and Type**

1.	Identification of Point on Plot Plan or Flow Diagram? Unregulated Emission Units			Emission Po	int Type Code: 3					
3.	3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):									
	EU3-Turkey Point Black Start Diesel Generator – Unit 4									
4.	4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:									
5.	Discharge Type Code: V	6. Stack Heigh	nt: 14	feet	7. Exit Diameter: 1	.83 feet				
8.	Exit Temperature: 735 °F	9. Actual Volumente: 23	.000		10. Water Vapor:	%				
11.	Maximum Dry Standard Flo	ow Rate: dscfm	12. 1	Nonstack Er	nission Point Heigh	t: feet				
13.	Emission Point UTM Coord Zone: 17 E	linates: ast (km): <b>567.</b>	252	Nortl	n (km): 2813.469					
14.	Emission Point Comment (I					-				
	Each of the emergency diesel generators burns 183 gallons per hour, therefore combined consumption is 915 gallons per hour. Less than 400 operating hours/year is typical. Information is provided for one of the five identical units.									
	. •					·				

<b>Emissions Unit Information Section</b>	3	of	4	Black Start Diesel Gene	rator

## **Emission Point Description and Type**

1.	Identification of Point on Pl Flow Diagram? Unregulated Emission Un		2. H	Emission Po	oint Type Code: 3				
3.	<ol> <li>Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):</li> <li>EU3-Turkey Point Black Start Diesel Generator – Unit 5</li> </ol>								
1	ID Numbers or Descriptions	s of Emission Ut	nite wi	ith this Emi	ssion Point in Com	mon			
٦.	1D Numbers of Descriptions	of Emission Of	iits w		SSION I OINT IN COM	nion.			
5.	Discharge Type Code: V	6. Stack Heig	ht: 14	feet	7. Exit Diameter:	.83 feet			
8.	Exit Temperature: 735 °F	9. Actual Vol Rate: 23	umetr ,000	ic Flow acfm	10. Water Vapor:	%			
11.	. Maximum Dry Standard Flo	ow Rate: dscfm	12. N	Nonstack Er	nission Point Heigh	t: feet			
13.	Emission Point UTM Coord			3.7d					
14		ast (km): 567.			h (km): 2813.469				
col	Emission Point Comment (I Each of the emergency diembined consumption is 915 pical. Information is provid	esel generators l gallons per ho	ourns ur. Le	183 gallon ess than 400	operating hours/				

Emissions Unit Information	Section <u>3</u>	of 4 Blac	k Start Diesel Generators				
E. SEGMENT (PROCESS/FUEL) INFORMATION (All Emissions Units)							
Segment Description and Ra	te: Segment 1	lof1_					
1. Segment Description (Proc Diesel fuel burned in the	• • • • • • • • • • • • • • • • • • • •	`	<b>,</b>				
2. Source Classification Code	e (SCC):	3. SCC Units:					
2-01-001-02		Thousands Gallons Burned					
4. Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6. Estimated Annual Activity				
0.183	73.2		Factor:				
7. Maximum % Sulfur:	8. Maximum % Ash:		9. Million Btu per SCC Unit:				
0.5			136				

10. Segment Comment (limit to 200 characters):

Each of the emergency diesel generators burns 183 gallons per hour, therefore combined consumption is 915 gallons per hour. Maximum annual rate based on 400 hours per year.

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	Emissions	<b>Unit Informat</b>	ion Section	3	of	4	Black Start Diesel	Generators
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# F. EMISSIONS UNIT POLLUTANTS (All Emissions Units)

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOx			NS
			<u> </u>
			·
·			
	<u> </u>		

Emissions 1	Unit In	formation	Section	3	of	4	Black Start	Diesel	Generators

# G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units -

**Emissions-Limited and Preconstruction Review Pollutants Only)** 

## **Potential/Fugitive Emissions**

1.	Pollutant Emitted: NOx	2.	Total	Percent Efficie	ency of Control:
3.	Potential Emissions: 118.23 lb/hour	23.	646	tons/year	4. Synthetically Limited? [No]
5.	Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3			_ to to	ns/year
6.	Emission Factor: 4.75 lb/mmBtu  Reference: DEP Rule 62-296.570(4)(b	)7			7. Emissions Method Code: 0
8.	Calculation of Emissions (limit to 600 characters) characters (1.75 lb/mmBtu *24.89 mmBtu/hr = 118.2 l (118.2lb/hr * 400 hr/yr) / 2000 lb/ton = 23.5	b/h	•	year	
9.	Pollutant Potential/Fugitive Emissions Comm Emission limit calculated for oil combustion generators. AP-42 for this class of diesel IC emissions based on 400 hours per year open	on fo C Ei	or one	of the five bl	ack start diesel
<u>Al</u>	lowable Emissions Allowable Emissions 1	<u> </u>	of_	1	
1.	Basis for Allowable Emissions Code: <b>RULE</b>	2.		re Effective Dassions:	ate of Allowable
3.	Requested Allowable Emissions and Units: 4.75lb/mmBtu	4.	•	valent Allowa 118.2 lb/hour	ole Emissions:  23.646 tons/year
5.	Method of Compliance (limit to 60 character EPA Method 7 or 7c if ≥ 400 hours per year	•	perati	ion.	
Ru ret	Allowable Emissions Comment (Desc. of Opule 62-296.570(4)(a)3 does not require testing troactively to these previously unregulated to hours per year operation.	g if	unit (	op <400 hours	. Rule applies

Emissions Unit Information Section <u>3</u> of <u>4</u> Black Start Diesel Genera	t Information Section $3$ of 4 Black Start Diesel G	Jenerator
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# H. VISIBLE EMISSIONS INFORMATION

(Only Regulated Emissions U	nits Subject to a VE Limit	tation)
Visible Emissions Limitation: Visible Emissi	ons Limitation <u>1</u> of _	2
1. Visible Emissions Subtype: VE20	2. Basis for Allowable O [X] Rule	pacity: [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Ex Maximum Period of Excess Opacity Allowers	cceptional Conditions: ed: see comment below	% min/hour
4. Method of Compliance:  VE Test (EPA Method 9)		
5. Visible Emissions Comment (limit to 200 c Diesel generators are subject to the gener		ule 62-296.31(2)(a)
Visible Emissions Limitation: Visible Emissions	ons Limitation <u>2</u> of	2
1. Visible Emissions Subtype: VE100	2. Basis for Allowable O [X] Rule	pacity: [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Ex Maximum Period of Excess Opacity Allow	sceptional Conditions: ed:	100 % 60 min/hour
4. Method of Compliance:  VE Test (EPA Method 9)		
5. Visible Emissions Comment (limit to 200 c FDEP Rule 62-210.700(1) & (2) allows u from start-up & shut-down, and 2 hours	p to $100\%$ opacity for unl	_

Emissions	Unit l	Information	Section	3	of	4	Black Start Diesel Genera	tors
	Omit 1	LIIIOI IIIAUIOII	Section	9	O1	7	Diack Start Dieser Genera	COL

# I. CONTINUOUS MONITOR INFORMATION

(Only Regulated Emissions Units Subject to Continuous Monitoring) <u>Continuous Monitoring System:</u> Continuous Monitor <u>1</u> of <u>1</u> 1. Parameter Code: 2. Pollutant(s): [X] Rule ] Other 3. CMS Requirement: 4. Monitor Information Model Number: Serial Number: 6. Performance Specification Test Date: 5. Installation Date: Continuous Emission Monitors are not required for the emergency black start generators.

