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BUREAU OF AIR REGULATION

**TITLE V PERMIT APPLICATION
FLORIDA POWER & LIGHT COMPANY
MARTIN PLANT
INDIANTOWN, 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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1 Copy - Florida Power & Light Company
1 Copy - Florida Power & Light Martin 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:	Florida Power & Light Company		
2. Site Name:	Martin Plant		
3. Facility Identification Number:	085001	[]	Unknown
4. Facility Location: 21900 SW Warfield Blvd. Street Address or Other Locator:			
City: Indiantown	County: Martin	Zip Code: 34956-0176	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No		

Application Contact

1. Name and Title of Application Contact: John C. Hampp Sr. Environmental Specialist
2. Application Contact Mailing Address: Organization/Firm: Florida Power & Light Co. Environmental Services Dept. Street Address: 700 Universe Blvd. City: Juno Beach State: FL Zip Code: 33408
3. Application Contact Telephone Numbers: Telephone: (561)- 691-2894 Fax: (561)- 691-7049

Application Processing Information (DEP Use)

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

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
Current construction permit number: _____
- Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.
Current construction permit number: _____
Operation permit number to be revised: _____
- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)
Operation permit number to be revised/corrected: _____
- 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: 0850001-008-AV
Reason for revision: TITLE V PERMIT RENEWAL

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Air construction permit to construct or modify one or more emissions units.
- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Keith Hardy - Plant Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Florida Power & Light Company Martin Plant Street Address: 21900 SW Warfield Blvd City: Indiantown State: FL Zip Code: 34956-0176
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (772) 597-7106 Fax: (772) 597-7416
4. Owner/Authorized Representative or Responsible Official Statement: <i>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.</i> Signature <u>Keith Hardy</u> Date <u>6-26-03</u>

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Kennard F. Kosky Registration Number: 14996
2. Professional Engineer Mailing Address: Organization/Firm: Golder Associates Street Address: 6241 NW 23rd Street, suite 500 City: Gainesville State: FL Zip Code: 32653
3. Professional Engineer Telephone Numbers: Telephone: (352) 336- 5600 Fax: (352) 336-6603

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.

Kenneth F. Korb

Signature

7/2/03

Date

* Attach any exception to certification statement.

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

STATE OF FLORIDA
DEP Form No. 10-990(1) - Form
Effective 1/1/99

0237560/4/4.3/4.3.1 Martin/FPL-PMR_KFK_Form1_EU10

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Fossil Fired Steam Generator #1		N/A
002	Fossil Fired Steam Generator #1		N/A
003	Combined Cycle Unit 3A, 1 CT & 1 HRSG		N/A
004	Combined Cycle Unit 3B, 1 CT & 1 HRSG		N/A
005	Combined Cycle Unit 4A, 1 CT & 1 HRSG		N/A
006	Combined Cycle Unit 4B, 1 CT & 1 HRSG		N/A
007	Auxiliary Boiler		N/A
009	Emergency Diesel Generator		N/A
011	Simple Cycle Unit No. 8A		N/A
012	Simple Cycle Unit No. 8B		N/A
013	Natural Gas Fuel Heaters		N/A
xxx	Diesel Generator (for Units -001 and -002)		N/A
xxx	Facility-wide Fugitive Emissions for PM		N/A
xxx	Facility-wide Fugitive Emissions for VOC's		N/A

Application Processing Fee

Check one: [] Attached - Amount: \$ _____ [] 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 Martin Title V Air Operating permit. This facility is not subject to Compliance Assurance Monitoring (CAM) provisions (see Attachment PMRCAM.doc). Attachments are at the end of the Application.

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input checked="" type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	
<p>Units 1 and 2 are subject to 40 CFR 60 Subpart D, Units 3 and 4 are subject to 40 CFR 60 Subpart GG, Simple Cycle Units 8A and 8B are subject to 40 CFR 60 Subpart GG, Auxiliary Boiler is subject to 40 CFR 60 Subpart Dc. The existing Title V permitted facility is a major source of hazardous air pollutants (Title III).</p>	

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		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
SO2	A				
NOx	A				
CO	A				
PM	A				
PM10	A				
VOC	A				
H133	A				
SAM	A				
H106	A				
H107	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [X] Attached, Document ID: <u>PMRFS-1.bmp</u> [] Not Applicable [] Waiver Requested
2. Facility Plot Plan: [X] Attached, Document ID: <u>PMRFS-2a.bmp, PMRFS-2b.bmp, PMRFS-2c.bmp, PMRFS-2d-1.bmp, & PMRFS-2e-1.bmp.</u> [] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID: <u>PMRFS-3.bmp</u> [] Not Applicable [] Waiver Requested (<u>See also Attachment PMRU9-1.bmp.</u>)
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [X] Attached, Document ID: <u>PMRFS-4.txt</u> [] Not Applicable [] Waiver Requested
5. Fugitive Emissions Identification: [X] Attached, Document ID: <u>PMRFS-5.txt</u> [] Not Applicable [] Waiver Requested
6. Supplemental Information for Construction Permit Application: [] Attached, Document ID: _____ [] Not Applicable
7. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRFS-8.txt</u> <input checked="" type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRFS-9.txt</u> <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRFS-11.txt</u> <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRFS-14.txt</u> <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRFS-15.txt</u> <input type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

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

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

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fossil Fuel Fired Steam Generator # 1</p>			
<p>4. Emissions Unit Identification Number: ID: 01</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 12/1980</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters) Emission Unit 01 (Martin Unit 1) is a nominal 863 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.</p>			

Emissions Unit Control Equipment

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

**Multiple Cyclone w/o Fly Ash Reinjection
Staged Combustion**

2. Control Device or Method Code(s): **077, 025**

Emissions Unit Details

1. Package Unit:

Manufacturer: **N/A**

Model Number: **N/A**

2. Generator Nameplate Rating:

863.3 MW

3. Incinerator Information:

Dwell Temperature:

°F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	9,040	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum Heat Input Rate based on firing Natural Gas provided as a permitting note for purpose of particulate testing information when applicable. The maximum heat input when firing fuel oil is 8,650 MMBtu/hr.		

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

List of Applicable Federal Regulations

40 CFR 60.42 (a)(1), NSPS	Compliance with fuel oil Sulfur limits
40 CFR 60.42 (a)(2), NSPS	Compliance with fuel oil Sulfur limits
40 CFR 60.43 (a)(1), NSPS	Compliance with visible Emission limits
40 CFR 60.43 (b), NSPS	Compliance with visible Emission limits
40 CFR 60.43 (c), NSPS	Compliance with visible Emission limits
40 CFR 60.44 (a)(1), NSPS	Compliance with SO2 emission limits
40 CFR 60.44 (b)(2), NSPS	Compliance with SO2 emission limits
40 CFR 60.45 (a), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(1), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(2), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(3), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(4), NSPS	Requirements for CEMS
40 CFR 60.45 (c), NSPS	Requirements for CEMS
40 CFR 60.45 (e), NSPS	Requirements for CEMS
40 CFR 60.45 (g)(1), NSPS	Requirements for CEMS
40 CFR 60.45 (g)(2), NSPS	Requirements for CEMS
40 CFR 60.45 (g)(3), NSPS	Requirements for CEMS
40 CFR 60.46 (a), NSPS	Compliance Reference Test Methods . Requirements
40 CFR 60.46 (b), NSPS	Compliance Reference Test Methods Requirements

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

List of Applicable Federal Regulations

40 CFR 60.46 (c) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(1) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(2) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(3) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(4) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(5) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 279.72, Analysis and Records	On-Specification Used Oil
40 CFR 60.11(a) , NSPS	Compliance with Opacity limits
40 CFR 60.11(b) , NSPS	Compliance with Opacity limits
40 CFR 60.11(c) , NSPS	Compliance with Opacity limits
40 CFR 60.11(d) , NSPS	Compliance with Opacity limits
40 CFR 60.11(e)(2) , NSPS	Compliance with Opacity limits
40 CFR 60.12, NSPS	Circumvention of Monitoring Requirements
40 CFR 60.13(a) , NSPS	Continuous Emission Monitoring
40 CFR 60.13(d)(1) , NSPS	Continuous Emission Monitoring
40 CFR 60.13(e) , NSPS	Continuous Emission Monitoring
40 CFR 60.13(e) , NSPS	Continuous Emission Monitoring
40 CFR 60.7(b) , NSPS	Excess Emissions Reports
40 CFR 60.7(f) , NSPS	Excess Emissions Reports

C. EMISSIONS UNIT REGULATIONS

(Regulated Emissions Units Only)

List of Applicable Federal Regulations

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
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

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
40 CFR 75.33 , CEMS	Standard Missing Data Procedures
40 CFR 75.36 , CEMS	Missing Data for Heat Input

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

List of Applicable Federal Regulations

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
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements

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

List of Applicable Federal Regulations

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; SO ₂ & NO _x for controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NO _x & Flow
40 CFR Part 75 - Appendix D	Optional SO ₂ Emissions Protocol for Gas Fired Units

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

List of Applicable Federal Regulations

40 CFR Part 75 - Appendix F	Conversion Procedures
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

(Regulated Emissions Units Only)

List of Applicable State Regulations

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
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.405(2), New FFSG	NSPS
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

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1 	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V 	6. Stack Height: 499 feet	7. Exit Diameter: 36 feet	
8. Exit Temperature: 338 °F	9. Actual Volumetric Flow Rate: 2,634,519 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543075 North (km): 2993085 			
14. Emission Point Comment (limit to 200 characters): Values for fields 8 and 9 derived from compliance tests (EPA Method 17) (July 7, 1994)			

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

Segment Description and Rate: Segment 1 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Firing Natural Gas		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 8.61	5. Maximum Annual Rate: 75,424	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,050
10. Segment Comment (limit to 200 characters): $\%S = [10\text{gr of S}/1000 \text{ CF gas}] * [1 \text{ lb S}/7000 \text{ gr}] [\text{CF gas}/0.046 \text{ lb gas}] * 100 = 0.0031\%S$		

Segment Description and Rate: Segment 2 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Firing No. 6 Residual Fuel Oil		
2. Source Classification Code (SCC): 1-01-004-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 56.9	5. Maximum Annual Rate: 498,513	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.7	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): This emission unit may burn up to 1% sulfur oil provided it is blended with a sufficient quantity of natural gas such that the SO2 emissions are kept below 0.8lb/mmBtu		

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

Segment Description and Rate: Segment 3 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Firing Propane		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 8.65	5. Maximum Annual Rate: 865	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,000
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, propane , or on-spec. used oil from FPL operations. Propane is primarily used for lighting off the boiler for start-up.		

Segment Description and Rate: Segment 4 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Firing No. 2 Fuel Oil		
2. Source Classification Code (SCC): 1-01-005-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 63.603	5. Maximum Annual Rate: 557,162.3	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.007	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
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, propane , or on-spec. used oil from FPL operations. No. 2 oil is primarily used for during boiler for start-up.		

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

Segment Description and Rate: Segment 5 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Co-Firing On-Specification Used Oil from FPL Operations		
2. Source Classification Code (SCC): 1-01-013-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 0.5	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Maximum % Sulfur given is for co-firing with Natural gas. When firing 100% oil, a max. sulfur content of 0.7% is the current limit. FPL burns only on-specification used oil, per 40 CFR 279.72. The maximum annual limit is based on both Units 1 and 2 (current Title V permit, Condition A.11.)		

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. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Ft. and Thousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 1	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit:
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 on-spec. used oil. Permit allows Unit 1 to burn a mixture of the above fuels provided max. SO2 rate is 0.8 lbs/mmBtu.		

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

Segment Description and Rate: Segment 7 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 1 Boiler Chemical Cleaning waste evaporation. This process may be undertaken while firing natural gas or residual oil		
2. Source Classification Code (SCC): 1-01-013-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 700	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Sulfur:	9. Million Btu per SCC Unit:
10. 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) and may include evaporation of waste from Units 3 & 4 HRSGs.		

**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		EL
SO2			EL
NOx	025	026	EL
CO			NS
VOC			NS
PM10			NS
H133			NS
SAM			NS
H106			NS
H107			NS

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 Efficiency of Control:
3. Potential Emissions: 865 lb/hour 3,788.7 tons/year	4. Synthetically Limited? [NO]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.1 lb/mmBtu Reference: 40 CFR 60.42(a)(1)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.1 lb/mmBtu * 8,650 mmBtu/hr = 865 lb/hr (865 lb/hr * 8760 hr/yr) / 2000 lb/ton = 3,788.7 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.1 lb/mmBtu	4. Equivalent Allowable Emissions: 865 lb/hour 3,315.1 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.1 lb/mmBtu = reg. Limit for PM [Rule 62-296.405(2)]. Emissions based on 100% oil.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6,920 lb/hour 30,309.6 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.8 lb/mmBtu; Reference: 40 CFR 60.43(a)(1)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 8,650 mmBtu/hr * 0.8 lb/mmBtu = 6,920 lb/hr (6,920 lb/hr * 8760 hr/yr) / 2000 lb/ton = 30,309.6 ton/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): This emission unit is limited to firing 0.7% sulfur oil while firing 100% oil and is limited to firing 1 % sulfur oil while co-firing with Natural Gas. Compliance is based on a 3-hour averaging period.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.8 lb/mmBtu	4. Equivalent Allowable Emissions: 6,920 lb/hour 30,309.6 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. This unit is subject to 40 CFR 60.43(a)(1) requirements.	

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: 2,595 lb/hour 11,366.1 tons/year	4. Synthetically Limited? [No]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.3 lb/mmBtu Reference: 40 CFR 60.44(a)(2)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.3 lb/mmBtu * 8,650 mmBtu/hr = 2,595 lb/hr (oil) (2,595 lb/hr * 8760 hr/yr) / 2000 lb/ton = 11,366.1 tons/year (oil) 0.2 lb/mmBtu * 9,040 mmBtu/hr = 1,808 lb/hr (gas) (1,808 lb/hr * 8,760 hr/yr) / 2,000 lb/ton = 7,919 tons/yr (gas)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emission limit calculated for oil and gas combustion.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lb/mmBtu oil 0.2 lb/mmBtu natural gas	4. Equivalent Allowable Emissions: oil 2,595 lb/hour 11,366.1 tons/year gas 1,808 lb/hour 7,919 tons/year
5. Method of Compliance (limit to 60 characters): CEM Part 75 , arithmetic avg. of 3 consecutive 1-hour periods	
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 NOx. When co-firing oil and gas, the emission limit is based on the percentage of heat input by each fuel.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: <p align="center">VE20</p>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: see comment below min/hour	
4. Method of Compliance: <p align="center">VE Test (EPA Method 9)</p>	
5. Visible Emissions Comment (limit to 200 characters): <p>One six-minute period per hour of not more than 27% opacity (40 CFR 60.42(a)(2)).</p>	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: <p align="center">VE99</p>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: <p align="center">VE Test (EPA Method 9)</p>	
5. Visible Emissions Comment (limit to 200 characters): <p>FDEP Rule 62-210.700(1) & (2) allows up to 100% opacity for 2 hours/24 hour period for excess visible emissions from start-up, shut-down, and malfunctions.</p>	

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

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : NOx = TECO CO₂ = Milton Roy Model Number: NOx = 42C CO₂ = 3300 Serial Number: NOx = 42C-74012-375 CO₂ = N3K4369T	
5. Installation Date: 04/18/2002	6. Performance Specification Test Date: 4/24/2002
7. Continuous Monitor Comment (limit to 200 characters): NOx Required by 40 CFR 75.10(a)(2); CO₂ provides % O₂ data to NOx monitor per 40 CFR 75 Appendix E. CO₂ data is calculated using 40 CFR 75 Appendix G equation G-4.	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: EM	2. Pollutant(s): SO₂
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : SO₂ Oil Mass Flow = Micromotion Model Number: SO₂ Oil Mass Flow = D300 Serial Number: SO₂ Oil Mass Flow = 1OILFLW	
5. Installation Date: 04/01/2000	6. Performance Specification Test Date: 04/24/2002
7. Continuous Monitor Comment (limit to 200 characters): SO₂ Required by 40 CFR 75.10(a)(1); SO₂ calculated according to 40 CFR 75 appendix D	

**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: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information Phoenix Instruments Model Number: OPAC 20/20 Serial Number: OPAC-1069/OPAC-1070	
5. Installation Date: 12/13/2000	6. Performance Specification Test Date: 01/08/2001
7. Continuous Monitor Comment (limit to 200 characters): Two serial numbers are provided because each duct leading to the stack has its own transmissometer.	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMREU1-1.bmp</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-2.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-3.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMREU1-4.jpg</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: <u>July 15, 1994</u> <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU1-6.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>PMRU1-11.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: <u>PMRU1-13.txt</u> [] Not Applicable
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable (Note: Refer to Attachment PMRCAM)
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>PRMU1-15</u> [] 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

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

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Fossil Fuel Fired Steam Generator # 2</p>			
<p>4. Emissions Unit Identification Number: ID: 02</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 06/1981</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters) Emission Unit 02 (Martin Unit 2) is a nominal 863 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.</p>			

Emissions Unit Control Equipment

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

**Multiple Cyclone w/o Fly Ash Reinjection
Staged Combustion**

2. Control Device or Method Code(s): **077,025**

Emissions Unit Details

1. Package Unit:		
Manufacturer: N/A	Model Number: N/A	
2. Generator Nameplate Rating:	863.3	MW
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	9,040	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum Heat Input Rate based on firing Natural Gas provided as a permitting note for purpose of particulate testing information when applicable. The maximum heat input when firing fuel oil is 8,650 MMBtu/hr.		