	Emissions Unit Inforn	mation Section	3	of	4	Black Start Diesel	Generators
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# J. EMISSIONS UNIT SUPPLÉMENTAL INFORMATION (Regulated Emissions Units Only)

## **Supplemental Requirements**

1.	Process Flow Diagram [X] Attached, Document ID: PTFU3-1.bmp [ ] Not Applicable [ ] Waiver Requested
2.	Fuel Analysis or Specification
	[X] Attached, Document ID: PTFU3-2.txt [ ] Not Applicable [ ] Waiver Requested
3.	Detailed Description of Control Equipment  [ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
4.	Description of Stack Sampling Facilities  [ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[X] Previously submitted, Date: N/A
	[ ] Not Applicable
6.	Procedures for Startup and Shutdown [X] Attached, Document ID PTFU3-6.txt [ ] Not Applicable [ ] Waiver Requested
7.	Operation and Maintenance Plan
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[ ] Attached, Document ID: [X] Not Applicable
9.	Other Information Required by Rule or Statute
	[ ] Attached, Document ID: [X] Not Applicable
10.	Supplemental Requirements Comment:

Emissions 1	Unit I	nformation	Section	3	of	4	Black Start	Diesel -	Generators
THE PROPERTY.			Section	9	O.	•	Diack Start	Diesei	Ochel atolo

## Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[X] Attached, Document ID: <u>PTFU3-11.txt</u> [ ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable <sub>o</sub>
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:
[X] Not Applicable

Emissions Uni	t Information Section	ı 4	of	4	Unregulated	Emission	Units
Dimioutono Cin	t illion limiton Section		0.	•	CIII OF WINCOM	LILLANDOIGE	~

#### III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

## A. GENERAL EMISSIONS UNIT INFORMATION (All Emissions Units)

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

1. Type of Emissions Unit Addressed in Thi	s Section: (Check one)	
[ ] This Emissions Unit Information Section process or production unit, or activity, which has at least one definable emission	which produces one or more a	•
[ X ] This Emissions Unit Information Section process or production units and activities (stack or vent) but may also produce fug	es which has at least one defin	
[ ] This Emissions Unit Information Section process or production units and activities		
2. Regulated or Unregulated Emissions Unit	t? (Check one)	
[ ] The emissions unit addressed in this En emissions unit.	nissions Unit Information Sec	ction is a regulated
[X] The emissions unit addressed in this Enemissions unit.	nissions Unit Information Sec	ction is an unregulated
4. Description of Emissions Unit Addressed Unregulated Emission Units and insign		characters):
4. Emissions Unit Identification Number:		[ ] No ID
ID: xxx		[X] ID Unknown
5. Emissions Unit Status Code: Date:	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [ N ]
10. Emissions Unit Comment: (Limit to 500	Characters)	,
Emission unit comprises all unregulate	-	•
Attachment PTF-FW presents a list of	all sources included in this	emission unit.

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<b>Emissions Unit Control Equipment</b>	
1. Control Equipment/Method Description (Limit	t to 200 characters per device or method):
·	·
	•
	•
•.	
	·
	·
2. Control Device or Method Code(s):	
Emissions Unit Details	
1. Package Unit:	
Manufacturer:	Model Number:
2. Generator Nameplate Rating	MW
3. Incinerator Information:	
Dwell Temperature:	o.t.
Dwell Time: Incinerator Afterburner Temperature:	seconds °F
monorator rittorounier reinperature.	1

Emissions Unit Information Section 4 of 4 Unregulated Emission Units

Emissions Unit Information Section 4 of 4 Unregulated Emission Units

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

## **Emissions Unit Operating Capacity and Schedule**

1.	Maximum Heat Input Rate:			
2.	Maximum Incineration Rate:	lb/hr		tons/day
3.	Maximum Process or Through	nput Rate:		
4.	Maximum Production Rate:			
5.	Requested Maximum Operatir	ng Schedule:		
		hours/day		days/week
		weeks/year	8760	hours/year
	Various sources within this e	emission unit may operate	up to 8760	hours/year.
	Various sources within this e	emission unit may operate	up to 8760	hours/year.

	Emissions Unit Information Section	4	of	4	Unregulated Emiss	ion Units
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# H. VISIBLE EMISSIONS INFORMATION (Only Regulated Emissions Units Subject to a VE Limitation)

Vis	sible Emissions Limitation: Visible Emissi	ons Limitation <u>1</u> of _	2
1.	Visible Emissions Subtype:	2. Basis for Allowable O	pacity:
	VE20	[X] Rule	[ ] Other
3.	Requested Allowable Opacity:		
	Normal Conditions: 20 % Ex	cceptional Conditions:	%
	Maximum Period of Excess Opacity Allow	ed:	min/hour
5.	Method of Compliance:		
	EPA Method 9		
6.	Visible Emissions Comment (limit to 200 c	haracters):	
	The equipment in this EU may be subjec	t to the general VE std. if t	they emit PM. Rule
	62-210.700(1) allows 2hrs/24hrs of excess	emissions for startup, shu	ıtdown &
	malfunction.	•	

<b>Emissions Unit Information Section</b>	4	of	4	<b>Unregulated Emission</b>	Units

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

Continuous Monitoring System: Continuous	Monitor <u>1</u> of <u>1</u>
1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information  Manufacturer: :  Model Number:  Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 Emission monitors are not required for u	·

<b>Emissions Unit Information Section</b>	4	of	4	Unregulated Emission Un	aits

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

## **Supplemental Requirements**

1.	Process Flow Diagram
	[ ] Attached, Document ID:[X] Not Applicable [ ] Waiver Requested
2.	Fuel Analysis or Specification
•	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
3.	Detailed Description of Control Equipment
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
4.	Description of Stack Sampling Facilities
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
5.	Compliance Test Report
	[ ] Attached, Document ID:
	[ ] Previously submitted, Date:
	[X] Not Applicable
6.	Procedures for Startup and Shutdown
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
7.	Operation and Maintenance Plan
	[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
8.	Supplemental Information for Construction Permit Application
	[ ] Attached, Document ID: [ X ] Not Applicable
9.	Other Information Required by Rule or Statute
	[X] Attached, Document ID: <u>PTP-FW</u> [ ] Not Applicable
10	. Supplemental Requirements Comment:

Emissions	Unit	Information	Section	4	of	4	Unregulated Emiss	ion Units

## Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
12. Alternative Modes of Operation (Emissions Trading)
[ ] Attached, Document ID: [X] Not Applicable
13. Identification of Additional Applicable Requirements
[ ] Attached, Document ID: [X] Not Applicable [ ] Waiver Requested
14. Compliance Assurance Monitoring Plan
[ ] Attached, Document ID: [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required)
[ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID:
[ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:
Attached, Document ID
[ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID:
[ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID:
[ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID:
[ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID:
[X] Not Applicable
()rr

ATTACHMENTS FOR FPL TURKEY POINT FOSSIL
TITLE V PERMIT RENEWAL APPLICATION

#### **Attachment PTFCAM.doc**

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

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

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

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

### Title V Core List

Effective: 03/01/02

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

### Federal: (description)

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).