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

List of Applicable Federal Regulations

40 CFR 60.42 (a)(1), NSPS	Compliance with fuel oil Sulfur limits
40 CFR 60.42 (a)(2), NSPS	Compliance with fuel oil Sulfur limits
40 CFR 60.43 (a)(1), NSPS	Compliance with visible Emission limits
40 CFR 60.43 (b), NSPS	Compliance with visible Emission limits
40 CFR 60.43 (c), NSPS	Compliance with visible Emission limits
40 CFR 60.44 (a)(1), NSPS	Compliance with SO ₂ emission limits
40 CFR 60.44 (b)(2), NSPS	Compliance with SO ₂ emission limits
40 CFR 60.45 (a), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(1), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(2), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(3), NSPS	Requirements for CEMS
40 CFR 60.45 (b)(4), NSPS	Requirements for CEMS
40 CFR 60.45 (c), NSPS	Requirements for CEMS
40 CFR 60.45 (e), NSPS	Requirements for CEMS
40 CFR 60.45 (g)(1), NSPS	Requirements for CEMS
40 CFR 60.45 (g)(2), NSPS	Requirements for CEMS
40 CFR 60.45 (g)(3), NSPS	Requirements for CEMS
40 CFR 60.46 (a), NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (b), NSPS	Compliance Reference Test Methods Requirements

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

List of Applicable Federal Regulations

40 CFR 60.46 (c) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(1) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(2) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(3) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(4) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 60.46 (d)(5) , NSPS	Compliance Reference Test Methods Requirements
40 CFR 279.72, Analysis and Records	On-Specification Used Oil
40 CFR 60.11(a) , NSPS	Compliance with Opacity limits
40 CFR 60.11(b) , NSPS	Compliance with Opacity limits
40 CFR 60.11(c) , NSPS	Compliance with Opacity limits
40 CFR 60.11(d) , NSPS	Compliance with Opacity limits
40 CFR 60.11(e)(2) , NSPS	Compliance with Opacity limits
40 CFR 60.12, NSPS	Circumvention of Monitoring Requirements
40 CFR 60.13(a) , NSPS	Continuous Emission Monitoring
40 CFR 60.13(d)(1) , NSPS	Continuous Emission Monitoring
40 CFR 60.13(e) , NSPS	Continuous Emission Monitoring
40 CFR 60.13(e) , NSPS	Continuous Emission Monitoring
40 CFR 60.7(b) , NSPS	Excess Emissions Reports
40 CFR 60.7(f) , NSPS	Excess Emissions Reports

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

List of Applicable Federal Regulations

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
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

40 CFR 73.35 (d), SO ₂ 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 - SO ₂
40 CFR 75.10 (a) (2), CEMS	Primary Measurement - NO _x
40 CFR 75.10 (a) (3) (iii), CEMS	Primary Measurement - CO ₂ & O ₂ 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	SO ₂ Emission Monitoring Requirements for Gas-Fired Units
40 CFR 75.11 (e), CEMS	SO ₂ Emissions Monitoring Gas-Fired Units
40 CFR 75.12 (a), CEMS	NO _x Monitoring
40 CFR 75.12 (b), CEMS	NO _x Monitoring Moisture Correction
40 CFR 75.12 (c), CEMS	NO _x Monitoring Determination of NO _x Emission Rate - Appendix F
40 CFR 75.13 (b), CEMS	CO ₂ Emissions Monitoring Appendix G
40 CFR 75.13 (c), CEMS	CO ₂ 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

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

List of Applicable Federal Regulations

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
40 CFR 75.33 , CEMS	Standard Missing Data Procedures
40 CFR 75.36 , CEMS	Missing Data for Heat Input

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

List of Applicable Federal Regulations

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
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements

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

List of Applicable Federal Regulations

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; SO ₂ & NO _x for controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NO _x & Flow
40 CFR Part 75 - Appendix D	Optional SO ₂ Emissions Protocol for Gas Fired Units

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

List of Applicable Federal Regulations

40 CFR Part 75 - Appendix F	Conversion Procedures
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

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

List of Applicable State Regulations

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
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.320(4)(b), Stationary Units	CT & Diesel Unit (State Only)
FAC 62-297.405(2), New FFSG	NSPS
FAC 62-297.310(2)(b) , Emiss. Monitoring	Operating Rate
FAC 62-297.310(3) , Emiss. Monitoring	Calculation of Emissions

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

List of Applicable State Regulations

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

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 499 feet	7. Exit Diameter: 36 feet	
8. Exit Temperature: 338 °F	9. Actual Volumetric Flow Rate: 2,634,519 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543075 North (km): 2993004			
14. Emission Point Comment (limit to 200 characters): Values for fields 8 and 9 derived from compliance tests (EPA Method 17) (July 7, 1994)			

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

Segment Description and Rate: Segment 1 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Firing Natural Gas		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 8.61	5. Maximum Annual Rate: 75,424	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % 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 Rate: Segment 2 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Firing No. 6 Residual Fuel Oil		
2. Source Classification Code (SCC): 1-01-004-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 56.9	5. Maximum Annual Rate: 498,513	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.7	8. Maximum % Ash:	9. Million Btu per SCC Unit: 152
10. Segment Comment (limit to 200 characters): This emission unit may burn up to 1% sulfur oil provided it is blended with a sufficient quantity of natural gas such that the SO2 emissions are kept below 0.8lb/mmBtu		

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

Segment Description and Rate: Segment 3 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Firing Propane		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 8.65	5. Maximum Annual Rate: 865	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,000
10. Segment Comment (limit to 200 characters): Unit 2 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. Propane is primarily used for lighting off the boiler for start-up.		

Segment Description and Rate: Segment 4 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Firing No. 2 Fuel Oil		
2. Source Classification Code (SCC): 1-01-005-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 63.603	5. Maximum Annual Rate: 557,162.3	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.007	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): Unit 2 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.		

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

Segment Description and Rate: Segment 5 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Co-Firing On-Specification Used Oil from FPL Operations		
2. Source Classification Code (SCC): 1-01-013-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 0.5	5. Maximum Annual Rate: 1,500	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Maximum % Sulfur given is for co-firing with Natural gas. When firing 100% oil, a max. sulfur content of 0.7% is the current limit. FPL burns only on-specification used oil, per 40 CFR 279.72. The maximum annual limit is based on both Units 1 and 2 (current Title V permit, Condition A.11).		

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		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Ft. and Thousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 500	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 1	8. Maximum % Ash: 0.1	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Unit 2 is permitted to burn a mixture of nat. gas, No.6 oil, No.2 oil, propane, or on-spec. used oil. Permit allows Unit 1 to burn a mixture of the above fuels provided max. SO2 rate is 0.8 lbs/mmBtu.		

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

Segment Description and Rate: Segment 7 of 7

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Unit 2 Boiler Chemical Cleaning waste evaporation. This process may be undertaken while firing natural gas or residual oil		
2. Source Classification Code (SCC): 1-01-013-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 3	5. Maximum Annual Rate: 700	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Sulfur:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Items 6 - 9 do not apply. This activity is to be undertaken on a periodic basis in accordance with DARM guidance, and EPA waste rules (40 CFR 279.72) and may include evaporation of waste from Units 3 & 4 HRSGs.		

**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		EL
SO2			EL
NOx	025	026	EL
CO			NS
VOC			NS
PM10			NS
H133			NS
SAM			NS
H106			NS
H107			NS

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 Efficiency of Control:
3. Potential Emissions: 865 lb/hour 3,788.7 tons/year	4. Synthetically Limited? [NO]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.1 lb/mmBtu Reference: 40 CFR 60.42(a)(1)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.1 lb/mmBtu * 8,650 mmBtu/hr = 865 lb/hr (865 lb/hr * 8760 hr/yr) / 2000 lb/ton = 3,788.7 tons/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Emission limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.2 lb/mmBtu steady state	4. Equivalent Allowable Emissions: 865 lb/hour 3,315.1 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): 0.1 lb/mmBtu = reg. Limit for PM [Rule 62-296.405(2)]. Emissions based on 100% oil.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 6,920 lb/hour 30,309.6 tons/year	4. Synthetically Limited? [N]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.8 lb/mmBtu; Reference: 40 CFR 60.43(a)(1)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 8,650 mmBtu/hr * 0.8 lb/mmBtu = 6,920 lb/hr (6,920 lb/hr * 8760 hr/yr) / 2000 lb/ton = 30,309.6 ton/yr	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): This emission unit is limited to firing 0.7% sulfur oil while firing 100% oil and is limited to firing 1 % sulfur oil while co-firing with Natural Gas.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.8 lb/mmBtu	4. Equivalent Allowable Emissions: 6,920 lb/hour 30,309.6 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. This unit is subject to 40 CFR 60.43(a)(1) requirements.	

**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: 2,595 lb/hour 11,366.1 tons/year	4. Synthetically Limited? [No]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.3 lb/mmBtu Reference: 40 CFR 60.44(a)(2)	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): 0.3 lb/mmBtu * 8,650 mmBtu/hr = 2,595 lb/hr (oil) (2,595 lb/hr * 8760 hr/yr) / 2,000 lb/ton = 11,366.1 tons/year (oil) 0.2 lb/mmBtu * 9,040 mmBtu/hr = 1,808 lb/hr (gas) (1,808 lb/hr * 8,760 hr/yr) / 2,000 lb/ton = 7,919 tons/year (gas)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emission limit calculated for oil and gas combustion.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lb/mmBtu oil 0.2 lb/mmBtu natural gas	4. Equivalent Allowable Emissions: oil 2,595 lb/hour 11,366.1 tons/year gas 1,808 lb/hour 7,919 tons/year
5. Method of Compliance (limit to 60 characters): CEM Part 75 , arithmetic avg. of 3 consecutive 1-hour periods	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): This emission unit utilizes Low NOx burners as well as off-stoichiometric combustion to control emissions of NOx. When co-firing oil and gas, the emission limit is based on the percentage of heat input by each fuel.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: see comment below min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): One 6-minute period per hour of not more than 27% opacity [40 CFR 60.42(a)(2)].	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE99	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-210.700(1) & (2) allows up to 100% opacity for 2 hours/24 hour period for excess visible emissions from start-up, shut-down, and malfunctions.	

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

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: EM	2. Pollutant(s): NO _x
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : NO _x = TECO CO ₂ = Milton Roy Model Number: NO _x = 42 CO ₂ = 3300 Serial Number: NO _x = 42-45961-275K CO ₂ = N3K8184T	
5. Installation Date: 01/31/1994	6. Performance Specification Test Date: 12/09/94
7. Continuous Monitor Comment (limit to 200 characters): NO _x required by 40 CFR 75.10(a)(2); CO ₂ provides % O ₂ data to NO _x monitor per 40 CFR 75 Appendix E. CO ₂ data is calculated using 40 CFR 75 Appendix G equation G-4.	

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: EM	2. Pollutant(s): SO ₂
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : SO ₂ = TECO Model Number: SO ₂ = 43B Serial Number: SO ₂ = 43B-46556-276	
5. Installation Date: 01/31/1994	6. Performance Specification Test Date: 12/09/94
7. Continuous Monitor Comment (limit to 200 characters): SO ₂ Required by 40 CFR 75.10(a)(1); SO ₂ calculated according to 40 CFR 75 appendix D	

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:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : Lear Sigler Model Number: RM 41 Serial Number: 924/966	
5. Installation Date: 03/01/1978	6. Performance Specification Test Date: 01/05/1995
7. Continuous Monitor Comment (limit to 200 characters): Two serial numbers are provided because each duct leading to the stack has its own transmissometer.	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU2-1.jpg</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-2.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-3.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-4.jpg</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU1-6.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-11.txt</u> <input type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1-13.txt</u> <input type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (Refer to Attachment PMRCAM)
15. Acid Rain Part Application (Hard-copy Required) <input checked="" type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>PMRU1-15</u> <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

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

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

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine with Heat Recovery Steam Generator (HRSG) CT 3A</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: 03 <input type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 02/16/94</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? [Y]</p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>Each combined cycle unit consists of two combustion turbines with each unit firing into a Heat Recovery Steam Generator (HRSG). Each combustion turbine is connected to an electrical generator. Waste heat recovered in the HRSG's is sent to a steam turbine-generator for production of additional electric power. Generator nameplate rating is given for the CT-coupled generator only.</p>			

Emissions Unit Control Equipment

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

Dry Low-NO_x Combustors for Natural Gas combustion and steam injection for distillate oil combustion.

2. Control Device or Method Code(s): **025**

Emissions Unit Details

1. Package Unit:		
Manufacturer: GE	Model Number: MS7001FA	
2. Generator Nameplate Rating:	204	MW
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1,966	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum Heat Input (HI) Rate above = current maximum for natural gas fuel @ 40 deg. F. Max.; HI for dist. Oil = 1,846 mmBtu. Compliance method for HI is fuel sampling and analysis. Operation of inlet foggers limited to 181,661 deg. F-hours per calendar year.		

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

List of Applicable Federal Regulations

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
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

40 CFR 73.35 (d), SO ₂ 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 - SO ₂
40 CFR 75.10 (a) (2), CEMS	Primary Measurement - NO _x
40 CFR 75.10 (a) (3) (i), CEMS	Primary Measurement - CO ₂ & O ₂ 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 (f), CEMS	Minimum Measurement Capability
40 CFR 75.10 (g), CEMS	
40 CFR 75.11 (d), CEMS	SO ₂ Emission Monitoring Requirements for Gas-Fired Units
40 CFR 75.11 (e), CEMS	SO ₂ Emissions Monitoring Gas-Fired Units
40 CFR 75.12 (a), CEMS	NO _x Monitoring
40 CFR 75.12 (b), CEMS	NO _x Monitoring Moisture Correction
40 CFR 75.12 (c), CEMS	NO _x Monitoring Determination of NO _x Emission Rate - Appendix F
40 CFR 75.13 (b), CEMS	CO ₂ Emissions Monitoring Appendix G
40 CFR 75.13 (c), CEMS	CO ₂ 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

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

List of Applicable Federal Regulations

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
40 CFR 75.33 , CEMS	Standard Missing Data Procedures
40 CFR 75.36 , CEMS	Missing Data for Heat Input

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

List of Applicable Federal Regulations

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
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements

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

List of Applicable Federal Regulations

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 75.65 , CEMS	
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; SO ₂ & NO _x for Controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NO _x & Flow

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

List of Applicable Federal Regulations

40 CFR Part 75 - Appendix D	Optional SO2 Emissions Protocol for Gas Fired Units
40 CFR Part 75 - Appendix F	Conversion Procedures
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
40 CFR 60.332(a)(1) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(f) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.334(a) , Subpart GG	Monitoring of water injection during firing of oil
40 CFR 60.334(b)(1) , Subpart GG	Monitoring of operation during firing of oil, oil specifications
40 CFR 60.334(b)(2) , Subpart GG	Monitoring of operation during firing of natural gas, gas specifications
40 CFR 60.334(c)(1) , Subpart GG	Monitoring of NOx emissions at load conditions during operation
40 CFR 60.335, Subpart GG	Custom Fuel Monitoring Schedule for Natural Gas

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

List of Applicable State Regulations

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
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.320(4)(b), Stationary Units	CT & Diesel Unit (State Only)
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
FAC 62-297.310(8) , Emiss. Monitoring	Test Reports

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

List of Applicable State Regulations

FAC 62-297.310(4)(a) , Emiss. Monitoring	Applicable Test Procedures , Sampling Time
FAC 62-297.310(4)(b) , Emiss. Monitoring	Sample Volume
FAC 62-297.310(4)(c) , Emiss. Monitoring	Required Low Rate Range-PM, H2SO4,F
FAC 62-297.310(4)(d) , Emiss. Monitoring	Calibration
FAC 62-297.310(4)(e) , Emiss. Monitoring	EPA Method 5 (applicable when combusting oil)
FAC 62-297.310(5) , Emiss. Monitoring	Determination of Process Variables
FAC 62-297.310(6)(a) , Emiss. Monitoring	Permanent Testing Facilities
FAC 62-297.310(6)(c) , Emiss. Monitoring	Sampling Ports
FAC 62-297.310(6)(d) , Emiss. Monitoring	Work Platforms
FAC 62-297.310(6)(e) , Emiss. Monitoring	Access
FAC 62-297.310(6)(f) , Emiss. Monitoring	Electrical Power Provisions
FAC 62-297.310(6)(g) , Emiss. Monitoring	Equipment Support
FAC 62-297.310(7)(a)3 , Emiss. Monitoring	Permit Renewal Test Requirement
FAC 62-297.310(7)(a)4b,Emiss. Monitoring	Annual Test Requirement
FAC 62-297.310(7)(a)5 , Emiss. Monitoring	Exemption from PM Test if operation is less than 400 hrs on oil/distillate
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

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 213.3 feet	7. Exit Diameter: 20 feet	
8. Exit Temperature: 280 °F	9. Actual Volumetric Flow Rate: 2,420,307 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543266 North (km): 299261			
14. Emission Point Comment (limit to 200 characters): The Volumetric Flow Rate (VFR) given above is reflective of a 40 degree F ambient condition while firing oil. The VFR while firing nat. gas under the same condition is 2,352,904 acfm. The VFR while firing nat. gas in power aug. mode is 2,468,838 acfm.			

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

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pipeline Natural Gas burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 1.87	5. Maximum Annual Rate: 16,381.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,050
10. Segment Comment (limit to 200 characters): $\%S = [10\text{gr of S}/1000 \text{ CF gas}] * [1 \text{ lb S}/7000 \text{ gr}] [\text{CF gas}/0.046 \text{ lb gas}] * 100 = 0.0031\%S$		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Light Distillate Oil burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 14.13	5. Maximum Annual Rate: 28,260	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130.66
10. Segment Comment (limit to 200 characters): Max. annual rate is for 2,000 hrs of operation on Dist. Oil, which is limited in the PSD permit (4.a) and the Site Certification for the 4 CTs of Units 3 & 4.		

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			EL
SO2			EL
NOx	025	028	EL
CO			EL
VOC			EL
PM10			NS
SAM			NS
H114			NS
FL			NS
H021			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 60.6lb/hour	100 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 60.6 lb/hr Reference: see comment below	7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM10, The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.		

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 18 lb/hour	4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year	
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing		
6. Allowable Emissions Comment (Desc. Of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.		

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM-10 from all 4 CTs of Units 3 & 4.	

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 Efficiency of Control:	
3. Potential Emissions: 60.6 lb/hour		4. Synthetically Limited? [Yes] 100 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 60.6 lb/mmBtu Reference: see comment below		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM-10, The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 18 lb/hour		4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year	
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CTs of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM-10 from all 4 CTs of Units 3 & 4.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 920 lb/hour		4. Synthetically Limited? [Yes] 568 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.5 % Sulfur in Fuel Reference: see comment		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable – Permit limit on % Sulfur in Fuel			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Sulfur content of distillate oil is limited to 0.5% max. and 0.3% annual average by the PSD permit. Oil firing in CTs of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 920 lbs/hr		4. Equivalent Allowable Emissions: 920 lb/hour 568 tons/year	
5. Method of Compliance (limit to 60 characters): Fuel Specifications and vendor sampling and analysis of distillate oil			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 91.5 lb/hour	4. Equivalent Allowable Emissions: 91.5 lb/hour 400.77 tons/year
5. Method of Compliance (limit to 60 characters): ASTM Methods D 1072-80, D 3031-87, D-4084-82, or D3246-81 (or equivalent)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 568 tons/year	4. Equivalent Allowable Emissions: 568 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for SO2 for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 461 lb/hour	4. Synthetically Limited? [Yes] 3,108 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 461 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 177 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 461 lbs/hr	4. Equivalent Allowable Emissions: 461 lb/hour 3,108 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 177 lb/hour	4. Equivalent Allowable Emissions: 177 lb/hour 775.26 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3018 tons/year	4. Equivalent Allowable Emissions: lbs/hr 3018 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for NO_x for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOCs		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 11 lb/hour		4. Synthetically Limited? [Yes] 57 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 11 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 11 lbs/hr		4. Equivalent Allowable Emissions: 11 lb/hour 11 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3 lb/hour	4. Equivalent Allowable Emissions: 3 lb/hour 13.14 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 57 tons/year	4. Equivalent Allowable Emissions: lbs/hr 57 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for VOC for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 105.8 lb/hour		871 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 105.8 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 94.3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 105.8 lbs/hr		4. Equivalent Allowable Emissions: 105.8 lb/hour 105.8 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 94.3 lb/hour	4. Equivalent Allowable Emissions: 94.3 lb/hour 413.034 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 871 tons/year	4. Equivalent Allowable Emissions: lbs/hr 871 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for CO for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SAM (Sulfuric Acid Mist)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 113 lb/hour	70 tons/year
4. Synthetically Limited? [Yes]	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 113 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 5, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Hg (Mercury Compounds)	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.021 lb/hour	0.034 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 0.021 lb/hr Reference: Permit derived	7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on gas firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146. (oil emission rate = 0.0052 lb/hr)		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters): Annual Operating Report		
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.		

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Be (Beryllium Compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.004 lb/hour 0.004 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.004 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 3

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): The allowable opacity limits listed above are applicable to operation on distillate oil only. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): Allowable opacity limits above are applicable to operation on natural gas. Refer to Site Certification specific condition II.A.8 and PSD permit, specific condition No. 8.	