40 CFR 82, Subpart F: Recycling and Emissions Reduction.

#### State: (description)

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

62-4.030, F.A.C.: General Prohibition.

62-4.040, F.A.C.: Exemptions.

62-4.050, F.A.C.: Procedure to Obtain Permits; Application

62-4.060, F.A.C.: Consultation.

62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.

62-4.080, F.A.C.: Modification of Permit Conditions.

62-4.090, F.A.C.: Renewals.

62-4.100, F.A.C.: Suspension and Revocation.

62-4.110, F.A.C.: Financial Responsibility.

62-4.120, F.A.C.: Transfer of Permits.

62-4.130, F.A.C.: Plant Operation - Problems.

62-4.150, F.A.C.: Review

62-4.160, F.A.C.: Permit Conditions.

62-4.210, F.A.C.: Construction Permits.

62-4.220, F.A.C.: Operation Permit for New Sources.

## CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS,

effective 06-21-01

62-210.300, F.A.C.: Permits Required.

62-210.300(1), F.A.C.: Air Construction Permits.

62-210.300(2), F.A.C.: Air Operation Permits.

62-210.300(3), F.A.C.: Exemptions.

62-210.300(5), F.A.C.: Notification of Startup.

62-210.300(6), F.A.C.: Emissions Unit Reclassification.

62-210.300(7), F.A.C.: Transfer of Air Permits.

### Title V Core List

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

Effective: 03/01/02

- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.
- 62-210.360, F.A.C.: Administrative Permit Corrections.
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
- 62-210.400, F.A.C.: Emission Estimates.
- 62-210.650, F.A.C.: Circumvention.
- 62-210.700, F.A.C.: Excess Emissions
- 62-210.900, F.A.C.: Forms and Instructions.
- 62-210.900(1), F.A.C.: Application for Air Permit Title V Source, Form and Instructions.
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit Title V and Non-Title V Source.

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

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

- 62-213.205, F.A.C.: Annual Emissions Fee.
- 62-213.400, F.A.C.: Permits and Permit Revisions Required.
- 62-213.410, F.A.C.: Changes Without Permit Revision.
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
- 62-213.415, F.A.C.: Trading of Emissions Within a Source.
- 62-213.420, F.A.C.: Permit Applications.
- 62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
- 62-213.440, F.A.C.: Permit Content.
- 62-213.450, F.A.C.: Permit Review by EPA and Affected States
- 62-213.460, F.A.C.: Permit Shield.
- 62-213.900, F.A.C.: Forms and Instructions.
- 62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
- 62-213.900(7), F.A.C.: Statement of Compliance Form

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### **Title V Core List**

Effective: 03/01/02

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

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

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

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

62-297.310, F.A.C.: General Test Requirements.

62-297.330, F.A.C.: Applicable Test Procedures.

62-297.340, F.A.C.: Frequency of Compliance Tests.

62-297.345, F.A.C.: Stack Sampling Facilities Provided by the Owner of an Emissions Unit.

62-297.350, F.A.C.: Determination of Process Variables.

62-297.570, F.A.C.: Test Report.

62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

#### Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests

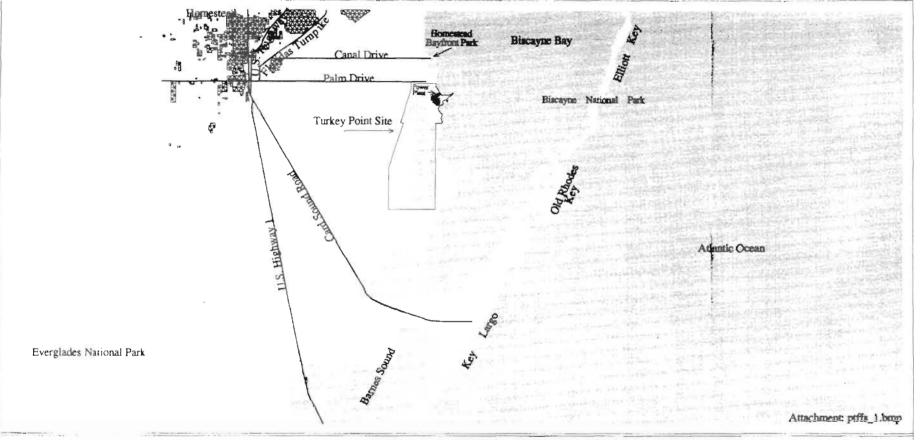
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99

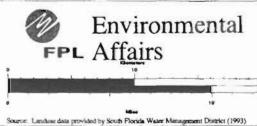
**CHAPTER 62-281, F.A.C.:** Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

coding\2002 Core List Page 3 of 3



## Turkey Point Area Map Dade County

No expressed or implied warmshies including, but not limited to the implied warmshee of MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE are made. The materials contained bereits are provided "as is" and may contain inaccuracius and user is the materials contained bereits are provided "as is" and may contain inaccuracius and user is the materials contained bereits are provided "as is" and may contain inaccuracius and user is the materials contained to the contained to t