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

1. Visible Emissions Subtype: <p style="text-align: center;">VE100</p>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: <p style="text-align: center;">VE Test (EPA Method 9)</p>	
5. Visible Emissions Comment (limit to 200 characters): <p>DEP Rule 62-210.700(1) allows excess emissions for up to 2 hrs/24 hrs for startup, shutdown and malfunctions.</p>	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
4. Monitor Information Manufacturer: : NOx = TECO CO₂ = Milton Roy Model Number: NOx = 42 CO₂ = 3300 Serial Number: NOx = 42D-49806-284 CO₂ = N2CO320T	
5. Installation Date: 12/09/1994	6. Performance Specification Test Date: 12/28/94
7. Continuous Monitor Comment (limit to 200 characters): This emission unit is classified as a "gas fired" under the 40 CFR 75 definitions and therefore not required to monitor opacity or SO₂.	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-1.jpg</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU1 -2.txt</u> [] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-4.jpg</u> [] Not Applicable [] Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU3-6.txt</u> <input type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>PMRU3-11.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 (Note: Refer to Title V permit 085001-008-AV)
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable (Note: Refer to Attachment PMRCAM)
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>PMREU1-15</u> [] 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

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

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine with Heat Recovery Steam Generator (HRSG) CT 3B</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: 04 <input type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 02/16/94</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? [Y]</p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>Each combined cycle unit consists of two combustion turbines with each unit firing into a Heat Recovery Steam Generator (HRSG). Each combustion turbine is connected to an electrical generator. Waste heat recovered in the HRSGs is sent to a steam turbine-generator for production of additional electric power. Generator nameplate rating is given for the CT-coupled generator only.</p>			

Emissions Unit Control Equipment

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

Dry Low-NO_x Combustors for Natural Gas combustion and steam injection for distillate oil combustion.

2. Control Device or Method Code(s): **025**

Emissions Unit Details

1. Package Unit:

Manufacturer: **GE**

Model Number: **MS7001FA**

2. Generator Nameplate Rating:

204 MW

3. Incinerator Information:

Dwell Temperature:

°F

Dwell Time:

seconds

Incinerator Afterburner Temperature:

°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1,966	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum Heat Input (HI) Rate above = current maximum for natural gas fuel @ 40 deg. F. Max.; HI for dist. Oil = 1,846 mmBtu. Compliance method for HI is fuel sampling and analysis. Operation of inlet foggers limited to 181,661 degree F-hours per calendar year.		

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

List of Applicable Federal Regulations

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
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

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) (i), 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 (f), CEMS	Minimum Measurement Capability
40 CFR 75.10 (g), CEMS	
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

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

List of Applicable Federal Regulations

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
40 CFR 75.33 , CEMS	Standard Missing Data Procedures
40 CFR 75.36 , CEMS	Missing Data for Heat Input

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

List of Applicable Federal Regulations

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
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements

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

List of Applicable Federal Regulations

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 75.65 , CEMS	
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; SO ₂ & NO _x for controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NO _x & Flow

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

List of Applicable Federal Regulations

40 CFR Part 75 - Appendix D	Optional SO ₂ Emissions Protocol for Gas Fired Units
40 CFR Part 75 - Appendix F	Conversion Procedures
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 SO ₂ Offset Plans
40 CFR 77.5 (b) , Excess Emissions	Future Deduction of SO ₂ Allowances for Excess SO ₂ Emissions
40 CFR 77.6 , Excess Emissions	Future Penalties for Excess Emissions of SO ₂ and NO _x
40 CFR 60.332(a)(1) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(f) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.334(a) , Subpart GG	Monitoring of water injection during firing of oil
40 CFR 60.334(b)(1) , Subpart GG	Monitoring of operation during firing of oil, oil specifications
40 CFR 60.334(b)(2) , Subpart GG	Monitoring of operation during firing of natural gas, gas specifications
40 CFR 60.334(c)(1) , Subpart GG	Monitoring of NO _x emissions at load conditions during operation
40 CFR 60.335, Subpart GG	Custom Fuel Monitoring Schedule for Natural Gas

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

List of Applicable State Regulations

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
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.320(4)(b), Stationary Units	CT & Diesel Unit (State Only)
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
FAC 62-297.310(8) , Emiss. Monitoring	Test Reports

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

List of Applicable State Regulations

FAC 62-297.310(4)(a) , Emiss. Monitoring	Applicable Test Procedures , Sampling Time
FAC 62-297.310(4)(b) , Emiss. Monitoring	Sample Volume
FAC 62-297.310(4)(c) , Emiss. Monitoring	Required Low Rate Range-PM, H2SO4,F
FAC 62-297.310(4)(d) , Emiss. Monitoring	Calibration
FAC 62-297.310(4)(e) , Emiss. Monitoring	EPA Method 5 (applicable when combusting oil)
FAC 62-297.310(5) , Emiss. Monitoring	Determination of Process Variables
FAC 62-297.310(6)(a) , Emiss. Monitoring	Permanent Testing Facilities
FAC 62-297.310(6)(c) , Emiss. Monitoring	Sampling Ports
FAC 62-297.310(6)(d) , Emiss. Monitoring	Work Platforms
FAC 62-297.310(6)(e) , Emiss. Monitoring	Access
FAC 62-297.310(6)(f) , Emiss. Monitoring	Electrical Power Provisions
FAC 62-297.310(6)(g) , Emiss. Monitoring	Equipment Support
FAC 62-297.310(7)(a)3 , Emiss. Monitoring	Permit Renewal Test Requirement
FAC 62-297.310(7)(a)4b,Emiss. Monitoring	Annual Test Requirement
FAC 62-297.310(7)(a)5 , Emiss. Monitoring	Exemption from PM Test if operation is less than 400 hrs on oil/distillate
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

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack.			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 213.3 feet	7. Exit Diameter: 20 feet	
8. Exit Temperature: 280 °F	9. Actual Volumetric Flow Rate: 2,420,307 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543226 North (km): 299261			
14. Emission Point Comment (limit to 200 characters): The Volumetric Flow Rate (VFR) given above is reflective of a 40 degree F ambient condition while firing oil. The VFR while firing nat. gas under the same condition is 2,352,904 acfm. The VFR while firing nat. gas in power aug. mode is 2,468,838 acfm.			

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pipeline Natural Gas burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 1.87	5. Maximum Annual Rate: 16,381.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % 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 Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Light Distillate Oil burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 14.13	5. Maximum Annual Rate: 28,260	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130.66
10. Segment Comment (limit to 200 characters): Max. annual rate is for 2,000 hrs of operation on Dist. Oil, which is limited in the PSD permit (4.a) and the Site Certification for the 4 CTs of Units 3 & 4.		

**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			EL
SO2			EL
NOx	025	028	EL
CO			EL
VOC			EL
PM10			EL
SAM			NS
H114			NS
FL			NS
H021			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM₁₀	2. Total Percent Efficiency of Control:
3. Potential Emissions: 60.6lb/hour	4. Synthetically Limited? [Yes] 100 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 60.6 lb/hr Reference: see comment below	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM₁₀. The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 18 lb/hour	4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CTs of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM₁₀ from all 4 CTs of Units 3 & 4.	

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 Efficiency of Control:
3. Potential Emissions: 60.6 lb/hour 100 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 60.6 lb/mmBtu Reference: see comment below	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM₁₀. The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 18 lb/hour	4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM₁₀ from all 4 CTs of Units 3 & 4.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 920 lb/hour 568 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.5 % Sulfur in Fuel Reference: see comment	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable – Permit limit on % Sulfur in Fuel	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Sulfur content of distillate oil is limited to 0.5% max. and 0.3% annual average by the PSD permit. Oil firing in CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 920 lbs/hr	4. Equivalent Allowable Emissions: 920 lb/hour 568 tons/year
5. Method of Compliance (limit to 60 characters): Fuel Specifications and vendor sampling and analysis of distillate oil.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 91.5 lb/hour	4. Equivalent Allowable Emissions: 91.5 lb/hour 400.77 tons/year
5. Method of Compliance (limit to 60 characters): ASTM Methods D 1072-80, D 3031-87, D-4084-82, or D3246-81 (or equivalent)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 568 tons/year	4. Equivalent Allowable Emissions: 568 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for SO2 for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 461 lb/hour 3,108 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 461 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 177 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 461 lb/hr	4. Equivalent Allowable Emissions: 461 lb/hour 3,108 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 177 lb/hour	4. Equivalent Allowable Emissions: 177 lb/hour 775.26 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3018 tons/year	4. Equivalent Allowable Emissions: lbs/hr 3,018 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for NO_x for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC's		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 11 lb/hour		4. Synthetically Limited? [Yes] 57 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 11 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 11 lb/hr		4. Equivalent Allowable Emissions: 11 lb/hour 11 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3 lb/hour	4. Equivalent Allowable Emissions: 3 lb/hour 13.14 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 57 tons/year	4. Equivalent Allowable Emissions: lbs/hr 57 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for VOC for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 105.8 lb/hour		4. Synthetically Limited? [Yes] 871 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 105.8 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 94.3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 105.8 lb/hr		4. Equivalent Allowable Emissions: 105.8 lb/hour 105.8 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 94.3 lb/hour	4. Equivalent Allowable Emissions: 94.3 lb/hour 413.034 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 871 tons/year	4. Equivalent Allowable Emissions: lbs/hr 871 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for CO for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SAM (Sulfuric Acid Mist)	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 113 lb/hour	70 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 113 lb/hr Reference: Permit derived	7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 5, footnote a. of Permit #PSD-FL-146.		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Hg (Mercury Compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.021 lb/hour	4. Synthetically Limited? [Yes] 0.034 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.021 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on gas firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146. (oil emission rate = 0.0052 lb/hr)	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Be (Beryllium Compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.004 lb/hour	0.004 tons/year
4. Synthetically Limited? [Yes]	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.004 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No.5	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Fl (Fluorides Total)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.055 lb/hour	0.055 tons/year
4. Synthetically Limited? [Yes]	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.055 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 3

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input checked="" type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): The allowable opacity limits listed above are applicable to operation on distillate oil only. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): Allowable opacity limits above are applicable to operation on natural gas. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) allows excess emissions for up to 2 hrs/24 hrs for startup, shutdown and malfunctions.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	[<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
4. Monitor Information Manufacturer: : NOx = TECO CO₂ = Milton Roy Model Number: NOx = 42 CO₂ = 3300 Serial Number: NOx = 42D-49811-284 CO₂ = N4CO314T	
5. Installation Date: 12/09/1994	6. Performance Specification Test Date: 12/28/94
7. Continuous Monitor Comment (limit to 200 characters): This emission unit is classified as a "gas fired" under the 40 CFR 75 definitions and therefore not required to monitor opacity or SO₂.	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-1.jpg</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3 -2.txt</u> [] Not Applicable [] Waiver
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3 -3.txt</u> [] Not Applicable [] Waiver
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-4.jpg</u> [] Not Applicable [] Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU3-6.txt</u> <input type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>PMRU3-11.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 (Note: Refer to Title V permit 0850001-008-AV.)
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable (Refer to Attachment PMRCAM.)
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>PMREU1-15</u> [] 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

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

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine with Heat Recovery Steam Generator (HRSG) CT 4A</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: 05 <input type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 04/15/94</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? [Y]</p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>Each combined cycle unit consists of two combustion turbines with each unit firing into a Heat Recovery Steam Generator (HRSG). Each combustion turbine is connected to an electrical generator. Waste heat recovered in the HRSGs is sent to a steam turbine-generator for production of additional electric power. Generator nameplate rating is given for the CT-coupled generator only.</p>			

Emissions Unit Control Equipment

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

Dry Low-NO_x Combustors for Natural Gas combustion and steam injection for distillate oil combustion.

2. Control Device or Method Code(s): **025**

Emissions Unit Details

1. Package Unit:		
Manufacturer: GE	Model Number: MS7001FA	
2. Generator Nameplate Rating:	204	MW
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1,966	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum Heat Input (HI) Rate above = current maximum for natural gas fuel @ 40 deg. F. Max.; HI for dist. Oil = 1,846 mmBtu. Compliance method for HI is fuel sampling and analysis. Operation of inlet foggers limited to 181,661 degree F-hours per calendar year.		

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

List of Applicable Federal Regulations

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
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

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) (i), 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 (f), CEMS	Minimum Measurement Capability
40 CFR 75.10 (g), CEMS	
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

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

List of Applicable Federal Regulations

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
40 CFR 75.33 , CEMS	Standard Missing Data Procedures
40 CFR 75.36 , CEMS	Missing Data for Heat Input

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

List of Applicable Federal Regulations

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
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements

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

List of Applicable Federal Regulations

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 75.65 , CEMS	
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; SO ₂ & NO _x for controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NO _x & Flow

List of Applicable Federal Regulations

40 CFR Part 75 - Appendix D	Optional SO2 Emissions Protocol for Gas Fired Units
40 CFR Part 75 - Appendix F	Conversion Procedures
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
40 CFR 60.332(a)(1) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(f) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.334(a) , Subpart GG	Monitoring of water injection during firing of oil
40 CFR 60.334(b)(1) , Subpart GG	Monitoring of operation during firing of oil, oil specifications
40 CFR 60.334(b)(2) , Subpart GG	Monitoring of operation during firing of natural gas, gas specifications
40 CFR 60.334(c)(1) , Subpart GG	Monitoring of NOx emissions at load conditions during operation
40 CFR 60.335, Subpart GG	Custom Fuel Monitoring Schedule for Natural Gas

List of Applicable State Regulations

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
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.320(4)(b),Stationary Units	CT & Diesel Unit (State Only)
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
FAC 62-297.310(8) , Emiss. Monitoring	Test Reports

List of Applicable State Regulations

FAC 62-297.310(4)(a) , Emiss. Monitoring	Applicable Test Procedures , Sampling Time
FAC 62-297.310(4)(b) , Emiss. Monitoring	Sample Volume
FAC 62-297.310(4)(c) , Emiss. Monitoring	Required Low Rate Range-PM, H2SO4,F
FAC 62-297.310(4)(d) , Emiss. Monitoring	Calibration
FAC 62-297.310(4)(e) , Emiss. Monitoring	EPA Method 5 (applicable when combusting oil)
FAC 62-297.310(5) , Emiss. Monitoring	Determination of Process Variables
FAC 62-297.310(6)(a) , Emiss. Monitoring	Permanent Testing Facilities
FAC 62-297.310(6)(c) , Emiss. Monitoring	Sampling Ports
FAC 62-297.310(6)(d) , Emiss. Monitoring	Work Platforms
FAC 62-297.310(6)(e) , Emiss. Monitoring	Access
FAC 62-297.310(6)(f) , Emiss. Monitoring	Electrical Power Provisions
FAC 62-297.310(6)(g) , Emiss. Monitoring	Equipment Support
FAC 62-297.310(7)(a)3 , Emiss. Monitoring	Permit Renewal Test Requirement
FAC 62-297.310(7)(a)4b,Emiss. Monitoring	Annual Test Requirement
FAC 62-297.310(7)(a)5 , Emiss. Monitoring	Exemption from PM Test if operation is less than 400 hrs on oil/distillate
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

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 213.3 feet	7. Exit Diameter: 20 feet	
8. Exit Temperature: 280 °F	9. Actual Volumetric Flow Rate: 2,420,307 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543266 North (km): 299261			
14. Emission Point Comment (limit to 200 characters): The Volumetric Flow Rate (VFR) given above is reflective of a 40 degree F ambient condition while firing oil. The VFR while firing nat. gas under the same condition is 2,352,904 acfm. The VFR while firing nat. gas in power aug. mode is 2,468,838 acfm.			

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pipeline Natural Gas burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 1.87	5. Maximum Annual Rate: 16,381.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % 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 Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Light Distillate Oil burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 14.13	5. Maximum Annual Rate: 28,260	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130.66
10. Segment Comment (limit to 200 characters): Max. annual rate is for 2,000 hrs of operation on Dist. Oil, which is limited in the PSD permit (4.a) and the Site Certification for the 4 CTs of Units 3 & 4.		

**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			EL
SO2			EL
NOx	025	028	EL
CO			EL
VOC			EL
PM10			EL
SAM			NS
H114			NS
FL			NS
H021			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM₁₀		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 60.6lb/hour 100 tons/year		4. Synthetically Limited? [Yes]	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 60.6 lb/hr Reference: see comment below		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM₁₀. The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 18 lb/hour		4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year	
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CTs of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM₁₀ from all 4 CTs of Units 3 & 4.	

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 Efficiency of Control:
3. Potential Emissions: 60.6 lb/hour	4. Synthetically Limited? [Yes] 100 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 60.6 lb/mmBtu Reference: see comment below	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Not Applicable - limited by permit	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM₁₀. The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 18 lb/hour	4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CTs of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM₁₀ from all 4 CTs of Units 3 & 4.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 920 lb/hour		4. Synthetically Limited? [Yes] 568 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.5 % Sulfur in Fuel Reference: see comment		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable – Permit limit on % Sulfur in Fuel			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Sulfur content of distillate oil is limited to 0.5% max. and 0.3% annual average by the PSD permit. Oil firing in CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 920 lbs/hr		4. Equivalent Allowable Emissions: 920 lb/hour 568 tons/year	
5. Method of Compliance (limit to 60 characters): Fuel Specifications and vendor sampling and analysis of distillate oil			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 91.5 lb/hour	4. Equivalent Allowable Emissions: 91.5 lb/hour 400.77 tons/year
5. Method of Compliance (limit to 60 characters): ASTM Methods D 1072-80, D 3031-87, D-4084-82, or D3246-81 (or equivalent)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 568 tons/year	4. Equivalent Allowable Emissions: 568 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for SO2 for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 461 lb/hour	4. Synthetically Limited? [Yes] 3,108 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 461 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 177 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 461 lbs/hr	4. Equivalent Allowable Emissions: 461 lb/hour 3,108 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 177 lb/hour	4. Equivalent Allowable Emissions: 177 lb/hour 775.26 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3018 tons/year	4. Equivalent Allowable Emissions: lbs/hr 3018 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for NO_x for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOCs	2. Total Percent Efficiency of Control:
3. Potential Emissions: 11 lb/hour	4. Synthetically Limited? [Yes] 57 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 11 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 11 lbs/hr	4. Equivalent Allowable Emissions: 11 lb/hour 11 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3 lb/hour	4. Equivalent Allowable Emissions: 3 lb/hour 13.14 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 57 tons/year	4. Equivalent Allowable Emissions: lbs/hr 57 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for VOC for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 105.8 lb/hour		4. Synthetically Limited? [Yes] 871 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 105.8 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 94.3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 105.8 lbs/hr		4. Equivalent Allowable Emissions: 105.8 lb/hour 105.8 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 94.3 lb/hour	4. Equivalent Allowable Emissions: 94.3 lb/hour 413.034 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 871 tons/year	4. Equivalent Allowable Emissions: lbs/hr 871 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for CO for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SAM (Sulfuric Acid Mist)	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 113 lb/hour	70 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 113 lb/hr Reference: Permit derived	7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 5, footnote a. of Permit #PSD-FL-146.		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters): Annual Operating Report		
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.		

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Hg (Mercury Compounds)	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.021 lb/hour	0.034 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 0.021 lb/hr Reference: Permit derived	7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on gas firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146. (oil emission rate = 0.0052 lb/hr)		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters): Annual Operating Report		
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.		