Turkey Point Site

Water

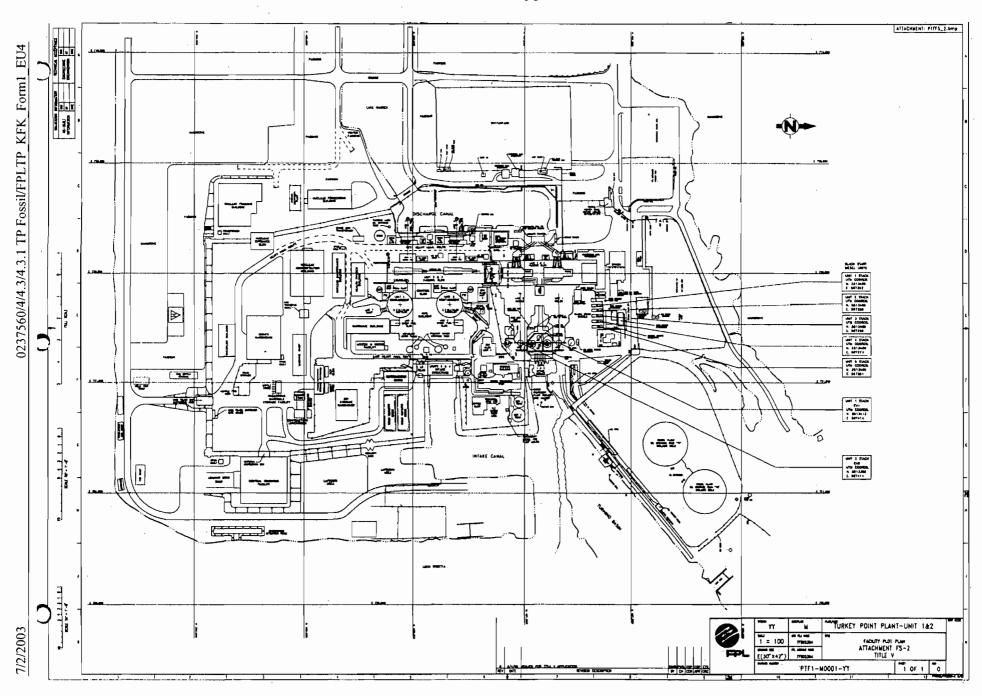
Major Roads

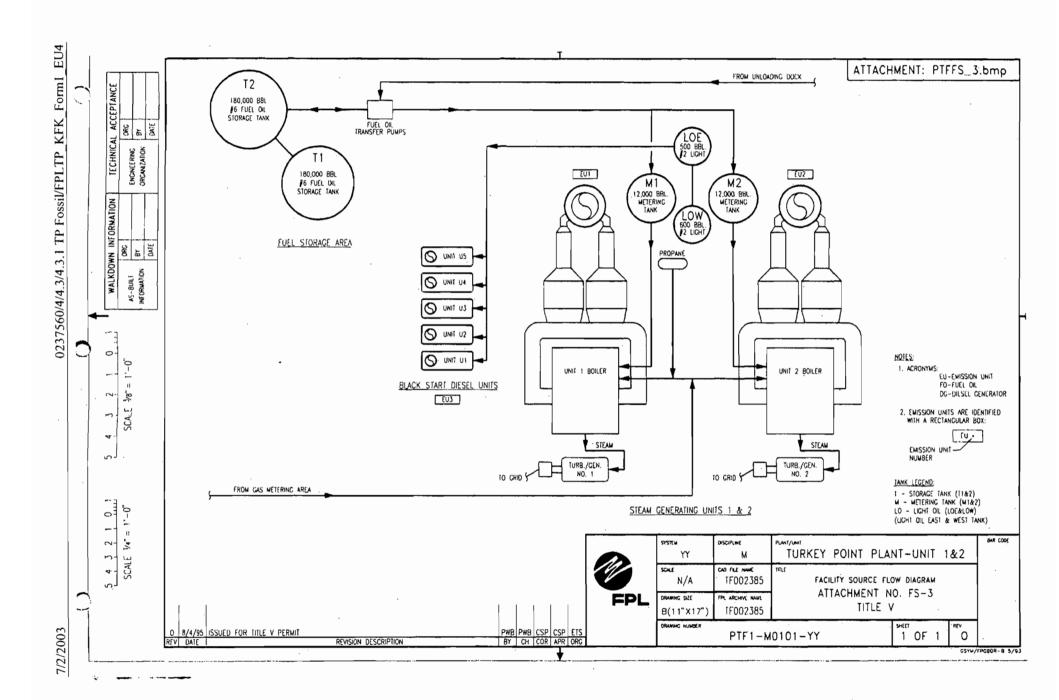
Railroads

Residential Areas

Carbon memory and discounted (0-0

## **Best Available Copy**





### **Attachment PTFFS-4.txt**

#### Precautions to Prevent Emissions of Unconfined Particulate Matter

The facility has negligible amounts of unconfined particulate matter as a result of 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 at the facility including:

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

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 62-296-310 F.A.C.:

- Use of thick poly flaps over the doorways to prevent any sandblasting material from leaving the sandblast facility. The facility also constructs temporary sandblasting enclosures when necessary, in order to perform sandblasting on fixed plant equipment
- Maintenance of paved roads 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 any powdered chemical products are cleaned up as soon as practicable
- Vehicles are restricted to slow speeds on the plant site

## **Attachment PTFFS-5.txt**

### **Fugitive Emission Identification**

### Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PTFFS\_4.txt. FPL is not aware of fugitive particulate emissions of Sulfur Dioxide, Nitrogen Oxides or Carbon Monoxide that would exceed the reporting thresholds defined in the permit application instructions.

## Fugative HAP's Emissions

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

### **Attachment PTFFS-8.txt**

### List of Exempt Emissions Units and/or Activities.

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Full Exemptions, are exempt from the permitting requirements of Chapters 62-210 and The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., are also exempt from the permitting requirements of Chapter 62-213, F.A.C., provided such emissions units and activities also meet the exemption criteria of Rule 62-213.430(6)(b), F.A.C. The below listed emissions units and/or activities are hereby exempt pursuant to Rule 62-213.430(6), F.A.C.

1	Natural Gas Metering Area Relief Valves
2	Hydrazine Mixing Tank
3	Fuel Oil storage tanks and related systems
4	Lube Oil tanks, vents, and related systems
5	Oil/Water Separation Basin and related equipment
6	Hazardous Waste Building
7	Paint/Lube Buildings
8	Miscellaneous mobile vehicle operation
9	Evaporation of Boiler Chemical Cleaning Waste

Note: See also Attachment PTF-FW for detailed list of insignificant activities and unregulated emission units.

### **Attachment PTF-14.txt**

## Turkey Point Fossil Plant Compliance Report and Plan

This 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 of this application is submitted to the Florida Department of Environmental Protection as required in Rule 62-213.420(1)(a) F.A.C.



## Department of Environmental Protection

## **Division of Air Resource Management**

#### STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SU	BMISSION (Check	one to indicate why this s	tatement of compliance is being submitte		
: Annual Requirement (Partial)   Transfer of Permit  Permanent Facility Shutdown					
	REPORTING	PERIOD*	REPORT DEADLINE**		
January 1.	through April 6	of2 0 0 3 (veár)	April 6.2003		

Facility	Owner/Company	Name:	FLORIDA POWER	&	LIGHT	COMPANY	

Site Name: TURKEY POINT FOSSIL PLANT Facility ID No. 0250003 County: DADE

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

- A. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.
  - B. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:
    - 1. Date of report previously submitted identifying the incident of deviation.\*
    - 2. Description of the incident.\*

#### \* SEE ATTACHMENTS

- C. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:
- 1. Emissions unit identification number.
- 2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
- 3. Description of the requirement of the permit condition.
- 4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
- 5. Beginning and ending dates of periods of noncompliance.
- Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
- 7. Dates of any reports previously submitted identifying this incident of noncompliance.