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Be (Beryllium Compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.004 lb/hour	4. Synthetically Limited? [Yes] 0.004 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.004 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: FI (Fluorides Total)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.055 lb/hour	4. Synthetically Limited? [Yes] 0.055 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.055 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: Not Applicable	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No. 5.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 3

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
5. Method of Compliance: VE Test (EPA Method 9)	
6. Visible Emissions Comment (limit to 200 characters): The allowable opacity limits listed above are applicable to operation on distillate oil only. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [X] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): Allowable opacity limits above are applicable to operation on natural gas. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) allows excess emissions for up to 2 hrs/24 hrs for startup, shutdown and malfunctions.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : NOx = TECO CO₂ = Milton Roy Model Number: NOx = 42 CO₂ = 3300 Serial Number: NOx = 42D-49810-284 CO₂ = N4CO309T	
5. Installation Date: 12/09/1994	6. Performance Specification Test Date: 12/28/94
7. Continuous Monitor Comment (limit to 200 characters): This emission unit is classified as a "gas fired" under the 40 CFR 75 definitions and therefore not required to monitor opacity or SO₂ .	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-1.jpg</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3 -2.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3 -3.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-4.jpg</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU3-6.txt</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>PMRU3-11.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 (Note: Refer to Title V permit 0850001-008-AV.)
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable (Note: Refer to Attachment PMRCAM.)
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>PMREU1-15</u> [] 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

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

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Combustion Turbine with Heat Recovery Steam Generator (HRSG) CT 4B</p>			
<p>4. Emissions Unit Identification Number: ID: 03</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: 04/15/94</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? <input checked="" type="checkbox"/></p>
<p>6. Emissions Unit Comment: (Limit to 500 Characters) Each combined cycle unit consists of two combustion turbines with each unit firing into a Heat Recovery Steam Generator (HRSG). Each combustion turbine is connected to an electrical generator. Waste heat recovered in the HRSG's is sent to a steam turbine-generator for production of additional electric power. Generator nameplate rating is given for the CT-coupled generator only.</p>			

Emissions Unit Control Equipment

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

Dry Low-NO_x Combustors for Natural Gas combustion and steam injection for distillate oil combustion.

2. Control Device or Method Code(s): **025**

Emissions Unit Details

1. Package Unit:		
Manufacturer: GE	Model Number: MS7001FA	
2. Generator Nameplate Rating:	204	MW
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	1,966	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Maximum Heat Input (HI) Rate above = current maximum for natural gas fuel @40 deg. F. Max.; HI for dist. Oil = 1,846 mmBtu. Compliance method for HI is fuel sampling and analysis . Operation of inlet foggers limited to 181,661 degree F-hours per calendar year.		

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

List of Applicable Federal Regulations

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
40 CFR 72.30 (a), Acid Rain Permits	Acid Rain Permit Duty to Apply

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

List of Applicable Federal Regulations

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

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

List of Applicable Federal Regulations

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) (i), 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 (f), CEMS	Minimum Measurement Capability
40 CFR 75.10 (g), CEMS	
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

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

List of Applicable Federal Regulations

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
40 CFR 75.33 , CEMS	Standard Missing Data Procedures
40 CFR 75.36 , CEMS	Missing Data for Heat Input

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

List of Applicable Federal Regulations

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
40 CFR 75.59 , CEMS	Certification, QA/QC record Provisions
40 CFR 75.60 , CEMS	General Reporting Requirements

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

List of Applicable Federal Regulations

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 75.65 , CEMS	
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; SO ₂ & NO _x for controlled sources
40 CFR Part 75 - Appendix C-2	Missing Data ; Load Based Procedure; NO _x & Flow

List of Applicable Federal Regulations

40 CFR Part 75 - Appendix D	Optional SO ₂ Emissions Protocol for Gas Fired Units
40 CFR Part 75 - Appendix F	Conversion Procedures
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 SO ₂ Offset Plans
40 CFR 77.5 (b) , Excess Emissions	Future Deduction of SO ₂ Allowances for Excess SO ₂ Emissions
40 CFR 77.6 , Excess Emissions	Future Penalties for Excess Emissions of SO ₂ and NO _x
40 CFR 60.332(a)(1) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(f) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.332(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(b) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.333(k) , Subpart GG	Nitrogen Oxide and Sulfur Standards
40 CFR 60.334(a) , Subpart GG	Monitoring of water injection during firing of oil
40 CFR 60.334(b)(1) , Subpart GG	Monitoring of operation during firing of oil, oil specifications
40 CFR 60.334(b)(2) , Subpart GG	Monitoring of operation during firing of natural gas, gas specifications
40 CFR 60.334(c)(1) , Subpart GG	Monitoring of NO _x emissions at load conditions during operation
40 CFR 60.335, Subpart GG	Custom Fuel Monitoring Schedule for Natural Gas

List of Applicable State Regulations

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
FAC 62-210.430 , Acid Rain	Compliance Options for Acid Rain Units
FAC 62-296.320(4)(b), Stationary Units	CT & Diesel Unit (State Only)
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
FAC 62-297.310(8) , Emiss. Monitoring	Test Reports

List of Applicable State Regulations

FAC 62-297.310(4)(a) , Emiss. Monitoring	Applicable Test Procedures , Sampling Time
FAC 62-297.310(4)(b) , Emiss. Monitoring	Sample Volume
FAC 62-297.310(4)(c) , Emiss. Monitoring	Required Low Rate Range-PM, H2SO4,F
FAC 62-297.310(4)(d) , Emiss. Monitoring	Calibration
FAC 62-297.310(4)(e) , Emiss. Monitoring	EPA Method 5 (applicable when combusting oil)
FAC 62-297.310(5) , Emiss. Monitoring	Determination of Process Variables
FAC 62-297.310(6)(a) , Emiss. Monitoring	Permanent Testing Facilities
FAC 62-297.310(6)(c) , Emiss. Monitoring	Sampling Ports
FAC 62-297.310(6)(d) , Emiss. Monitoring	Work Platforms
FAC 62-297.310(6)(e) , Emiss. Monitoring	Access
FAC 62-297.310(6)(f) , Emiss. Monitoring	Electrical Power Provisions
FAC 62-297.310(6)(g) , Emiss. Monitoring	Equipment Support
FAC 62-297.310(7)(a)3 , Emiss. Monitoring	Permit Renewal Test Requirement
FAC 62-297.310(7)(a)4b,Emiss. Monitoring	Annual Test Requirement
FAC 62-297.310(7)(a)5 , Emiss. Monitoring	Exemption from PM Test if operation is less than 400 hrs on oil/distillate
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

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 213.3 feet	7. Exit Diameter: 20 feet	
8. Exit Temperature: 280 °F	9. Actual Volumetric Flow Rate: 2,420,307 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543124 North (km): 299261			
14. Emission Point Comment (limit to 200 characters): The Volumetric Flow Rate (VFR) given above is reflective of a 40 degree F ambient condition while firing oil. The VFR while firing nat. gas under the same condition is 2,352,904 acfm. The VFR while firing nat. gas in power aug. mode is 2,468,838 acfm.			

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

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pipeline Natural Gas burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 1.87	5. Maximum Annual Rate: 16,381.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,050
10. Segment Comment (limit to 200 characters): $\%S = [10\text{gr of S}/1000 \text{ CF gas}] * [1 \text{ lb S}/7000 \text{ gr}] [\text{CF gas}/0.046 \text{ lb gas}] * 100 = 0.0031\%S$		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Light Distillate Oil burned in Combustion Turbine		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 14.13	5. Maximum Annual Rate: 28,260	6. Estimated Annual Activity Factor: %
7. Maximum % Sulfur: 0.5	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130.66
10. Segment Comment (limit to 200 characters): Max. annual rate is for 2,000 hrs of operation on Dist. Oil, which is limited in the PSD permit (4.a) and the Site Certification for the 4 CT's of Units 3 & 4.		

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			EL
SO2			EL
NOx	025	028	EL
CO			EL
VOC			EL
PM10			EL
SAM			NS
H114			NS
FL			NS
H021			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM-10	2. Total Percent Efficiency of Control:
3. Potential Emissions: 60.6lb/hour	4. Synthetically Limited? [Yes] 100 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 60.6 lb/hr Reference: see comment below	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM-10, The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 18 lb/hour	4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM-10 from all 4 CT's of Units 3 & 4.	

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 Efficiency of Control:
3. Potential Emissions: 60.6 lb/hour 100 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 60.6 lb/mmBtu Reference: see comment below	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): NA - limited by permit	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The PSD permit and Site Certification use the same emission limit for PM and PM-10, The hourly rate is for oil firing. The hourly rate for Nat. Gas is 18 lb/hr. Emissions are synth. limited based on PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 18 lb/hour	4. Equivalent Allowable Emissions: 18 lb/hour 78.8 tons/year
5. Method of Compliance (limit to 60 characters): Not required for Natural Gas firing	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 60.6 lb/hour	4. Equivalent Allowable Emissions: 60.6 lb/hour 60.6 tons/year
5. Method of Compliance (limit to 60 characters): DEP Rule 62-296.405(1)(e)2 only for firing oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of dist. oil operation. The four CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 100 tons/year	4. Equivalent Allowable Emissions: 100 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for PM-10 from all 4 CT's of Units 3 & 4.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 920 lb/hour 568 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.5 % Sulfur in Fuel Reference: see comment	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable – Permit limit on % Sulfur in Fuel	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Sulfur content of distillate oil is limited to 0.5% max. and 0.3% annual average by the PSD permit. Oil firing in CT's of Units 3 & 4 are restricted to an aggregate limit of 2,000 hours per year for dist. oil firing.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 920 lbs/hr	4. Equivalent Allowable Emissions: 920 lb/hour 568 tons/year
5. Method of Compliance (limit to 60 characters): Fuel Specifications and vendor sampling and analysis of distillate oil	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 91.5 lb/hour	4. Equivalent Allowable Emissions: 91.5 lb/hour 400.77 tons/year
5. Method of Compliance (limit to 60 characters): ASTM Methods D 1072-80, D 3031-87, D-4084-82, or D3246-81 (or equivalent)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 568 tons/year	4. Equivalent Allowable Emissions: 568 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for SO2 for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x	2. Total Percent Efficiency of Control:
3. Potential Emissions: 461 lb/hour 3,108 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 461 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 177 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 461 lbs/hr	4. Equivalent Allowable Emissions: 461 lb/hour 3,108 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 177 lb/hour	4. Equivalent Allowable Emissions: 177 lb/hour 775.26 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 20 or Modified Method 7E	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3018 tons/year	4. Equivalent Allowable Emissions: lbs/hr 3018 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for NO_x for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC's	2. Total Percent Efficiency of Control:
3. Potential Emissions: 11 lb/hour 57 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 11 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.	

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 11 lbs/hr	4. Equivalent Allowable Emissions: 11 lb/hour 11 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.	

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3 lb/hour	4. Equivalent Allowable Emissions: 3 lb/hour 13.14 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 18 or Modified Method 25A	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 57 tons/year	4. Equivalent Allowable Emissions: lbs/hr 57 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for VOC for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 105.8 lb/hour		871 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 105.8 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable - Limited by PSD Permit.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing (worst case). The allowable emission rate firing natural gas is 94.3 lb/hr at 40 degrees F. Note that emissions at other ambient temperatures may vary from these values.			

Allowable Emissions Allowable Emissions 1 of 3

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 105.8 lbs/hr		4. Equivalent Allowable Emissions: 105.8 lb/hour 105.8 tons/year	
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Emissions based on distillate oil operation. The emissions of this pollutant are limited based to an aggregate limit of 2,000 hours per year for distillate oil operation.			

Allowable Emissions Allowable Emissions 2 of 3

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 94.3 lb/hour	4. Equivalent Allowable Emissions: 94.3 lb/hour 413.034 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack testing using EPA Method 10	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above for lb/hr emission rate is reflective of natural gas operation at 100% capacity factor.	

Allowable Emissions Allowable Emissions 3 of 3

1. Basis for Allowable Emissions Code: Emissions limit required by rule	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 871 tons/year	4. Equivalent Allowable Emissions: lbs/hr 871 tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): The information given in fields 3 and 4 above represents the annual tpy limit for CO for this emission unit. In addition, the tpy value given in field 4 represents emissions from 4 combustion turbines.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SAM (Sulfuric Acid Mist)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 113 lb/hour		4. Synthetically Limited? [Yes] 70 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 113 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 5, footnote a. of Permit #PSD-FL-146.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: NA		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters): Annual Operating Report			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No.5			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Hg (Mercury Compounds)	2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.021 lb/hour	0.034 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year		
6. Emission Factor: 0.021 lb/hr Reference: Permit derived		7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable		
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on gas firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146. (oil emission rate = 0.0052 lb/hr)		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: NA	4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters): Annual Operating Report		
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No.5		

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Be (Beryllium Compounds)	2. Total Percent Efficiency of Control:
3. Potential Emissions: 0.004 lb/hour 0.004 tons/year	4. Synthetically Limited? [Yes]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.004 lb/hr Reference: Permit derived	7. Emissions Method Code: 5
8. Calculation of Emissions (limit to 600 characters): Not Applicable	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: NA	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters): Annual Operating Report	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No.5	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: Fl (Fluorides Total)		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.055 lb/hour		4. Synthetically Limited? [Yes] 0.055 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.055 lb/hr Reference: Permit derived		7. Emissions Method Code: 5	
8. Calculation of Emissions (limit to 600 characters): Not Applicable			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Potential emission rates are based on oil firing. The emissions of this pollutant are synthetically limited based on Specific Condition 4, footnote a. of Permit #PSD-FL-146.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: NA		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Determined by BACT and tabulated for PSD and inventory purposes as required by PSD Permit PSD-FL-146, specific condition No.5			

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 3

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): The allowable opacity limits listed above are applicable to operation on distillate oil only. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 3

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [X] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): Allowable opacity limits above are applicable to operation on natural gas. Refer to Site Certification specific condition II.A.8 and PSD permit specific condition 8.	

Visible Emissions Limitation: Visible Emissions Limitation 3 of 3

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) allows excess emissions for up to 2 hrs/24 hrs for startup, shutdown and malfunctions.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information Manufacturer: : NOx = TECO CO₂ = Milton Roy Model Number: NOx = 42 CO₂ = 3300 Serial Number: NOx = 42D-49805-284 CO₂ = N4CO313T	
5. Installation Date: 12/09/1994	6. Performance Specification Test Date: 12/28/94
7. Continuous Monitor Comment (limit to 200 characters): This emission unit is classified as a "gas fired" under the 40 CFR 75 definitions and therefore not required to monitor opacity or SO₂ .	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-1.jpg</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3 -2.txt</u> [] Not Applicable [] Waiver
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3 -3.txt</u> [] Not Applicable [] Waiver
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU3-4.jpg</u> [] Not Applicable [] Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU3-6.txt</u> <input type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/> Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>PMRU3-11.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 (Note: Refer to Title V permit 0850001-008-AV.)
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable (Note: Refer to Attachment PMRCAM.)
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>PMREU1-15</u> [] 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

III. EMISSIONS UNIT INFORMATION

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

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

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one) <input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input checked="" type="checkbox"/> 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): Auxiliary Boiler			
4. Emissions Unit Identification Number: [] No ID ID: 07 [] ID Unknown			
5. Emissions Unit Status Code: A	6. Initial Startup Date: 07/01/93	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [N]
9. Emissions Unit Comment: (Limit to 500 Characters) Auxiliary Boiler provides steam to actuate steam seals on steam turbine components of Combined Cycle Units 3 & 4. This unit is regulated under NSPS 40 CFR 60.4c, Subpart Dc.			

Emissions Unit Control Equipment

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

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:	
Manufacturer: VAPOR	Model Number: 1TG-5905-VHK-350-8
2. Generator Nameplate Rating:	MW
3. Incinerator Information:	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	16.3 mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day	
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:	hours/day	days/week	
	weeks/year	8760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	<p>The 16.3 mmBtu/hr heat input is reflective of both the auxiliary boiler (14.8 MMBtu/hr) and the superheater (1.5 mmBtu/hr), both of which are operated when steam from the Auxiliary Boiler is needed.</p>		

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

List of Applicable Federal Regulations

40 CFR 60.42 c(d)	40 CFR 60.13(e)
40 CFR 60.42 c(g)	40 CFR 60.13(h)
40 CFR 60.42 c(h)(1)	40 CFR 60.7(b)
40 CFR 60.43 c(c)	40 CFR 60.7(f)
40 CFR 60.43 c(d)	40 CFR 60.8(c)
40 CFR 60.44 c	40 CFR 60.8(e)
40 CFR 60.44 c	40 CFR 60.8(f)
40 CFR 60.44 c(b)	
40 CFR 60.44 c(c)	
40 CFR 60.45 c	
40 CFR 60.46 c(e)	
40 CFR 60.48 c	
40 CFR 60.11	
40 CFR 60.12	
40 CFR 60.11(a)	
40 CFR 60.13(a)	
40 CFR 60.13(c)	
40 CFR 60.13(d)(1)	
40 CFR 60.13(d)(2)	

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

List of Applicable State Regulations

F.A.C. 62-204.800(7)(b)4	F.A.C. 62-297.310(1)
F.A.C. 62-210.650	F.A.C. 62-297.310(2)(b)
F.A.C. 62-210.700(1)	F.A.C. 62-297.310(4)(a)2
F.A.C. 62-210.700(4)	F.A.C. 62-297.310(5)
F.A.C. 62-210.700(6)	F.A.C. 62-297.310(7)(a)3
F.A.C. 62-296.406	F.A.C. 62-297.310(7)(a)4a
F.A.C. 62-204.800(7)(d)	F.A.C. 62-297.310(7)(a)9

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? EU-7.jpg		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 60 feet	7. Exit Diameter: 3.6 feet	
8. Exit Temperature: 490 °F	9. Actual Volumetric Flow Rate: 30,536 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543193 North (km): 2992671			
14. Emission Point Comment (limit to 200 characters): The auxiliary steam system includes both the auxiliary boiler and the superheater, both of which are operated concurrently when additional steam is needed for combined cycle start-up.			

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural gas burned in the auxiliary boiler.		
2. Source Classification Code (SCC): 1-02-006-01		3. SCC Units: Million Cubic Feet Burned
4. Maximum Hourly Rate: 0.016	5. Maximum Annual Rate: 140.16	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.0031	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1000
10. Segment Comment (limit to 200 characters): Hours of operation restricted to startup and shutdown of the combined cycle units and for periodic testing and maintenance.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Distillate Oil burned in the auxiliary boiler.		
2. Source Classification Code (SCC): 1-01-005-01		3. SCC Units: Thousands Gallons Burned
4. Maximum Hourly Rate: 0.125	5. Maximum Annual Rate: 1,093	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 130.7
10. Segment Comment (limit to 200 characters): Hours of operation restricted to startup and shutdown of the combined cycle units and for periodic testing and maintenance.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOx			EL
SO2			EL

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: 4.88 lb/hour 21.37 tons/year	4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.3 lb/mmBtu Reference: PSD-FL-146	7. Emissions Method Code: 1
8. Calculation of Emissions (limit to 600 characters): 0.3 lb/mmBtu * 16.3 mmBtu/hr = 4.89 lb/hr 4.89 lb/hr * 8760 hrs/yr / 2,000lb/ton = 21.4 tons/year	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The potential emissions numbers are for 8760 hours of operation. This emission unit is limited to operation during startup and shutdown only. Emissions include the auxiliary boiler and the auxiliary boiler superheater which are operated concurrently.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.3 lbs/mmBtu	4. Equivalent Allowable Emissions: 4.89 lbs/hr 21.4 tons/year
5. Method of Compliance (limit to 60 characters): None Required	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Information provided is for both natural gas and distillate oil operation.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 5.05 lb/hour	22.1 tons/year 4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.31 lb/mmBtu (3% S) Reference: PSD-FL-146	10. Emissions Method Code: 1
11. Calculation of Emissions (limit to 600 characters): 0.31 lb/mmBtu * 16.3 mmBtu/hr = 5.05 lb/hr (oil) 5.05 lb/hr * 8760 hrs/yr / 2,000lb/ton = 22.1 tons/year (oil)	
12. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The potential emissions numbers are for 8760 hours of operation. This emission unit is limited to operation during startup and shutdown only. Emissions include the auxiliary boiler and the auxiliary boiler superheater which are operated concurrently.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other	2. Future Effective Date of Allowable Emissions:
4. Requested Allowable Emissions and Units: 3% S oil	4. Equivalent Allowable Emissions: 5.05 lbs/hr 22.1 tons/year
5. Method of Compliance (limit to 60 characters): 12-month weighted average sulfur content	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Information provided is for distillate oil operation.	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: 27 % Maximum Period of Excess Opacity Allowed: 6 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Information provided for operation using distillate oil	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: [<input checked="" type="checkbox"/>] Rule [<input type="checkbox"/>] Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: 100 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) allows excess emissions for up to 2 hrs / 24 hrs for startup, shutdown, and malfunction.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): Continuous Emission Monitoring Equipment is not required to be installed, operated, or maintained on the Auxiliary Boiler.	

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

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: <u>PMRU7-1.jpg</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification [X] Attached, Document ID: <u>PMRU7-2.txt</u> [] 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 [X] Attached, Document ID <u>PMRU7-6.txt</u> [] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application [] Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [] Attached, Document ID <u>PMRU7-11</u> [] 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: _____ [] 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

III. EMISSIONS UNIT INFORMATION

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

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

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one) <input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input type="checkbox"/> 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): Emergency Diesel Generator for EU 3 - 6			
4. Emissions Unit Identification Number: [] No ID ID: 09 [] ID Unknown			
5. Emissions Unit Status Code: A	6. Initial Startup Date: 08/14/92	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [N]
9. Emissions Unit Comment: (Limit to 500 Characters) Generator Nameplate rating for this unit is 718kVA. The emission unit is addressed in PSD Permit #PSD-FL-146			

Emissions Unit Control Equipment

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

Not Applicable

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit:		
Manufacturer: Unknown	Model Number: Unknown	
2. Generator Nameplate Rating:	0.61	MW
3. Incinerator Information:		
Dwell Temperature:		°F
Dwell Time:		seconds
Incinerator Afterburner Temperature:		°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	5.55 mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr		tons/day
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:	hours/day		days/week
	weeks/year	8760	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	<p>19,130 btu/lb x 6.83 lb/gal = 130,657.9 btu/gal</p> <p>(130,657.9 btu/gal x 42.5 gal/hr)/1,000,000 btu/mmBtu = 5.55 mmBtu/hr</p>		

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

List of Applicable State Regulations

F.A.C. 62-210.650	F.A.C. 62-297.310(1)
F.A.C. 62-210.650	F.A.C. 62-297.310(2)(b)
F.A.C. 62-210.700(1)	F.A.C. 62-297.310(4)(a)2
F.A.C. 62-210.700(4)	F.A.C. 62-297.310(5)
F.A.C. 62-210.700(5)	F.A.C. 62-297.310(7)(a)3
F.A.C. 62-210.700(6)	F.A.C. 62-297.310(7)(a)4a
F.A.C. 62-204.800(7)(d)	F.A.C. 62-297.310(7)(a)9

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? EU 8 - EDG		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: H	6. Stack Height: 13 feet	7. Exit Diameter: 0.5 feet	
8. Exit Temperature: 810 °F	9. Actual Volumetric Flow Rate: 4750 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543202 North (km): 22992707			
14. Emission Point Comment (limit to 200 characters): Emergency Diesel Generator for Combined Cycle Units 3 & 4.			

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Diesel Fuel burned in the emergency diesel generator		
2. Source Classification Code (SCC): 2-01-001-02		3. SCC Units: thousands gallons burned
4. Maximum Hourly Rate: 0.0425	5. Maximum Annual Rate: 372.3	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.3	8. Maximum % Ash:	9. Million Btu per SCC Unit: 131
10. Segment Comment (limit to 200 characters): Hours of operation restricted by PSD permit #PSF-FL-146 for providing emergency power to units 3 and 4 and to test operation.		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOx			EL
SO2			EL

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: 72.07 lb/hour		4. Synthetically Limited? [YES] 316 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 15 g/hp-hour Reference: PSD Permit #PSD-FL-146		13. Emissions Method Code: 1	
14. Calculation of Emissions (limit to 600 characters): $15 \text{ g/hp-hour} \times \text{Btu}/(2.547 \times 10^{-3})\text{hp-hr} = 5.889 \times 10^{-3} \text{ g/Btu}$ $5.889 \times 10^{-3} \text{ g/Btu} \times 1,000,000 \text{ Btu/mmBtu} = 5889.28 \text{ g/mmBtu}$ $5889.28 \text{ g/mmBtu} \times (2.205 \times 10^{-3} \text{ g/lb}) = 12.99 \text{ lb/mmBtu}$ $12.99 \text{ g/mmBtu} \times 5.55 \text{ mmBtu/hr} = 72.07 \text{ lb/hr}$ $(72.07 \text{ lb./hr} \times 8760 \text{ hrs/year})/2000\text{lb/ton} = 316 \text{ tons/year}$			
15. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): This Emissions Unit is limited to operation when emergency power is needed for emission units 3 – 4. Emission estimates are given for operation at 8760 hrs/year.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Required or assumed by permittee for other		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 15 g/hp-hour		4. Equivalent Allowable Emissions: 72.07 lbs/hr 316 tons/year	
5. Method of Compliance (limit to 60 characters): None Required			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): PSD Permit #PSD-FL-146 specifies and emission limit of 15g/hp-hour for this emission unit.			

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 20 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Information provided for operation using distillate oil	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE100	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 100 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: 100 min/hour	
4. Method of Compliance: EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): DEP Rule 62-210.700(1) allows excess emissions for up to 2 hrs / 24 hrs for startup, shutdown, and malfunction.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information Manufacturer: : Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): Continuous Emission Monitoring Equipment is not required to be installed, operated, or maintained on Emergency Diesel Generators	

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU8-1.jpg</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRU8-2.txt</u> [] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable [] Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMRU8-6.txt</u> <input type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID <u>PMRU8-11</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: <u>PMRU8-13</u> <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

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

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

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one) <input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input type="checkbox"/> 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): Combustion Turbine 8A & 8B			
4. Emissions Unit Identification Number: [] No ID ID: 11 - 12 [] ID Unknown			
5. Emissions Unit Status Code: A	6. Initial Startup Date: 08/01/01	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [Y]
9. Emissions Unit Comment: (Limit to 500 Characters) Emission Units 11 & 12 are lean burn General Electric model 7FA simple cycle combustion turbines for electrical generation using natural gas as primary fuel and distillate oil as backup fuel.			

Emissions Unit Control Equipment

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

Dry-Low NOx Staged Combustion

2. Control Device or Method Code(s): **025**

Emissions Unit Details

1. Package Unit:	
Manufacturer: General Electric	Model Number: PG7241 (FA)
2. Generator Nameplate Rating:	191 MW
3. Incinerator Information:	
Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	2,008	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	3390 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Combustion turbine maximum heat input rate is provided at inlet air temperature of 35 degrees F using High Heating Value (HHV). Operation below 50% is limited to 120 minutes per cycle and 60 minutes for an oil to natural gas fuel switch.		

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? See Figure 1.3-1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through simple cycle stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 80 feet	7. Exit Diameter: 20.5 feet	
8. Exit Temperature: 1,115 °F	9. Actual Volumetric Flow Rate: 2,380,000 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543.06 North (km): 2997.68			
14. Emission Point Comment (limit to 200 characters): Stack conditions for operation at 35 °F firing Natural gas			

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

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Pipeline Natural Gas		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 1.82	5. Maximum Annual Rate: 6,158	6. Estimated Annual Activity Factor: 39%
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,024
10. Segment Comment (limit to 200 characters): Maximum Hourly Rate = 1.816. Maximum and Annual rates based on 35 °F turbine inlet and 3,390 Base Load hours. Annual Million Btu assumes Natural Gas HHV.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Distillate Oil		
2. Source Classification Code (SCC): 2-01-001-01		3. SCC Units: Thousand Gallons
4. Maximum Hourly Rate: 14.717	5. Maximum Annual Rate: 7,358.35	6. Estimated Annual Activity Factor: 6.8%
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 139
10. Segment Comment (limit to 200 characters): Maximum Hourly Rate = 14.7167. Maximum and Annual rates based on 59 °F turbine inlet and 500 Base Load hours. Annual Million Btu assumes Distillate HHV.		

**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			NS
SO ₂			EL
NO _x	025	028	EL
CO			EL
VOC			EL
PM ₁₀			EL

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 Efficiency of Control:
3. Potential Emissions: 17.0 lb/hour 17.26 tons/year	4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 17.0 lb/hr Reference: GE, 1998 Golder Associates, Inc., 2000	7. Emissions Method Code: 2
8. Calculation of Emissions (limit to 600 characters): Max. PM on Distillate = 17.0 lbs/hr x 500 hrs/year = 8,500 lbs/yr Max. PM on Base Load Nat. Gas = 9.0 lbs/hr x 2,390 hrs/year = 21,510 lbs/yr Max. PM on Power Mode Nat. Gas = 9.0 lbs/hr x 500 hrs/year = 4,500 lbs/yr Max. Total PM Emissions / Year = 34,510 lbs = 17.26 tons Emissions for each unit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Lbs/hr and tons/year based on 35 °F turbine inlet temperature. Hours of operation limited to 500 hrs distillate and 3390 hrs Base Load Natural Gas.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 10 % Opacity	4. Equivalent Allowable Emissions: 17.0 lb/hour 17.26 tons/year
5. Method of Compliance (limit to 60 characters): VE Test (Method 9) < 10%	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Visible Emission standards are work practice standards established as BACT limits for PM and PM10 emissions. (Rule 62-212.400 F.A.C.)	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2	2. Total Percent Efficiency of Control:
3. Potential Emissions: 103.1 lb/hour 33.14 tons/year	4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 0.05% Sulfur Distillate; 1 grain / scf Nat. Gas Reference: GE, 1998 Golder Associates, Inc., 2000	7. Emissions Method Code: 2
8. Calculation of Emissions (limit to 600 characters): Max. SO2 on Distillate = 103.1 lbs/hr x 500 hrs/year = 51,550 lbs/yr Max. SO2 on Base Load Nat. Gas = 5.1 lbs/hr x 2,390 hrs/year = 12,189 lbs/yr Max. SO2 on Power Mode Nat. Gas = 5.1 lbs/hr x 500 hrs/year = 2,550 lbs/yr Max. Total SO2 Emissions / Year = 66,289 lbs = 33.14 tons Emissions for each unit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Lbs/hr and tons/year based on 35 °F turbine inlet temperature. Hours of operation limited to 500 hrs distillate and 3390 hrs Base Load Natural Gas.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: 103.1 lb/hour 33.14 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): Fuel specifications limited to pipeline natural gas and No.2 distillate oil (or higher quality) containing no more than 0.05% sulfur by weight. (Rule 62-212.400 F.A.C.)	

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: 334.0 lb/hour 188.62 tons/year	4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: 42 ppmvd @ 15% O2 Distillate 9 ppmvd @ 15% O2- Natural Gas. Reference: GE, 1998 Golder Associates, Inc., 2000	7. Emissions Method Code: 2
8. Calculation of Emissions (limit to 600 characters): Max. NOx on Distillate = 334.0 lbs/hr x 500 hrs/year = 167,000 lbs/yr Max. NOx on Base Load Nat. Gas = 66.0 lbs/hr x 2,390 hrs/year = 157,740 lbs/yr Max. NOx on Power Mode Nat. Gas = 105.0 lbs/hr x 500 hrs/year = 52,500 lbs/yr Max. Total NOx Emissions / Year = 377,240 lbs = 188.62 tons Emissions for each unit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Lbs/hr and tons/year based on 35 °F turbine inlet temperature. Hours of operation limited to 500 hrs distillate and 3390 hrs Base Load Natural Gas.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 42 ppmvd @ 15% O2 Distillate 9 ppmvd @ 15% O2 Natural Gas	4. Equivalent Allowable Emissions: 334 lb/hour 188.62 tons/year
5. Method of Compliance (limit to 60 characters): CEM Part 75	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): NOx emiss. based on a 3 hour roll avg and excludes 2 hrs excess emissions from start or shutdown, 1 hour/day for switch from oil oper. to nat. gas. Allow. excess emis. of 2 hrs in any 24 hr for malf.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 68.0 lb/hour 67.0 tons/year	4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 20 ppmv Distillate ; 12 ppmvd Natural Gas Reference: GE, 1998 Golder Associates, Inc., 2000	7. Emissions Method Code: 2
8. Calculation of Emissions (limit to 600 characters): Max. CO on Distillate = 68.0 lbs/hr x 500 hrs/year = 34,000 lbs/yr Max. CO on Base Load Nat. Gas = 32.0 lbs/hr x 2,390 hrs/year = 76,480 lbs/yr Max. CO on Power Mode Nat. Gas = 47.0 lbs/hr x 500 hrs/year = 23,500 lbs/yr Max. Total CO Emissions / Year = 133,980 lbs = 67.0 tons Emissions for each unit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Lbs/hr and tons/year based on 35 °F turbine inlet temperature. Hours of operation limited to 500 hrs distillate and 3390 hrs Base Load Natural Gas.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 20 ppmv Distillate ; 12 ppmvd Nat. Gas	4. Equivalent Allowable Emissions: 68.0 lb/hour 67.0 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 10; Initial Compliance Test only	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emiss. based on manuf. data and excludes 2 hrs excess emissions from start or shutdown, 1 hour/day for switch from oil oper. to nat. gas. Allow. excess emis. of 2 hrs in any 24 hr for malf.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 7.5 lb/hour 6.21 tons/year	4. Synthetically Limited? [YES]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 3.5 ppmvw Distillate ; 1.5 ppmvw Natural Gas Reference: GE, 1998 Golder Associates, Inc., 2000	7. Emissions Method Code: 2
8. Calculation of Emissions (limit to 600 characters): Max. VOC on Distillate = 7.5 lbs/hr x 500 hrs/year = 3,750 lbs/yr Max. VOC on Base Load Nat. Gas = 3.0 lbs/hr x 2,390 hrs/year = 7,170 lbs/yr Max. VOC on Power Mode Nat. Gas = 3.0 lbs/hr x 500 hrs/year = 1,500 lbs/yr Max. Total VOC Emissions / Year = 12,420 lbs = 6.21 tons Emissions for each unit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 3.5 ppmvw Distillate ; 1.5 ppmvw Nat. Gas	4. Equivalent Allowable Emissions: 7.5 lb/hour 6.21 tons/year
5. Method of Compliance (limit to 60 characters): EPA Methods 25, 25A for initial compliance test only.	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emiss. based on manuf. data and excludes 2 hrs excess emissions from start or shutdown, 1 hour/day for switch from oil oper. to nat. gas. Allow. excess emis. of 2 hrs in any 24 hr for malf.	

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

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control:
3. Potential Emissions: 17.0 lb/hour	4. Synthetically Limited? [YES] 17.26 tons/year
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 17.0 lb/hr Reference: GE, 1998 Golder Associates, Inc., 2000	7. Emissions Method Code: 2
8. Calculation of Emissions (limit to 600 characters): Max. PM10 on Distillate = 17.0 lbs/hr x 500 hrs/year = 8,500 lbs/yr Max. PM10 on Base Load Nat. Gas = 9.0 lbs/hr x 2,390 hrs/year = 21,510 lbs/yr Max. PM10 on Power Mode Nat. Gas = 9.0 lbs/hr x 500 hrs/year = 4,500 lbs/yr Max. Total PM10 Emissions / Year = 34,510 lbs = 17.26 tons Emissions for each unit.	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 10 % Opacity	4. Equivalent Allowable Emissions: 17.0 lb/hour 17.26 tons/year
5. Method of Compliance (limit to 60 characters): VE Test (Method 9) < 10%	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Visible Emission standards are work practice standards established as BACT limits for PM and PM10 emissions. (Rule 62-212.400 F.A.C.)	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: [] Rule [X] Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Annual VE Test (EPA Method 9)	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE99	2. Basis for Allowable Opacity: [X] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: NA % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: None	
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-210.700(1) allows for 2 hours (120 minutes) per 24 hour period for excess visible emissions from start-up, shut-down, and malfunction.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code: EM	2. Pollutant(s): NOx									
3. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other										
4. Monitor Information Manufacturer: : NOx = Thermo Environmental Instruments; O2 = Servomex Model Number: NOx = 42CHL; O2 = 1420C Serial Number: <table border="0" style="margin-left: 40px;"> <tr> <td></td> <td align="center">NOx</td> <td align="center">O2</td> </tr> <tr> <td>8A</td> <td>42CHL-67447-357</td> <td>01420C/1783</td> </tr> <tr> <td>8B</td> <td>42CHL-67452-357</td> <td>01420C/1784</td> </tr> </table>			NOx	O2	8A	42CHL-67447-357	01420C/1783	8B	42CHL-67452-357	01420C/1784
	NOx	O2								
8A	42CHL-67447-357	01420C/1783								
8B	42CHL-67452-357	01420C/1784								
5. Installation Date: June 2001	6. Performance Specification Test Date: 8A = 06/27/01 8B = 06/26/01									
7. Continuous Monitor Comment (limit to 200 characters):										

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

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>PMREU9-1</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>PMREU9-2</u> [] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment <input checked="" type="checkbox"/> Attached, Document ID: <u>PMRRU9-3</u> [] Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>PMREU9-4</u> [] Not Applicable [] Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID <u>PMREU9-6b Start-Up Gas, PMREU9-6a Start-Up Oil</u> <input type="checkbox"/> Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ [<input checked="" type="checkbox"/>] Not Applicable
10. Supplemental Requirements Comment: For each calendar day, up to 2 hours may be excluded from the continuous NOx compliance demonstration for each combustion turbine due to excess NOx emissions resulting from startup or shutdown. No more than one hour for switch from operation on oil to natural gas operation. No more than 2 hours in any 24-hour period may be excluded for documented malfunctions.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [] Attached, Document ID: _____ [X] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: _____ [X] Not Applicable
13. Identification of Additional Applicable Requirements [] Attached, Document ID: _____ [X] Not Applicable (Note: Refer to PSD-FL-286; DEP File No. 0850001-008-AC.)
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: <u>PMREU1-15</u> [] 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

III. EMISSIONS UNIT INFORMATION

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

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

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one) <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one) <input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit. <input type="checkbox"/> 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): Natural Gas Heaters			
4. Emissions Unit Identification Number: [] No ID ID: 13 [] ID Unknown			
5. Emissions Unit Status Code: C	6. Initial Startup Date: 08/01/01	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? [NO]
9. Emissions Unit Comment: (Limit to 500 Characters) Emission Unit 13 are direct fired heaters using natural gas to heat the natural gas supplied to the simple cycle combustion turbines 8A and 8B.			