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

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

DEP Form No. 62-213.900(7)

Effective: 6-02-02

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

<sup>\*\*</sup>See Rule 62-213.440(3)(a)2., F.A.C.

2. Description of the incident.

DEP Form No. 62-213.900(7) Effective: 6-02-02

#### STATEMENT OF COMPLIANCE - TITLE V SOURCE

#### RESPONSIBLE OFFICIAL CERTIFICATION

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

<	#E	Line	7		April 7, 2003
(Signature o	of Title	V Source Resp	onsible Official)		(Date)
Name:	H. 0.	Nunez		Title: Plant General	Manager

#### DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

(Signature of Acid Rain Source Designated Representative)	4-9-03
(Signature of Acid Rain Source Designated Representative)	(Date)

Name: Nancy M. Kierspe Title: Designated Representative

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

Effective: 6-02-02

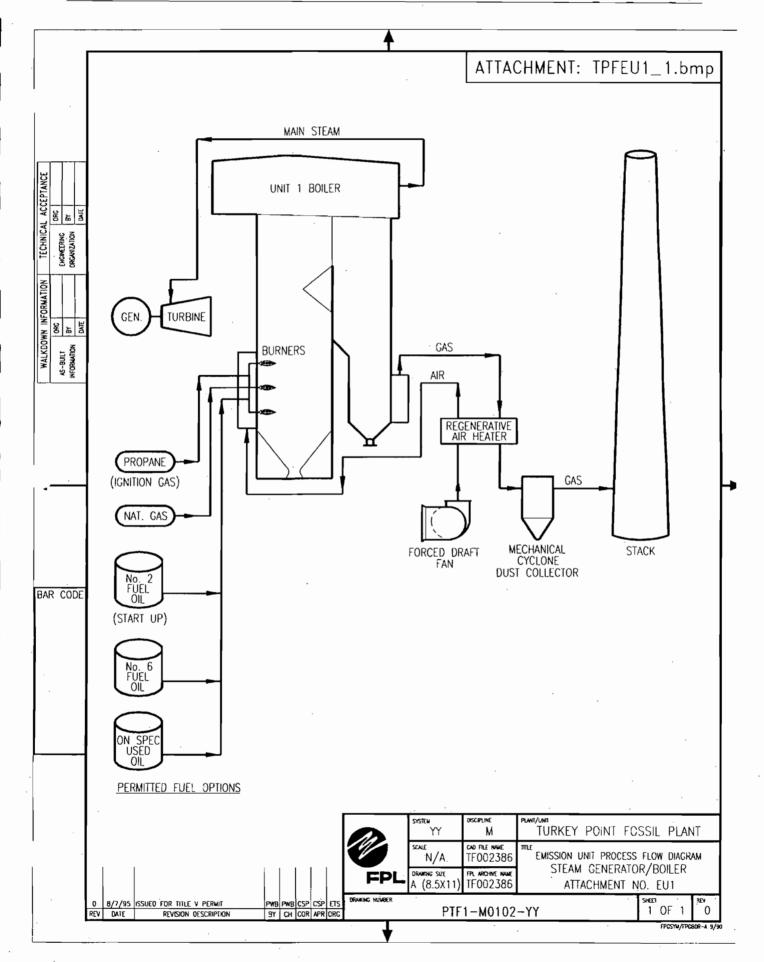
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# OPACITY EMISSIONS QUARTERLY REPORT Malfunction Summary

FROM <u>2 / 5 / 03</u> TO <u>2 / 5 / 03</u>

SOURCE NAME: Turkev Point Fossil Plant	COMPANY: Florida Power & Liaht			
EMISSION POINT: PTP 2	ADDRESS: 9700 SW. 344 St., Homestea	ad, FL 33035		
EMISSION TYPE: OPACITY				
TOTAL SOURCE OPERATION TIME:  DATE OF LATEST CERTIFICATION OR AUDIT:  MONITOR MANUFACTURER & MODEL NO. :	16.2 HOURS 6/12/00 Phoenix Instruments,Inc. OPAC 20/20	<del></del>		
REASON FOR EXCESS EMISSIONS	DURATION			
STARTUP / SHUTDOWN / LOAD CHANGE CLEANING / SOOTBLOWING PROCESS / EQUIPMENT MALFUNCTION CONTROL EQUIPMENT FAILURE UNKNOWN CAUSE FUEL PROBLEMS OTHER KNOWN EXCESS EMISSIONS (Offline/Main	Hours Hours O . 1 Hours			
TOTAL DURATION OF EXCESS EMISSIONS* PERCENT OF TIME OF EXCESS EMISSIONS	<u>0 . 1</u> Hours <u>0.62</u> %			
*Note: "Excess Emissions" for startup/shutdown/load change, cleaning/sootblowing that are allowed by permit or rule are not recorded on this form. Malfunction event hours which result in opacity greater than the steady state permitted limit are listed on this report.				
I CERTIFY THAT I HAVE PERSONALLY EXAMINED A SUBMITTED HEREIN, AND BASED ON MY INQUIRY FOR OBTAINING THE INFORMATION, BELIEVE THE	OF THOSE INDIVIDUALS IMMEDIATELY F			
H. O. Nunez NAME (Print)  SIGNATURE a	Plant General Mgr. TITLE	02/06/03 DATE		
NAME (Print) SIGNATURE	TITLE	DATE		

Rev.0: 9/08/98



Page 1 of 2

## **Attachment PTFU1-2.txt**

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

<u>Parameter</u>	Typical value	Max value
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124	none
% sulfur (grains/CCF)	$0.43^{1}$	1 grain / ccf
% nitrogen (by volume)	8.0	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)<sup>4</sup>

<u>Parameter</u>	Typical value	Specifications	
API gravity (@ 60° F)	6 - 12	none	
Heat content(MBtu/bbl)	6,310 - 6420	6,340 <sup>1</sup>	
% 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>	
= :			

#### Footnotes:

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

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

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

#### Footnotes:

- (1) Data taken from FPL fuel specifications.
- (2) Data taken from laboratory analysis.
- (3) The values are "typical" based upon the following:
  - Information gathered by FPL through laboratory analysis, and purchase spec's

Page 2 of 2

### **Attachment PTFU1-2.txt**

## Fuel Analysis Propane Analysis (typical)<sup>2</sup>

<u>Parameter</u>	Typical value	Max value	
Specific gravity(@ 60° F)	0.51	none	
Heat content (Btu/cu ft)	600 - 1000	none	
% sulfur (grains/CCF)	<0.01	none	
% nitrogen (by volume)	no specification	none	
% ash	no specification	none	

<sup>\*</sup>Note: The values listed are "typical" values based upon 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 NoOn-Specification Used Oil (typical)<sup>4</sup>

<u>Parameter</u>	Typical value	<u>Specifications</u>	
API gravity (@ 60° F)	30.0 <sup>1</sup>	none	
Heat content(MBtu/bbl)	6,000 <sup>1</sup>	none	
% Sulfur	0.3 <sup>1</sup>	none	
% Nitrogen	negligible	none	
% Ash	0.01	0.01	

#### Footnotes:

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

# Attachment PTFU1-3.txt Detailed Description of Control Equipment

**A. Cyclone Separator** - This steam generator (boiler) is supplied with two 543-C10 Research Cottrell series 14" tubular mechanical dust collectors with side inlet and universal outlet. Each dust collector consists of 543 tubes and four dust collection hoppers. The dust collector has the following efficiency at 2.55 inches of water @ peak load:

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

**B. Low NOx Burners** – Beacause of Ozone nonattainment problems in southern Florida, the Turkey Point Fossil Plant installed Low NOx Burners on the two boilers. The burners have achieved NOx reductions of approximately 31% on natural gas and 33% on residual oil from their original burners.