Emissions Unit Control Equipment

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

Low NOx Burners

2. Control Device or Method Code(s): **024**

Emissions Unit Details

1. Package Unit:		
Manufacturer: Gastech Engineering Corp.		Model Number: FGA-HX-2
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	5.7 mmBtu/hr	
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	hours/day	days/week
	weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Natural Gas Heaters are fired only with Natural Gas at Mfg. Design rate of 5.7		

CC. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable State Regulations

FAC 62-210.300	
FAC 62-296.320(4)(b)1.	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? NA		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 80 feet	7. Exit Diameter: 20.5 feet	
8. Exit Temperature: 306 °F	9. Actual Volumetric Flow Rate: 34,059 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543.06 North (km): 2997.68			
14. Emission Point Comment (limit to 200 characters):			

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): External Combustion Heaters - Natural Gas < 100 MMBtu/hr		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million Cubic Feet
4. Maximum Hourly Rate: 0.0056	5. Maximum Annual Rate: 49.06	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,024
10. Segment Comment (limit to 200 characters): Maximum Hourly Rate based on simultaneous operation of heaters for 8A & 8B		

Segment Description and Rate: Segment ___ of ___

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

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NO _x	024		NS
CO			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.285 lb/hour		1.25 tons/year	4. Synthetically Limited? [NO]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.05 lb/MMBtu Reference: PFM Test Data		7. Emissions Method Code: 2	
8. Calculation of Emissions (limit to 600 characters): NOx = 0.285 lb/hr * 8760 hrs/year * 1 ton/2000 lbs = 1.25 tons/year			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Lbs/hr and tons/year based on 100% capacity for 8760 hours/year. Emissions are provided for information purposes only. There are no emission limits for these units.			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.04 lb/hour		4. Synthetically Limited? [NO]	
		0.17 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.007 lb/MMBtu Reference: PFM Test Data		7. Emissions Method Code: 2	
8. Calculation of Emissions (limit to 600 characters): CO = 0.04 lb/hr * 8760 hrs/year * 1 ton/2000 lbs = 0.17 tons/year			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Lbs/hr and tons/year based on 100% capacity for 8760 hours/year. Emissions are provided for information purposes only. There are no emission limits for these units.			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters): There are no initial or periodic testing requirements for the visible emissions from the Natural Gas heaters.	

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE99	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: 100 % Maximum Period of Excess Opacity Allowed: 60 min/hour	
4. Method of Compliance: None	
5. Visible Emissions Comment (limit to 200 characters): FDEP Rule 62-210.700(1) allows for 2 hours (120 minutes) per 24 hour period for excess visible emissions from start-up, shut-down, and malfunction.	

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information Manufacturer: : Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): Emission monitors are not required for Natural Gas Heaters.	

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

Supplemental Requirements

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

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [] Attached, Document ID: _____ [X] Not Applicable [] 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: _____ [] 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 Unit Information Section : Unregulated Emission Units

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

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> 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).</p> <p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters): Unregulated Emission Units</p>			
<p>4. Emissions Unit Identification Number: <input type="checkbox"/> No ID</p> <p>ID: xxx <input checked="" type="checkbox"/> ID Unknown</p>			
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date:</p>	<p>7. Emissions Unit Major Group SIC Code: 49</p>	<p>8. Acid Rain Unit? [N]</p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters) Emission unit includes Emergency Diesel Generator for Units 1 & 2, Painting and Solvent Cleaning, and Mobile Equipment and Engines, and other miscellaneous equipment not otherwise regulated at the facility.</p>			

Emissions Unit Information Section : Unregulated Emission Units

Emissions Unit Control Equipment

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

2. Control Device or Method Code(s):

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:
2. Generator Nameplate Rating:	MW
3. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

Emissions Unit Information Section : 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 Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	hours/day	days/week
	weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters): Various sources within this emission unit may operate up to 8760 hours/year.		

Emissions Unit Information Section : Unregulated Emission Units

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

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. 62-297.310(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)9
F.A.C. 62-297.310(8)	F.A.C. 62-297.320(4)(b)1

Emissions Unit Information Section : Unregulated Emission Units

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? NA		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Unit exhaust through single stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: H	6. Stack Height: 18 feet	7. Exit Diameter: 1.17 feet	
8. Exit Temperature: 950 °F	9. Actual Volumetric Flow Rate: 11,540 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 543173 North (km): 2993027			
14. Emission Point Comment (limit to 200 characters): Values for emergency diesel generator associated with Emission Units 1 & 2.			

Emissions Unit Information Section : Unregulated Emission Units

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

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Diesel fuel burned in mobile emergency diesel generator.		
2. Source Classification Code (SCC): 2-01-001-02	3. SCC Units: Thousands Gallons Burned	
4. Maximum Hourly Rate: 0.034	5. Maximum Annual Rate: 13.65	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 136
10. Segment Comment (limit to 200 characters): Maximum annual rate based on 400 hours of operation per year.		

Segment Description and Rate: Segment 2 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Fugative emissions – fugitive dust		
2. Source Classification Code (SCC):	3. SCC Units: Tons	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 35.71	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): This page represents fugitive dust from unpaved roads around the facility, including the 6,000 acre cooling pond perimeter. Estimate include in initial Title V application.		

Emissions Unit Information Section : Unregulated Emission Units

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

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Fugative emissions – fugitive VOC's		
2. Source Classification Code (SCC):		3. SCC Units: Tons
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 23.22	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): This page represents VOC emissions from oil storage tanks, facility painting operations, and site solvent usage. Estimate include in initial Title V application.		

Emissions Unit Information Section : Unregulated Emission Units

**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			NS
SO2			NS
NOx			NS
CO			NS
VOC			NS
PM10			NS

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

Potential/Fugitive Emissions

1. Pollutant Emitted: NOx		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 15.88 lb/hour		3.41 tons/year	4. Synthetically Limited? [NO]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 15.88 lb/mmBtu Reference: Detroit Diesel		7. Emissions Method Code: 1	
8. Calculation of Emissions (limit to 600 characters): 15.88 lb/hr * 400 hours/year * (1 ton/2000 lb) = 3.41 Tons/year			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): The Emergency Diesel Generator is operated only when needed to supply emergency power to the facility. Estimates are based on 400 hrs/year from Mfg. Supplied factor. The emergency diesel generator does not currently have an emissions limit for NOx.			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions:
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

Emissions Unit Information Section : Unregulated Emission Units

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

Continuous Monitoring System: Continuous Monitor 1 of 1

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information Manufacturer: : Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): Emission monitors are not required for unregulated emission units.	

Emissions Unit Information Section : Unregulated Emission Units

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

Supplemental Requirements

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

Emissions Unit Information Section : Unregulated Emission 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: _____ [] 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

ATTACHMENTS

FPL MARTIN PLANT TITLE V APPLICATION

Attachment PPEU1 14.doc

Units 1 and 2: 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 U.S. EPA 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.

Units 3A and A, Units 4A and B, and Units 8A and B: CAM is not applicable to the combustion turbine units since dry low-NOx combustors when firing natural gas are not considered a pollution control device under 40 CFR Part 64. When firing distillate, the underlying emission limits are based on CEMS and, therefore, the requirements of CAM are not required pursuant to 40 CFR 64.2(b)(vi).

Attachment A

Title V Core List – Effective 3/01/02

[**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.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS,
effective 06-21-01 (continued)

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.
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

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:

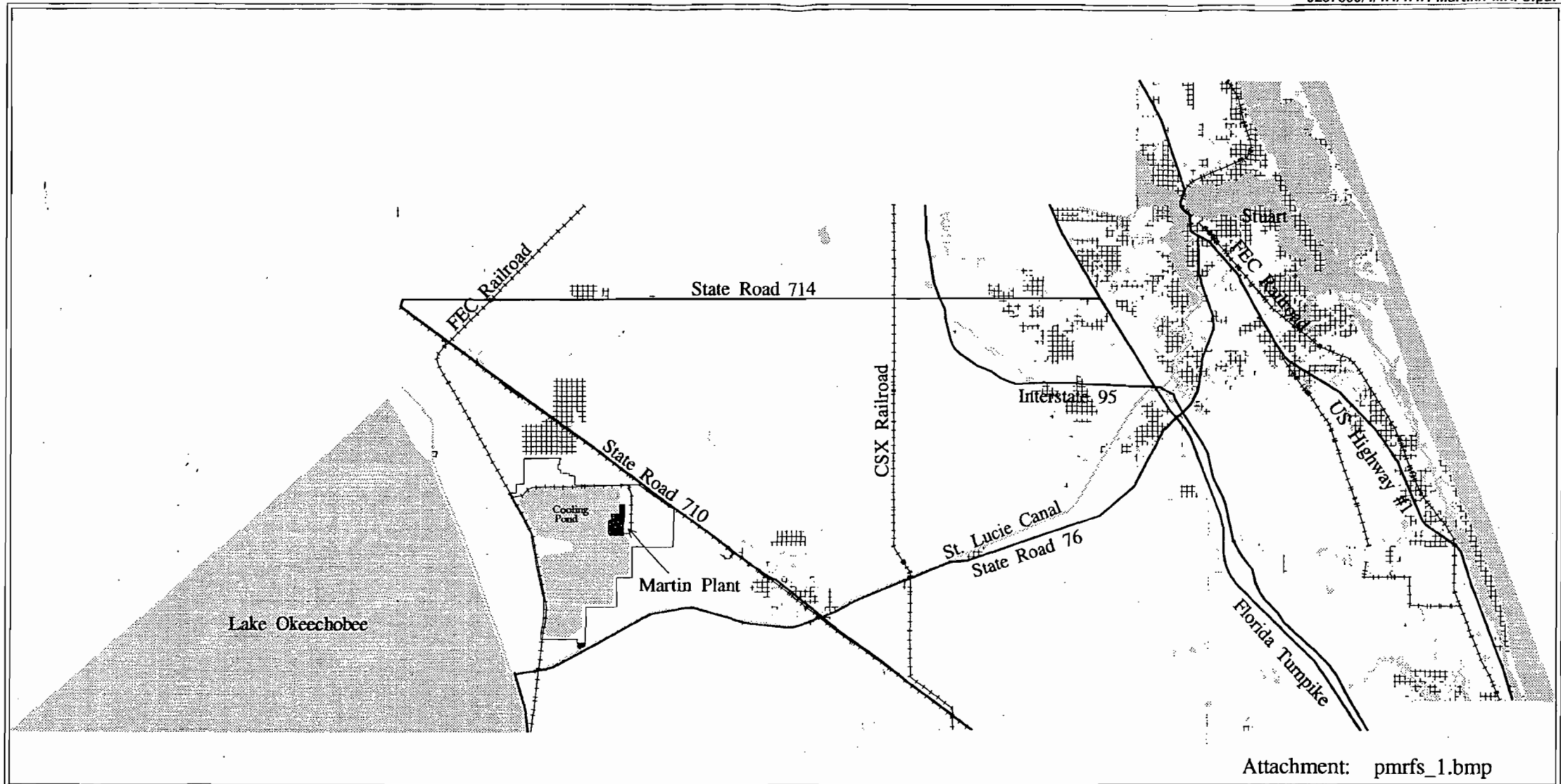
CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests

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**



Attachment: pmrfs_1.bmp

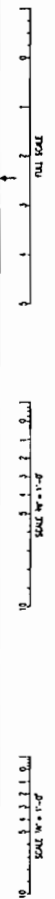
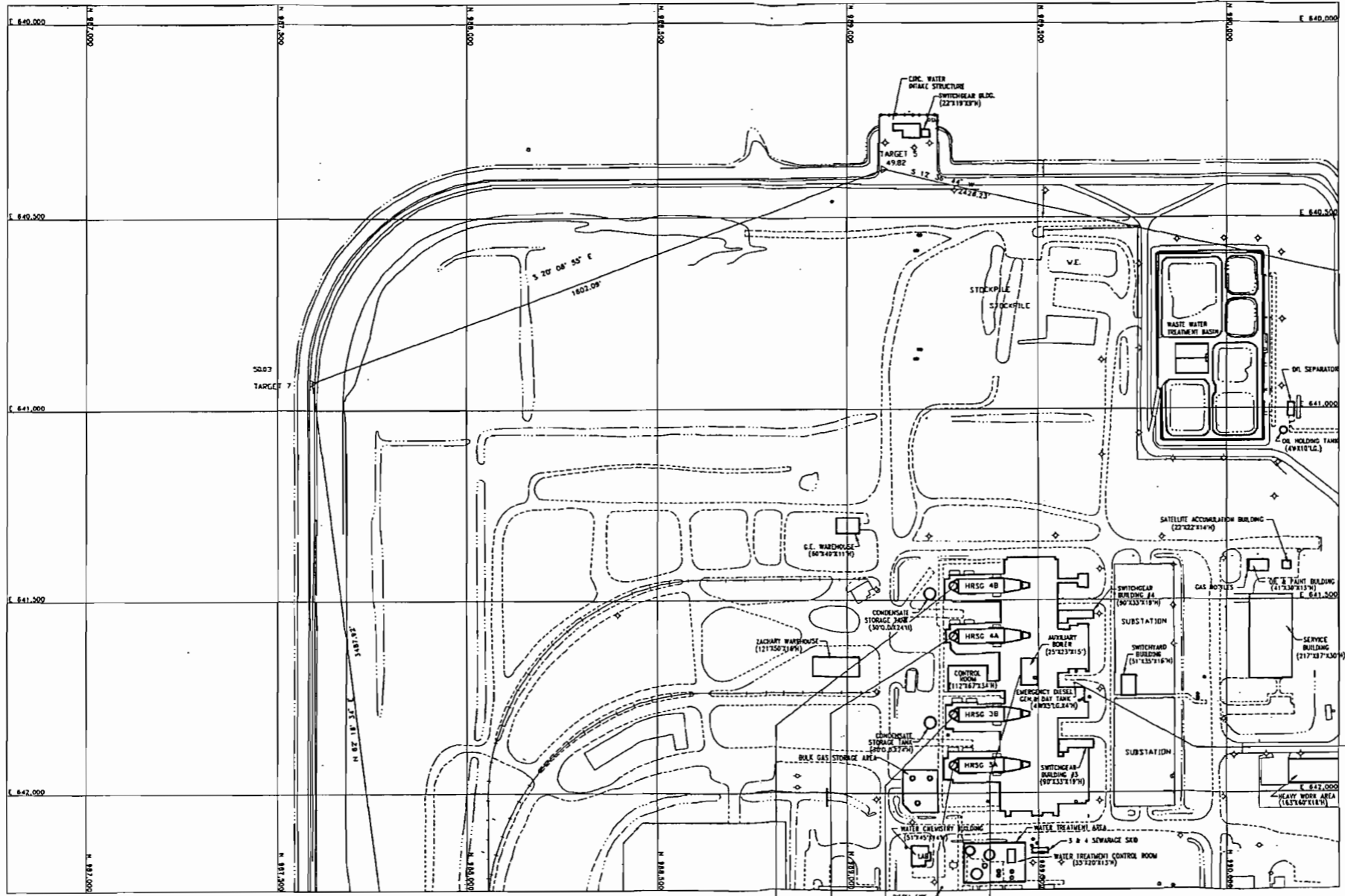
Martin Plant Area Map

Martin County



- Water
- Electrical Power Facility
- Residential Area
- Major Roads
- Railroads

WILCOX	REVISION	DATE
AS-BUILT	COMPLETION	DATE
REVISION	DATE	DATE



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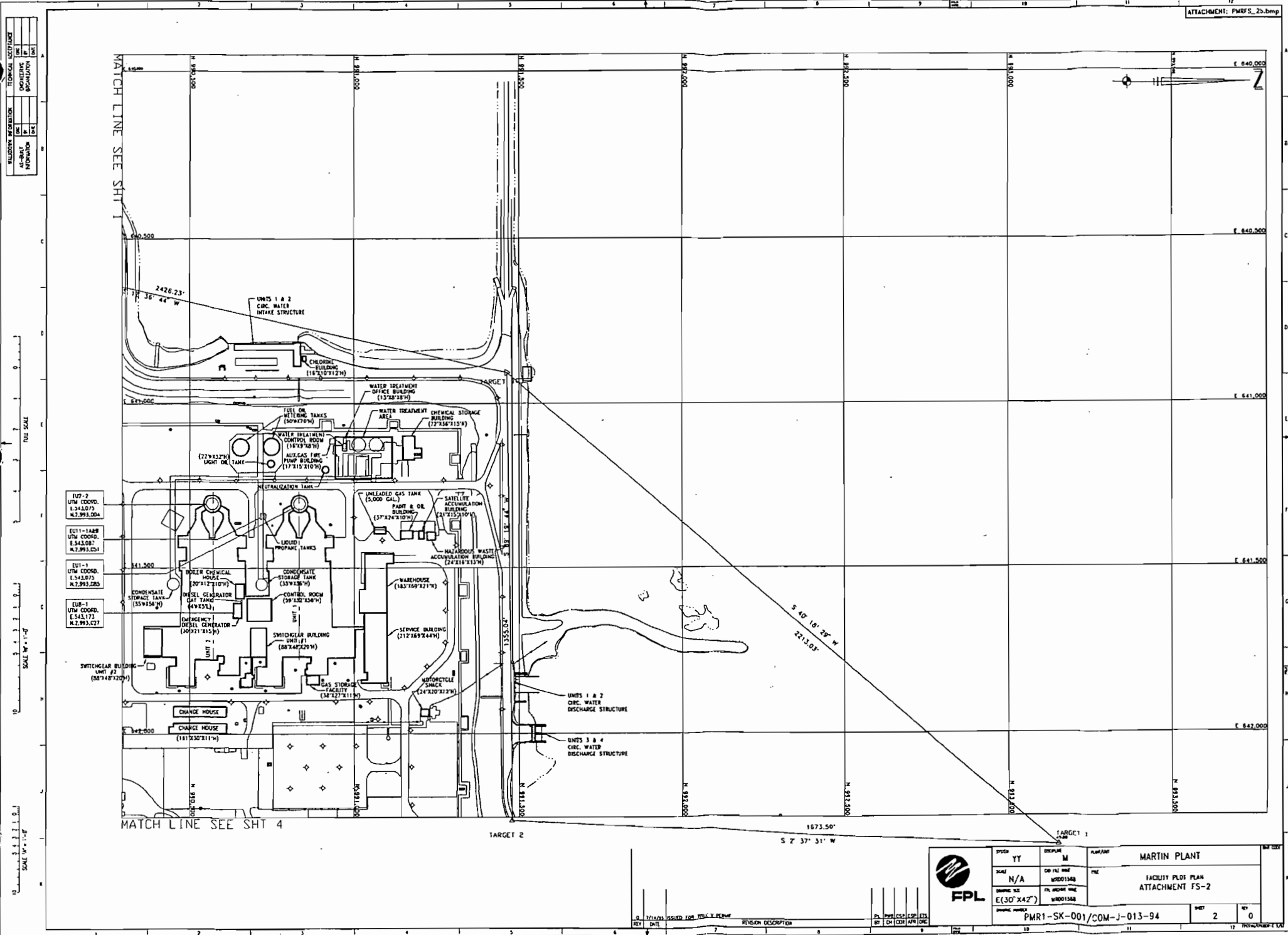
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103	E.343,174 N.2,992,610	104	E.343,164 N.2,992,610	105	E.343,193 N.2,992,611