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

PTFU1\_4.BMP

FOSSIL FUEL STEAM GENERATORS UNIT 1

STACK SPECIFICATIONS STACK DIAGRAM SAMPLING DIAMETER: 236.6 in. BAMPLING AREA: \$05.1 eq. ft. **SAMPLING PORT DEPTH: 81.5 in.** No. OF PORTS: 4 No. OF POINTS PER TRAVERSE: 6 TOTAL No. OF POINTS: 24 **8AMPLING TIME PER POINT: 2.5 min.** TOTAL SAMPLING TIME: 80.0 min. NOTE: DRAWING IS NOT TO SCALE PARTICULATE SAMPLING PROBE DIAGRAM 183'6" SAMPLE PORTS & PLATFORM 166"10" 109.4 214 123.4\* 47'2" 140.6\*

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

#### **Attachment PTFU1-6.txt**

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<sub>x</sub>, SO<sub>2</sub> and opacity. An audible and visual alarm are activated whenever permitted values for any of the above parameters are approached.

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

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

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 PTFU1-11.txt **Alternative Methods of Operation**

#### Operation at Various Capacities and heat input rates

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

#### Different Fuel Types

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

#### Current emissions limitations are as follows:

Pollutant

**Emission Limit** 

Particulate matter-Steady state

0.1 lb/MMBtu 0.3 lb/MMBtu

Particulate matter-Sootblowing Sulfur dioxide

1.1 lb/MMBtu

Nitrogen oxides

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

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

#### Soot blowing

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

#### **Utilization of Additives**

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

### Evaporation of Spent Boiler Chemical Cleaning Chemicals

On a periodic basis, as part of routine maintenance, the inside of the steam generator tubes (boiler tubes) at Turkey Point Fossil Unit 1 and Unit 2 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units. The solutions and rinse waters are collected in large mobile tanks ("frac tanks") pursuant to guidance issued by the Department. Upon completion of the cleaning process and prior to disposal of the spent cleaning solution and rinses, representative sampling of the liquids collected in the "frac tanks" is conducted as per 40 CFR 261, Appendix I, to determine the hazardous waste status of the accumulated wastewater, using Toxicity Characteristic Leaching Procedure (TCLP) analysis. If the wastewater is determined to be hazardous, it will be managed as such in accordance with 40 CFR 262.34, 40 CFR 265 Subpart I, and 40 CFR 268 with respect to generators accumulating and treating waste in containers and tanks. An appropriate waste analysis plan will be developed to determine and document the pre- and post-treatment characteristics of the wastewater. Hazardous waste may also be transported to an approved hazardous waste facility for the appropriate disposal. If the spent cleaning solution and rises are determined to be non-hazardous, they are then disposal by evaporation in the units boiler. Introduction into the boiler will occur at a rate that will not cause an exceedence of the opacity limit of the unit in which evaporation is occurring (in this case, 40 percent opacity).

# Attachment PTFU1-13.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).

### 0250003-001-AV Permit contains the following conditions:

- 1. The boiler fuel firing rate shall not exceed 4,000 mmBtu/hr during fuel oil firing or 4,180 mmBtu/hr during gas firing. Each boiler can operate continuously (8760 hours per year). FPL uses fuel sampling and analysis to monitor the heat input rate to the boiler.
- 2. The boiler shall be fired with a variable combination of no.6 residual oil, no.2 fuel oil, natural gas, propane gas and on-specification used oil from FPL operations. FPL fires the fuels as specified, and maintains records to demonstrate this.
- 3. The maximum allowable emissions from each boiler shall not exceed the following emission limitations:

MAXIMUM ALLOWABLE EMISSION LIMITS				
Pollutant	Fuel	lb/mmBtu	Test Method .	
Pariculate Matter (Steady state) (Sootblowing)	Oil Oil	0.1 0.3 max. 3 hrs .	EPA Method 5 or 17 EPA Method 5 or 17	
NOx RACT	Oil	0.53	CEM	
	Gas	0.40	CEM	
SO2	Oil	2.75	Monthly fuel analysis	

- (1)For compliance with each of these emission limits, FPL uses annual stack tests.
- (2)These limits, based on a 30-day rolling average, apply at all times except during periods of startup, shutdown, or malfunction as provided by F.A.C rule 17-210.700.
- (3)Dade County has established an SO2 limit of 1.1 lb/mmBtu. This limit is not federally enforceable and therefore not an applicable requirement
- 4. To determine compliance with the oil firing heat input limitation, the Permittee shall maintain daily records of fuel oil consumption for each boiler and monthly records of heating value for such fuel All records shall be maintained for a minimum of three years after the date of each record and shall be made available to representatives of DER upon request.

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

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

ATTACHMENT PTFU1-15

ACID RAIN RENEWAL APPLICATION

## Phase II Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: **MM** New

න්න Revised

STEP 1 Identify the source by plant name, State, and ORIS code from NADB

Plant Name TURKEY POINT Plant State FL ORIS Code 621

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

	Complian Plan	се			
a	l b	c	d	e	
Unit <b>ID#</b>	Unit will hold allowances in accordance	Repowering Plan	New Units	New Units	
	with 40 CFR 72.9(c)(l)		Commence Operation Date	Monitor Certification Deadline	

PTP1		NO	N/A	N/A
	Yes			
PTP2		NO	N/A	N/A
	Yes			
	Yes		_	
	Yes			
	Yes			<u> </u>
	Yes			

STEP 3 Check the box if the response in column c of Step 2 is "Yes" for any unit For each unit that is being repowered, the Repowering Extension Plan form is included

## STEP 4 Read the standard requirements and

certification, enter the name of the designated representative, and sign and date

Plant Name (from Step 1) **TURKEY POINT Plant** 

#### Standard Requirements

#### Acid Rain Part Reauirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
- (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C.,
  - in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
- (ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
  The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
- - (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and (ii) Have an Acid Rain Part.

#### Monitorina Reauirements

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the

#### Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR
- (4) Allowances shall be held in deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (I)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Reautrements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Excess Emissions Requirements

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Rewrdkeeoina and Reporting Reauirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3year period for recordkeeping, the J-year period shall apply;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program;

Plant Name (from Step 1)
TURKEY POINT Plant

#### Recordkeeping and Reporting Requirements (cont)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8 or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

  (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>X</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- that is located at a source of which they are not owners or operators or the designated representative.
  (7) Each violation of a provision of 40 CFR parts 72, 73, 75. 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act, or, (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.
- 5) Interienng with or impaining any program for competitive bidding for power supply in a State in which such program is est

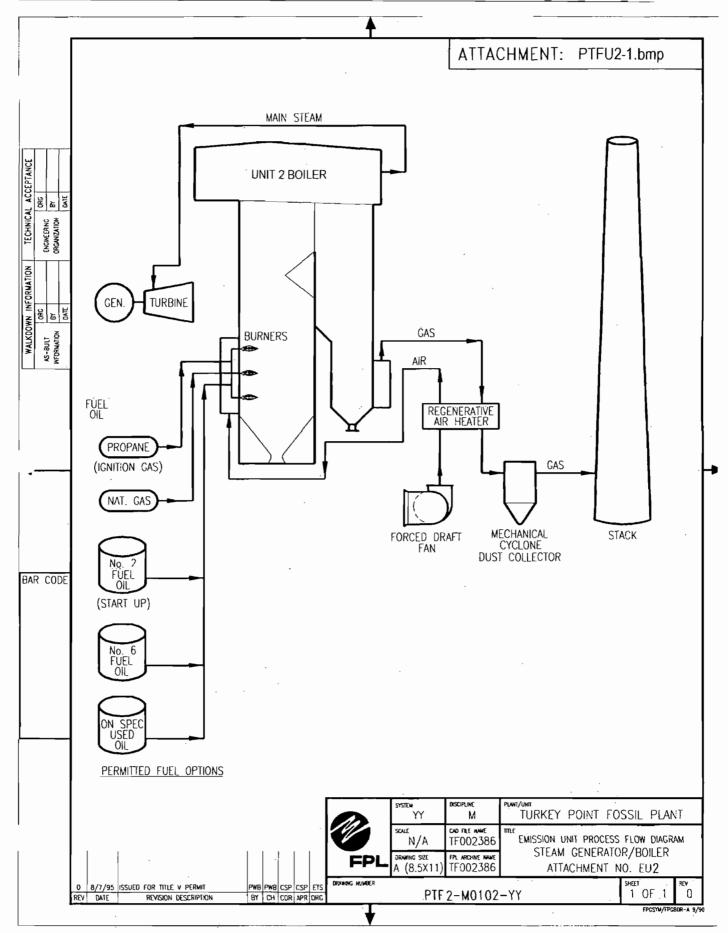
#### Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	: Nancy Kierspe				
Signa	ure Yany	Kierspe		Date Date	

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

Effective: 4-16-01



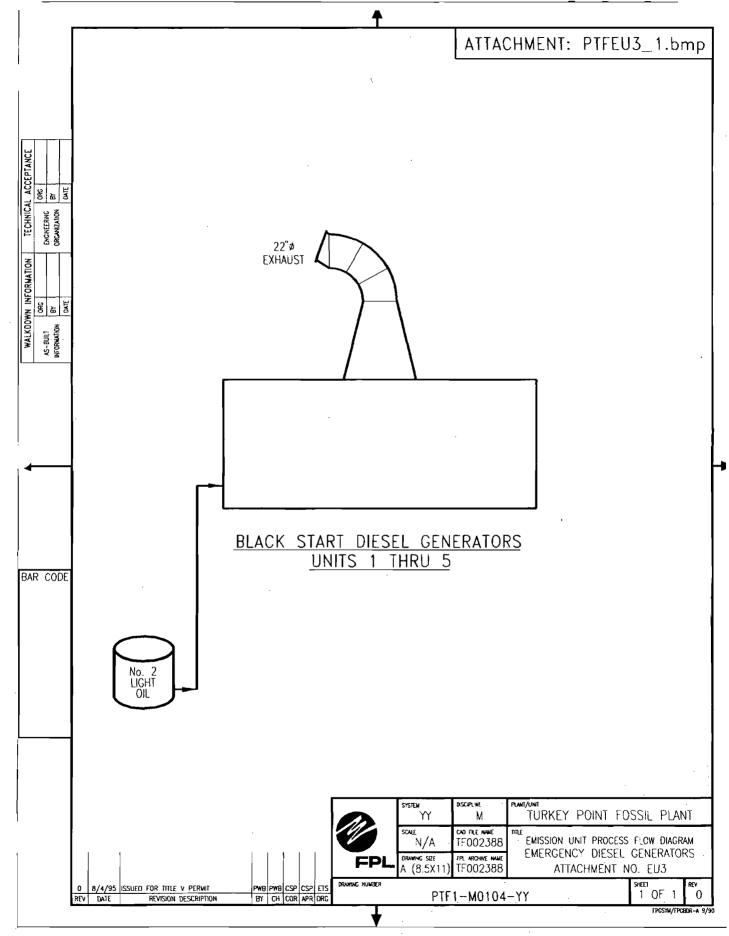
### FLORIDA POWER & LIGHT CO. STACK SAMPLING FACILITIES TURKEY POINT

PTFU2 4.BMP

FOSSIL FUEL STEAM GENERATORS Unit 2

STACK SPECIFICATIONS STACK DIAGRAM SAMPLING DIAMETER: 236.5 in. SAMPLING AREA: \$05.1 eq. ft. SAMPLING PORT DEPTH: 81.5 in. No. OF PORTS: 4 No. OF POINTS PER TRAVERSE: 6 TOTAL No. OF POINTS: 24 SAMPLING TIME PER POINT: 2.5 min. TOTAL SAMPLING TIME: 60.0 min. NOTE: DRAWING IS NOT TO SCALE PARTICULATE SAMPLING PROBE DIAGRAM 183'6" SAMPLE PORTS & PLATFORM 166'10" 109.4 214 123.4"

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



### **Attachment PTFU3-2.txt**

### **Fuel Analysis**

Light Distillate oil (typical)\*

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

\*Note: The values listed are "typical" values based upon:

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

### Footnotes:

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

#### **Attachment PTFU3-6.txt**

#### Procedures for Startup / Shutdown

The emergency black start diesel generators are the main backup power supply component for the fossil steam boiler generating units. The function of the emergency diesel generators 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 PTFU3\_11.txt

#### **Alternative Methods of Operation**

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

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

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

Page 1 of 8

#### ATTACHMENT PTF - FW

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

Following are several pages of unregulated and insignificant activities at the facility. 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..