YEAR	YY	REVISION	M	DATE		MARTIN PLANT		
SCALE	N/A	DATE				FACILITY PLOT PLAN		
DRAWING SIZE	E(30" X 42")	PL. APPROV. DATE				ATTACHMENT FS-2		
DRAWING NAME	PMR1-SK-M-001/COM-J-013-94				NO.	1 OF 4	REV.	0

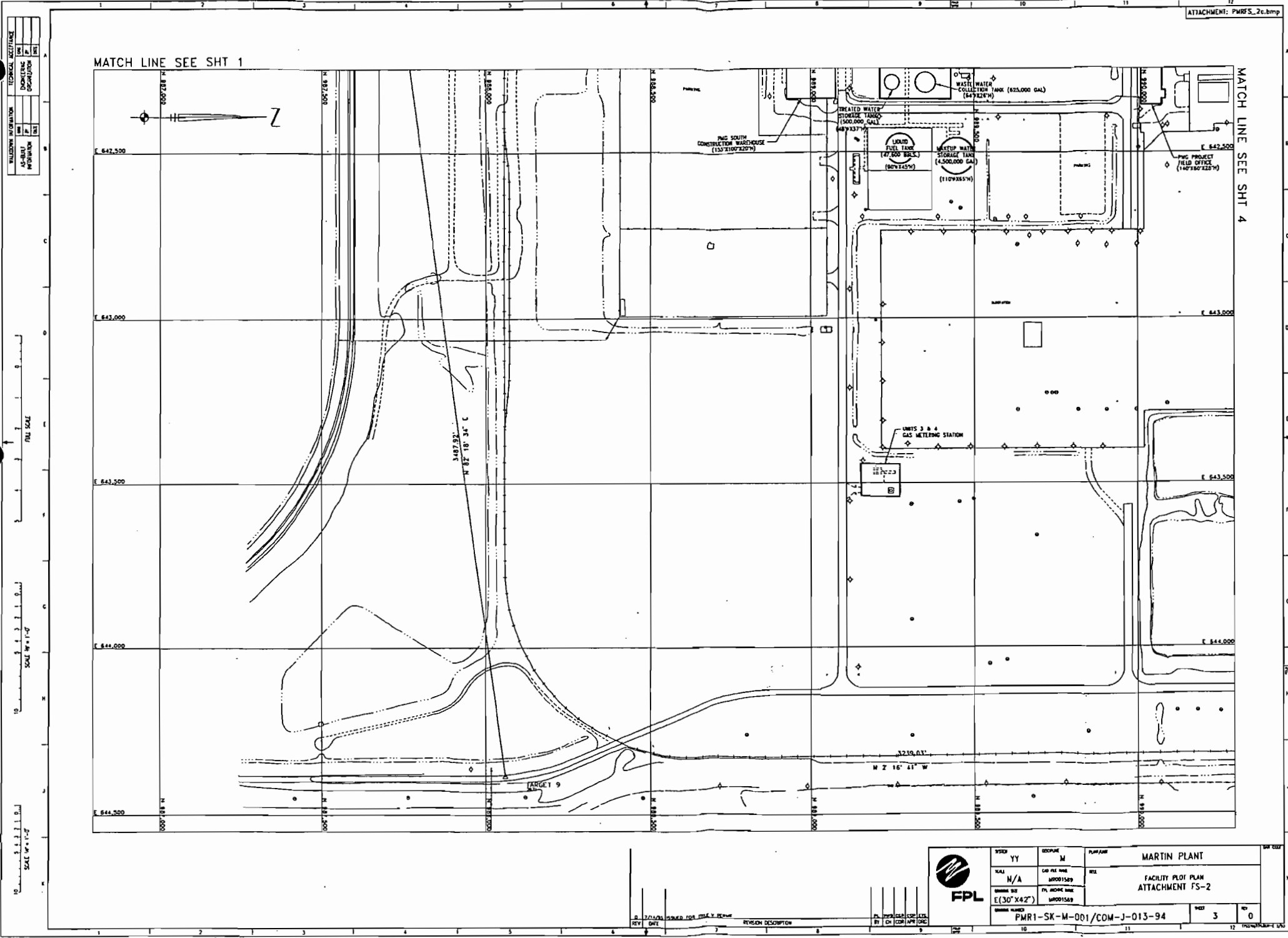
0 3/11/99 ISSUED FOR TIE 1 PERMIT
REV. DATE REVISION DESCRIPTION BY / CH. DATE / APP. DATE



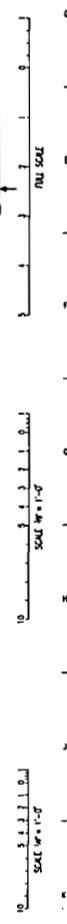
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| UNIT-2 | UTM COORD. | E.543.073 |
| | | N.2.993.204 |
- | | | |
|-----------|------------|-------------|
| UNIT-1A&B | UTM COORD. | E.543.087 |
| | | N.2.993.251 |
- | | | |
|--------|------------|-------------|
| UNIT-1 | UTM COORD. | E.543.073 |
| | | N.2.993.205 |
- | | | |
|--------|------------|-------------|
| UNIT-1 | UTM COORD. | E.543.173 |
| | | N.2.993.227 |

	SYMBOL	YY	DESCRIPT	M	ALPHABET	MARTIN PLANT			
	SCALE	N/A	COP FILE NAME	W0001348	FILE	FACILITY PLOT PLAN			
	DRAWING SIZE	E(30"x42")	PL. ARCHIVE NAME	W0001348		ATTACHMENT FS-2			
	DRAWING NUMBER	PMR1-SK-001/COM-J-013-94							
						SHEET	2	REV	0

REV	DATE	DESCRIPTION	BY	CHK	APP	DATE



MILESTONE INFORMATION		TECHNICAL REFERENCE	
AS-BUILT	DATE	DATE	NO.



	SYSD	YY	OCUPM	M	PLANT	MARTIN PLANT
	VAL	N/A	CD FILE NO.	MR001549	WEL	FACILITY PLOT PLAN
	DRWG NO.	E(30'x42')	PL. NO. & DATE	MR001549		ATTACHMENT FS-2
	DRWG NUMBER	PMR1-SK-M-001/CDM-J-013-94	NO.	3	REV	0

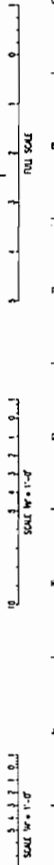
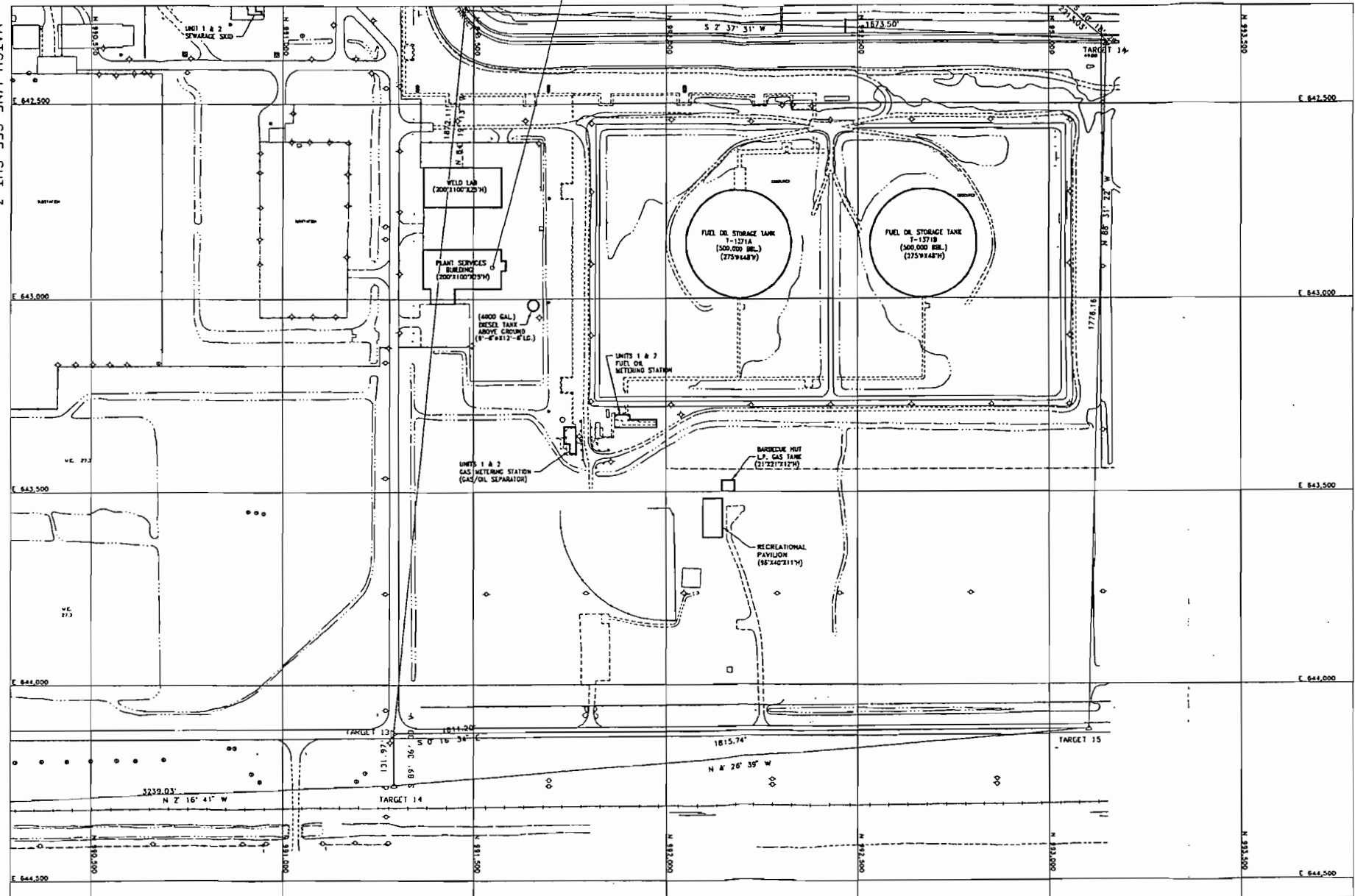
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 REVISION DESCRIPTION

PL. NO. & DATE
 MR001549

TECHNICAL APPROVAL	DATE
DESIGNED	
CHECKED	
APPROVED	

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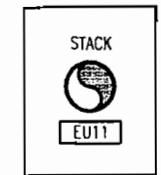
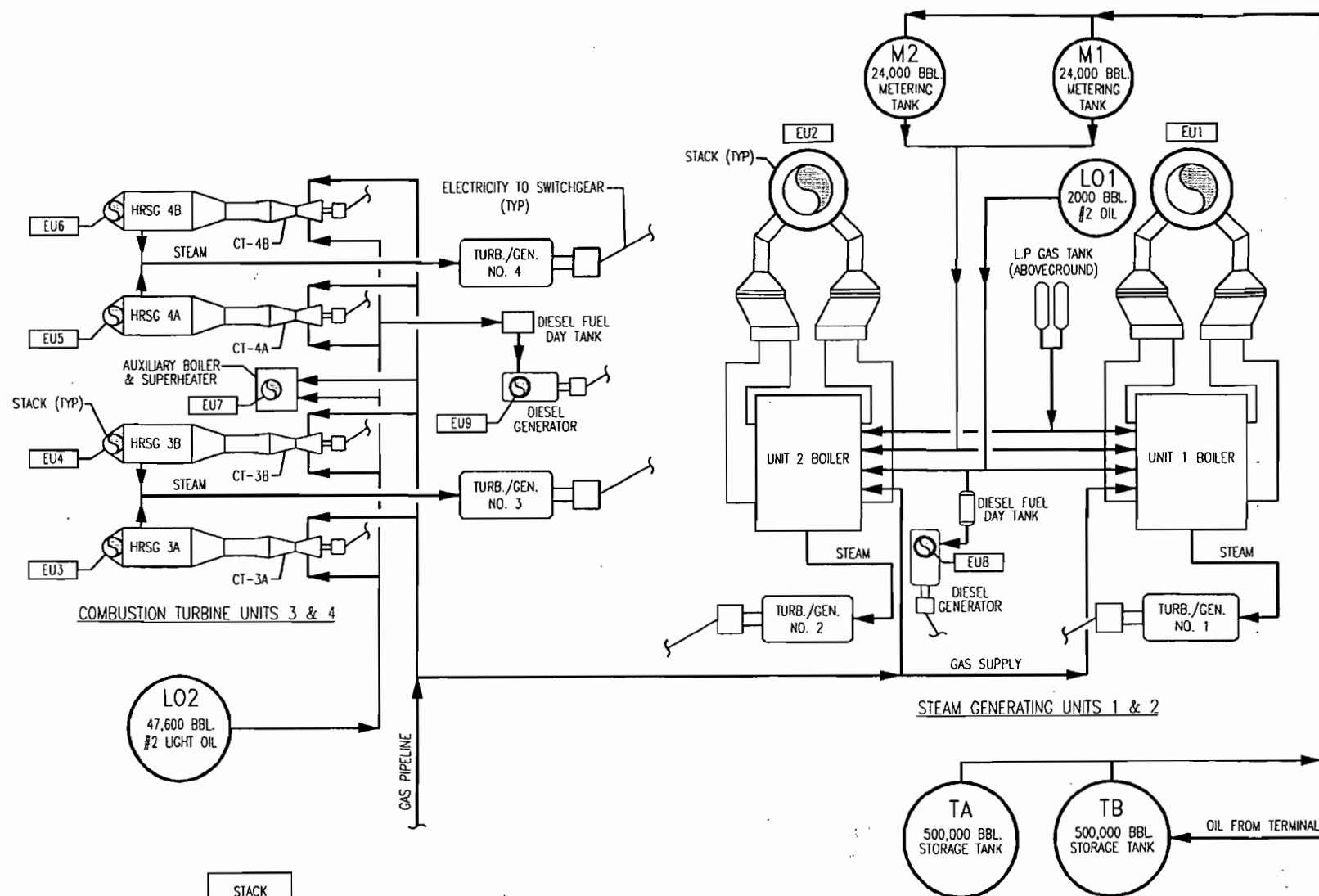
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PROJECT NUMBER PMR1-SK-M-001/COM-J-013-94							

ATTACHMENT: PMRFS_3.bmp

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

SCALE 3/8" = 1'-0"

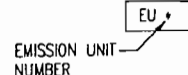
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PLANT SERVICES
PAINT SPRAY BOOTH

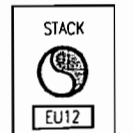
NOTES:

- ACRONYMS:
 EU-EMISSION UNIT
 FO-FUEL OIL
 CT-COMBUSTION TURBINE
 LP-LIQUID PROPANE
 HRSG-HEAT RECOVERY
 STEAM GENERATOR
 AB-AUXILIARY BOILER
 DG-DIESEL GENERATOR
- FOR BOILER POLLUTION CONTROL DEVICES, SEE EMISSION UNIT FLOW SHEETS.
- EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:



TANK LEGEND:

- T - STORAGE TANK (TA&B)
- M - METERING TANK (M1&2)
- LO - LIGHT OIL TANK (LO1&2)



LAND UTILIZATION
PAINT SPRAY BOOTH

	SYSTEM	N/A	DISCIPLINE	M	PLANT/UNIT	MARTIN PLANT-UNIT 1,2,3 & 4	BAR CODE
	SCALE	N/A	CAD FILE NAME	MR001736	TITLE	FACILITY SOURCE FLOW DIAGRAM TITLE V ATTACHMENT FS-3 TITLE V	
	DRAWING SIZE	B(11"X17")	FPL ARCHIVE NAME	MR001736	DRAWING NUMBER	PMR1-M0101-YY	
	DRAWING NUMBER	PMR1-M0101-YY	SHEET	1 OF 1	REV	0	

0	8/15/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS
REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG

Attachment PMRFS-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 17-296-310 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 PMRFS-5.txt

Fugitive Emission Identification

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment PMRFS_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.

Fugitive 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 PMRFS-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	Lube Oil Vapor Extraction Vents
4	Lube Oil Dump Tank Vent
5	Oil Separation Basin
6	Hazardous Waste Building
7	Paint/Lube Building
8	Miscellaneous mobile vehicle operation
9	Evaporation of Boiler Chemical Cleaning Waste

Attachment PMRFS-9.txt

Equipment/Activities Regulated Under Title VI

The Martin facility currently has more than 100 refrigeration and air conditioning units on site. Of these, nine air conditioning units currently meet the 50 pound threshold established by 40 CFR 82 for regulated Class 1 and Class 2 substances:

<u>Unit</u>	<u>Location</u>	<u>Pounds CFC</u>
Trane Model CGACC804RLNJJ423DG7VFM	PMG Service Building	143
York Model YCAZ77LES/46XR	PMG Service Building	112
Trane Model SSZA3004HF54C54DFO	PMG Service Building	64
Trane Model SSZA3004HF54C54DFO	PMG Service Building	64
Trane Model SAC1504A	PMG Control Building	67.6
Trane Model SAC1504A	PMG Control Building	67.6
Trane Model SAC1504A	PMG Control Building	67.6
Trane Model SAC1504A	PMG Control Building	67.6
Trane Model SAC1504A	PMG Control Building	67.6

Attachment PMRFS-11.txt

Alternative Methods of Operation

Conventional Fossil fuel-fired Boiler Units 1 and 2

Operation at Various Capacities

The two conventional fossil-fuel boilers at the Martin plant site may be operated up to 8,760 hours per year at heat input rates from zero to 100% of maximum.

Different Fuel Types and heat input rates

The units burn low sulfur fuel oil containing a maximum of 0.7% sulfur (by weight), natural gas, or a mixture of low sulfur fuel oil containing a maximum of 1.0% sulfur by weight and natural gas in a ratio which will result in a maximum sulfur dioxide emission rate of 0.80 lbs/MMBtu heat input. The units' heat inputs are each 8,650 MMBtu/hr on oil and 9,040 MMBtu/hr 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. The units may also burn on-specification used oil meeting EPA specifications under 40 CFR 266.40.

Soot Blowing/Auxiliary Equipment

The unit may blow soot for up to 24 hours per day, so long as this does not result in excess emissions. (Excess emissions during soot blowing are not allowed for NSPS Subpart D units). Other activities such as operation of the boilers' steam coils, boiler steam lances and air preheater and dust collector wash equipment is undertaken as needed in order to maintain the boilers' cleanliness.

Utilization of Magnesium Oxide

Magnesium oxide (MgO, or "magox") is added to the boiler periodically at various loads. The MgO slurry is injected into the boiler via the I.K. soot blower lances and through manual hand lances on a batch basis, rather than continuously. The dosage rate is based on the quantity of fuel burned and the amount of ash in the fuel.

Off-Stoichiometric Combustion

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

Flame Temperature Reduction

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

Combined-Cycle Units 3 and 4

Operation at Various Capacities

The two combined-cycle units at the Martin power plant site may be operated up to 8760 hours per year at heat input rates from zero to 100% of maximum.

Different Fuel Types and heat input rates

The units currently burn primarily natural gas, with light distillate oil as a backup fuel. At a later date, coal-gasification equipment may be added at the plant site. Per the existing PSD permit (PSD-FL-146) the maximum heat input to each CT shall neither exceed 1,966 MMBtu/hr (@ 40 deg. F) while firing natural gas, nor 1846 MMBtu/hr while firing light distillate oil (@ 40 deg. F). Operation on distillate oil is currently limited to 2,000 hours per year. For coal-derived gas firing the maximum heat input to each CT shall not exceed 2100 MMBtu/hr (@ 75 deg. F). Note that the heat input rate varies with ambient temperature.