Page 2 of 8

## ATTACHMENT PTP – FW UNIT 1 & 2 BOILER / STEAM GENERATOR POWER BLOCK

Steam and Air systems

Steam Drum 3" Relief Valves

Steam Drum 2" Valves to Vent

Main Steam 21/2" Relief Valves with Silencer

Main Steam Stop Valve Vents

Main Steam 1" Free Blow & Vent

Reheat Outlet Header 2" Vents

Reheat Outlet Header 6" Relief Valves

Hot Reheat 2" Vents

Cold Reheat at Inlet Header 6" Relief Valves

Blowdown Tank 16" Silencer Vent

Main Steam 6" Relief Valve at Desuperheater

After Condenser 1/2" Vent from Drainer

After Condenser 2" Vents

Hogging Ejector 10" Exhaust Head with Silencer

Moisture Separator 10" Exhaust Head with Silencer

Moisture Separator 1" Vent

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

Steam Relief Valves at Steam Seal Regulator

Boiler Blowdown Heat Exchanger 1" Vent

Boiler Feed Condensate, Heater Drains

Condensate Storage Tank Vent

## ATTACHMENT PTP – FW UNIT 1 & 2 BOILER / STEAM GENERATOR POWER BLOCK

Steam & Air Evacuation Systems (Continued)

Condensate Recovery Tank Vents

Condensate Recovery Cooler - 3/4" Vent

Condensate Recovery Flash Tank - 8" Relief Valve

Vent Condenser 1/2" Vent

After Condenser 1/2" Vent

Inter-Condenser 1/2" Vent

Boiler Feed Pumps 1" Vent

Boiler Feed Condensate, Heater Drains

Boiler Feed Pumps Relief Valves

Extraction Heater 3" & 4" Relief Valves

Gland Steam Condenser Air Ejector

Extraction Heaters 3/4" & 1" Vents

Hydrazine Storage Tank

Ammonia Storage Tank

Phosphate Storage Tank

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

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

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

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

Boiler Feed Pump Hydrogen Coupling Coolers 3/4" Vent

Cooling Water Surge Tank 8" Vent

## ATTACHMENT PTP – FW UNIT 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK

Service Water, Cooling Water & Fire Protection(Continued)

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

Boiler Feed Pump Seal Piping Cooler Vents

Fuel Oil, Lube Oil & Lube Oil Purification

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

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

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

Light Oil Storage Tank (500 BBL.) Vent

Light Oil Storage Tank (600 BBL) Vent

Blowback Tank at Metering Tank 1" Relief Valve

Blowback Tank at Metering 2" Valve

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

Blowback Tank at Fuel Oil Burner Pumps - 2" Valves

Fuel Oil Lines 1: Relief Valves

Fuel Oil Lines 3/4" Valves

Fuel Oil, Lube Oil & Lube Oil Purification

Blowback Tanks at Each Level of Burners - 2" Vent

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

Fuel Oil burner Booster Pumps Vents

8" Fuel Oil Line at Heaters Vents

Station Air at all Blowback Tanks 2" Vent

Generator Loop Seal Tank Exhaust Head - 4"

Oil Mist Eliminator 6" Vent

Fuel Oil, Lube Oil & Lube Oil Purification (continued)

Lube Oil Coolers 1/2" Vent

## ATTACHMENT PTP – FW UNIT 1 & 2 BOILER/STEAM GENERATOR POWER BLOCK

Lube Oil Conditioner Filter Vent

Lube Oil Piping High Point Filter Vent

Lube Oil Batch Tank Filter Vent

Magnesium Hydroxide Tank (Fuel Additive)

<u>Lime Slurry, Caustic Wash, Nitrogen Purge Instrument Air</u> Nitrogen Relief Valve

High Pressure Heater Nitrogen Vents

Steam Drum Nitrogen Vent

Secondary S.H. Outlet Nitrogen Vent

Primary S.H. Outlet Nitrogen Vent

Instrument AirAir ReceiverRelief Valves

Instrument Air After Cooler Relief Valves

Station Air After Cooler Relief Valves

Station Air Air ReceiverRelief Valves

Slurry Mixing Tank

Slurry Service Tank

Soda Ash Service Tank

Soda Ash Mixing Tank

## ATTACHMENT PTP – FW GENERAL SITE

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

Stores Building

**Control Building** 

Service Building

North Gate Guard House

**Switchyard Buildings** 

C.E.M. Building

Switchgear Room

Water Treatment/Lab

**Elevators** 

Administration Building

Sanitary Vents/Stacks

**Control Building** 

Recreation Pavilion

Service Building

Administration Building

Port-A-Johns

**Sheet Metal Shop** 

Service Building

Chemical Lab

Chemical Storage Bldg.

### ATTACHMENT PTP – FW GENERAL SITE

Sanitary Vents/Stacks	(continued)			
Switchyard Control Bldg				

**Battery Room** 

Paint & Lube Oil Bldg.

Dry Storage Bldg.

Electrical Bldg.

Warehouses

Boiler Feed Pump Bldg.

Control Bldg.

Chlorination Bldg.

I & C Shop

Weld Shop

Administration Bldg.

Kitchen Vent/Exhaust Systems

Control Room

Service Bldg.

Administration Bldg.

Recreation Pavilion

C.E.M. Equipment

**Monitoring Gases** 

## ATTACHMENT PTP – FW GENERAL SITE

### Gas Bottle Storage

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

Oily Waste WaterSumps

Filling Station2000 Gallon Diesel Fuel Tank 2" Vent

2000 Gallon Unleaded Fuel Tank 2" Vent

Hazardous Waste Storage Area

Sealed Drums & Containers

Natural GasGas Metering Station

Ignition Gas (Liquid Propane)

Propane Storage Tank

Water Treatment

Chemical Storage Area

Waste Water Treatment

Storm Water Sumps

Oil/Water Separator Tank Vent

Waste Neutralization Basin

Storm Water Basin

Ash Disposal Basin

#### Miscellaneous Activities

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

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

Vacuum Pumps used in laboratory operations

Equipment used for steam cleaning

### ATTACHMENT PTP – FW GENERAL SITE

#### Miscellaneous Activities (continued)

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

Equipment used exclusively for space heating, other than boilers

Laboratory equipment used exclusively for chemical or physical analysis

Brazing, soldering or welding equipment

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

Fire & Safety Equipment

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

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

Plant Grounds Maintenance

#### Routine Maintenance/Repair Activities

Non-Halogenated Solvent Cleaning Operations

Use of spray cans or solvents for routine maintenance activities

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

Transformers, Switches and Switchgear, Processing & Venting

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

Air Compressors and Centrifuges Used for Compressing Air

Storage of Product in Sealed Containers

Painting of Plant Equipment

## ATTACHMENT PTP – FW GENERAL SITE

Miscellaneous Mobile Vehicle Operation

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

Miscellaneous Mobile Equipment Operation

Compressors, Chain Saws, Small Generators, (<100KW) Welding Machines,

Electric Saws & Drills, Etc.

Sandblast Shed (future)