Power Augmentation

At higher ambient temperatures (> 40 deg. F) the combined-cycle combustion turbines may be operated in power augmentation mode; that is, while steam or water is injected into the combustion area of the turbine. Current emissions limitations and heat input limits will not be exceeded while operating in either mode of operation. This mode of operation will increase megawatt output to low ambient conditions. The power augmentation mode from a combustion viewpoint is no different from standard operation. All emission limits are based on with and without power augmentation.

Simple-Cycle Units 8A and 8B

Operation at Various Capacities

Each simple-cycle units at the Martin power plant site may be operated up to 5,902.6 mcf natural gas or 4,965.1 mcf natural gas and 7,358 kgal distillate oil in any 12 month period at heat input rates from zero to 100% of maximum.

Different Fuel Types and heat input rates

The units currently burn primarily natural gas, with light distillate oil as a backup fuel. Per the existing PSD permit (PSD-FL-286) the maximum heat input to each CT shall neither exceed 1,920 MMBtu/hr (@ 35 deg. F) while firing natural gas, nor 2008 MMBtu/hr while firing light distillate oil (@ 35 deg. F). Operation on distillate oil is currently limited to 7,358 kgal per year. Note that the heat input rate varies with ambient temperature.

Power Augmentation and Peaking

At higher ambient temperatures (> 40 deg. F) the simple-cycle combustion turbines may be operated in power augmentation mode; that is, while steam or water is injected into the combustion area of the turbine. Additionally, the turbines can also be operated at higher exhaust temperature modes for no more than 60 hours in any 12 month period. Current emissions limitations and heat input limits will not be exceeded while operating in either mode of operation.

Attachment PMRFS-14.txt

**Martin 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 SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

<input checked="" type="checkbox"/> Annual Requirement (Partial)	<input type="checkbox"/> Transfer of Permit	<input type="checkbox"/> Permanent Facility Shutdown
--	---	--

REPORTING PERIOD*	REPORT DEADLINE**
January 1 through March 7 of 2003 (year)	July 1, 2003

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

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: FLORIDA POWER & LIGHT COMPANY

Site Name: MARTIN PLANT Facility ID No. 0850001-007-AV County: MARTIN

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.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

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

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

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

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

Keith Hardy
(Signature of Title V Source Responsible Official)

2-7-03
(Date)

Name: Keith Hardy

Title: Plant General Manager

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

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

Nancy M. Kierspe
(Signature of Acid Rain Source Designated Representative)

4-7-03
(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).}

Attachment

STATEMENT OF COMPLIANCE - TITLE V SOURCE
PERMIT NO. 0850001-007-AV

For instances of opacity exceedance events, please refer to the log sheet fax transmissions during the year 2003.

The log sheet fax reports were dated 01/09/2003, 1/15/2003, 01/22/2003, 02/15/2003

**FLORIDA POWER & LIGHT COMPANY
MARTIN POWER PLANT**

Excess Emissions Report for Opacity

Unit Status: _____

Time On Line: _____

Time Off LFC: _____

Routing	
Mid Pit Foreman	SKYPPER
Day Pit Foreman	YATIS
Mid Pit Foreman	BENNYKOFFER
Env Spec	U

Unit : PMR 1

Date: 01/09/03

Total Number (Total of all 6 Min. Avgs. Above Limits)	OPERATOR	Specific 6 Min. Periods within Total Excess Emissions Time (List as Time of Day Start/Stop)	Opacity Level(s) and cause code for each 6 minute average and the name of the operator during the event.	Immediate Corrective Action	Cause of Incident	Preventative Action
3	SKYPPER	21:06-21:11 21:12-21:17 21:18-21:23	32% 35% 23%	CHECKED FURNACE STARTED LOOKING FOR TUBE LEAK FOUND LEAK 6TH FL, STARTED COOLING BOILER FOR REPAIR	UNIT OFF LINE N. SIDE OPACITY STARTED UP. BTAPS #2	

I = Startup
J = Shutdown

M = Process Malfunction - Requires PWO

Use Pen Only

**FLORIDA POWER & LIGHT COMPANY
MARTIN POWER PLANT**

Excess Emissions Report for Opacity

Unit Status: 1

Time On Line: 0

Time Off LFC: _____

Routing	
Mid Plt Foreman	<u>ya bs</u>
Day Plt Foreman	<u>Hildroth</u>
Mid Plt Foreman	<u>ya bs</u>
Env Spec	

Unit: PMR 2

Date: 01/15/03

Total Number (Total of all 6 Min. Avgs. Above Limits)	OPERATOR	Specific 6 Min. Periods within Total Excess Emissions Time (List as Time of Day Start/Stop)	Opacity Level(s) and cause code for each 6 minute average and the name of the operator during the event.	Immediate Corrective Action	Cause of Incident	Preventative Action
1	SB	04:54 04:59	62	Held load, Increase O2 Removed #8 Burner	#8 Burner in service and it failed Burner #8 Removed from service, new gun put in service and opacity cleared	old gun sent to maint. for ANALYSIS & repair.
1	SB	06:00 06:05	27	Held load, Raised air	Had to force #17 + #18 ignitor in the process it upset the Boiler	
1	JP	06:42 06:48	21	Held Load. Drop load Took unit off control. Adjusted Air	Unit puffing on load ramp	
1	JP	07:24 07:30	23	Drop load. Took unit off control Raised air. Moved Dampers	Load Ramp. Temp Controls in hand. Controls deft swinging.	Controls dept notified.
1	JP	09:06 09:12	21	Moved dampers, guns. Raised air	Load Ramp & Controls swinging again.	Controls dept tuned (adjusted) temp Controls.

I = Startup
J = Shutdown

M = Process Malfunction - Requires PWO

Use Pen Only

**FLORIDA POWER & LIGHT COMPANY
MARTIN POWER PLANT**

Excess Emissions Report for Opacity

Unit Status: RAU

Time On Line: _____

Time Off LFC: _____

Routing	
Mid Plt Foreman	<u>HILDRETH</u>
Day Plt Foreman	<u>FRED</u>
Mid Plt Foreman	<u>HILDRETH</u>
Env Spec	

Unit: PMR 2 Date: ²²01/29/03

Total Number (Total of all 6 Min. Avgs. Above Limits)	OPERATOR	Specific 6 Min. Periods within Total Excess Emissions Time (List as Time of Day Start/Stop)	Opacity Level(s) and cause code for each 6 minute average and the name of the operator during the event.	Immediate Corrective Action	Cause of Incident	Preventative Action
1	M DS RG	06:30/ 06:31	28	STOPPED LOAD ADJ. AIR	S/H AND R/H DAMPERS NOT CONTROLLING IN AUTO, TEMPERATURES ARE UNSTABLE. OPACITY INCREASE WHILE DAMPERS OPENED	REQUEST BOSWORTH LOOK AT UNIT TUNING.
1	M H	06:48 06:53	33	LOWERED LOAD CHANGED BURNER PATTERN READJUST S/H DAMPER	TEMPERATURE, AIR AND FUEL NOT CONTROLLING	
1	M	07:30 07:36	22	REMOVED 29-30 OIL GUNS. ALLOW BOILER TO SETTLE	PUT OIL BURNERS 27-30 OIL GUNS IN SERVICE	IN PROGRESS 1/22/02 <u>DS</u>
2	M	08:00 08:12	21 21	PUT NOX GUNS GAS BACK IN	CONTROLS ARE NOT RESPONDING FUEL IS MOVING AROUND TRYING TO REMOVE GAS GUNS, OPACITY INCREASED.	
1	M	11:00 11:05	28	OPENED FD DAMPER TO 20%	BIASING FANS AND CLOSING FD FAN DAMPERS FOR APH WASH & FUEL SWING	
2	PS DS	19:06- 19:11 19:12-19:17	22 29	stopped load ste settled out Boiler	Tuning S/H - R/H Dampers	
1	PS DS	20:30 20:35	21	lowered load	Trying to Raise load S/H + R/H Dampers, Combustion problems	

I = Startup
J = Shutdown

M = Process Malfunction - Requires PWO

Use Pen Only

**FLORIDA POWER & LIGHT COMPANY
MARTIN POWER PLANT**

Excess Emissions Report for Opacity

Unit Status: Run

Time On Line: 03:34

Routing	
Mid Plt Foreman	<u>SKAPPER</u>
Day Plt Foreman	<u>YATES</u>
Mid Plt Foreman	<u>SKAPPER</u>
Env Spec	

Unit: PMR 2

Date: 02/15/03

Time Off LFC: _____

Total Number (Total of all 6 Min. Avgs. Above Limits)	OPERATOR	Specific 6 Min. Periods within Total Excess Emissions Time (List as Time of Day Start/Stop)	Opacity Level(s) and cause code for each 6 minute average and the name of the operator during the event.	Immediate Corrective Action	Cause of Incident	Preventative Action
2	<u>SKAPPER</u>	<u>0424-0429</u> <u>0430-0435</u> <u>0454-0459</u>	<u>30</u> <u>23</u> <u>32</u>	<u>INVESTIGATED EXCESS O2 BIAS BOILER TAMPERS TO ADD O2 TO SIDE OF BOILER THAT WAS MAKING</u>	<u>SUSPECT #8 OIL GUN TIP LEAKING AFTER #8 OIL GUN REMOVED + REPAIRED OPACITY DROPPED TO 3%</u>	<u>PULLING OUT #8 OIL GUN & CHANGED OUT</u>
3	<u>G S</u>	<u>7:12</u> <u>7:29</u>	<u>23</u> <u>27</u> <u>21</u>	<u>INSPECTED BOILER - FURNACE CLEAR STACK CLEAR, HOLD LOAD RAISED AIR NO HELP CCMS COMPUTER ACTING UP</u>	<u>AFTER WALKING DOWN BOILER FOUND 2A APM UPPER WASH LANCE LEAKING THEN I/C FOUND AIR DUCT LENSE VERY DIRTY</u>	<u>PWO'D WASH LANCE #31310</u>

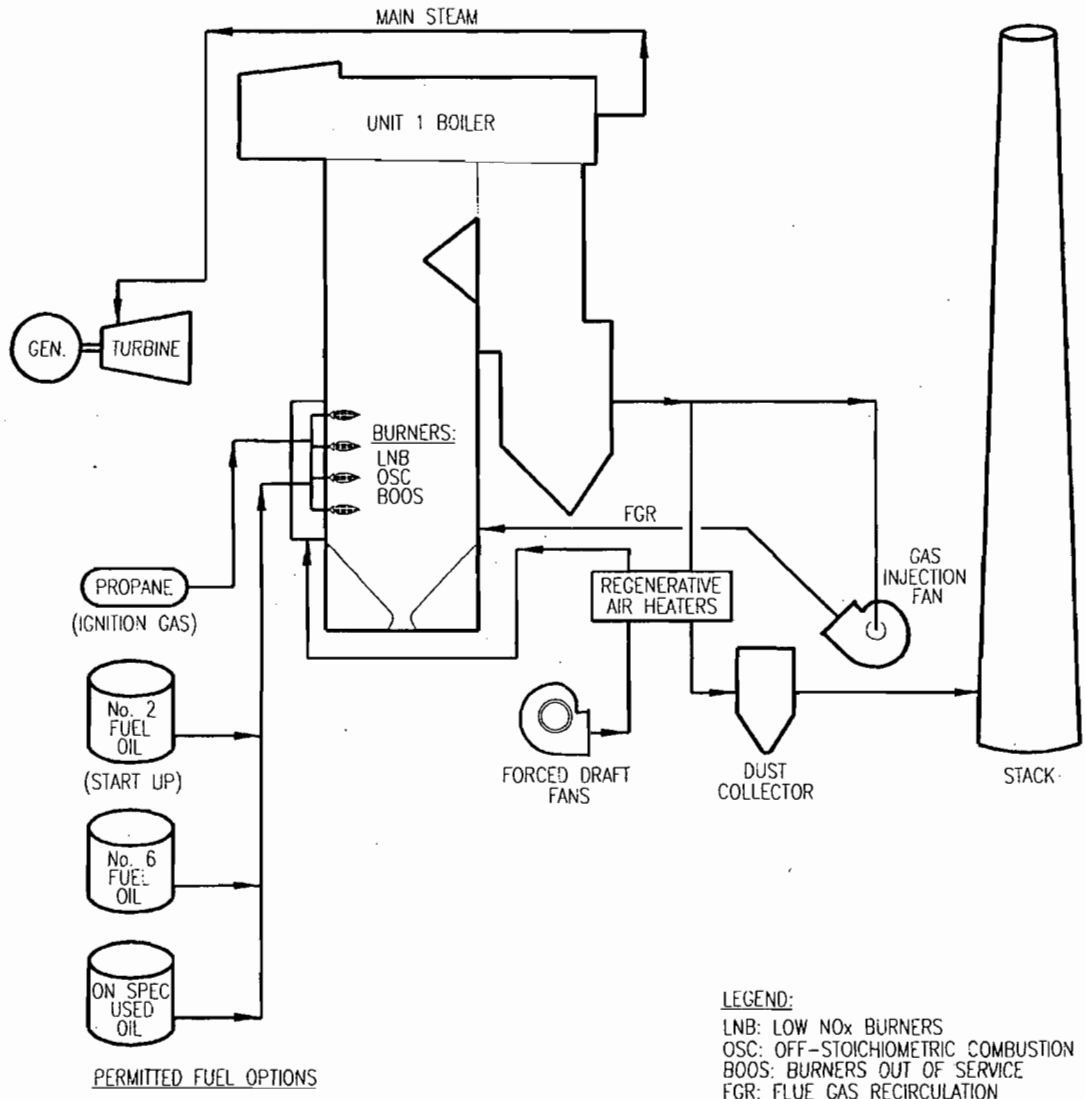
I = Startup
J = Shutdown

M = Process Malfunction - Requires PWO

Use Pen Only

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

BAR CODE



LEGEND:
 LNB: LOW NO_x BURNERS
 OSC: OFF-STOICHIOMETRIC COMBUSTION
 BOOS: BURNERS OUT OF SERVICE
 FGR: FLUE GAS RECIRCULATION

	SYSTEM	DISCIPLINE	PLANT/UNIT
	YY	M	MARTIN PLANT
	SCALE	CAD FILE NAME	TITLE
	N/A	MR001737	EMISSION UNIT PROCESS FLOW DIAGRAM STEAM GENERATOR/BOILER ATTACHMENT NO. EU1
DRAWING SIZE	FPL ARCHIVE NAME		
A (8.5x11)	MR001737		

0	7/13/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS
REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG

DRAWING NUMBER	SHEET	REV
PMR1-M0102-YY	1 OF 1	0

Attachment PMRU1-2.txt**Fuel Analysis****Natural Gas Analysis (typical)²**

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

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

(1) Data from laboratory analysis

(2) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

No.6 Oil Analysis (typical)⁴

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60° F)	6 - 12	none
Heat content(MBtu/bbl)	6,310 - 6420	6,340 ¹
% Sulfur	0.7	1.0 max ³
% Nitrogen	0.2 - 0.5 ²	none
% Ash	0.06 - 0.09 ²	0.10 max ¹

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(3) Maximum permitted from current air operation permit when co-fired with natural gas.

(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.

No. 2 Distillate oil (typical)³

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

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(3) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and purchase specs.

Attachment PMRU1-2.txt**Fuel Analysis****Propane (typical)¹**

Emission unit #1 may occasionally light off (start up) on propane fuel, then switch to another fuel, such as No.6 residual oil. The propane fuel is supplied by a commercial vendor and is stored in small tanks located at the bottom of the boiler area. The chemical formula for propane is C₃H₈.

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

Footnotes:

(1) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

On Specification Used Oil

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

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

Footnotes:

(1) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and
 - FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time

Attachment PMRU1-3.doc

Detailed Description of Control Equipment

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

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

B. Flue Gas Recirculation - Nitrogen oxides reduction

Purpose

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

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

Gas Injection Fan Speed Control

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

Attachment PMRU1-3.doc

Detailed Description of Control Equipment

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

D. Flame Temperature Reduction

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

E. Staged Combustion

This technique involves operating the burners at fuel-rich mixture ratios. The proportion of fuel burned at peak temperatures in the presence of excess air is reduced and consequently NO_x emissions are lowered. The remaining air required to maintain the overall furnace stoichiometry is introduced through overfire air ports located above the top row of burners.

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

FLORIDA POWER & LIGHT CO.
STACK SAMPLING FACILITIES
MARTIN SITE

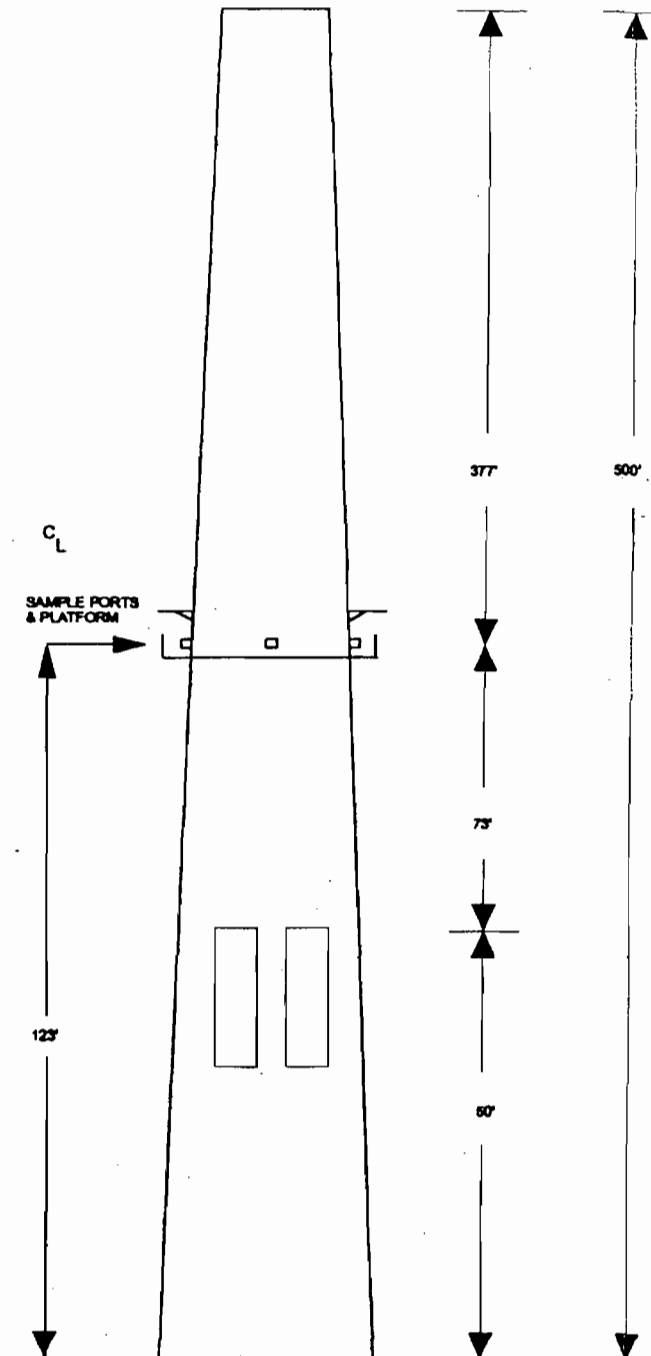
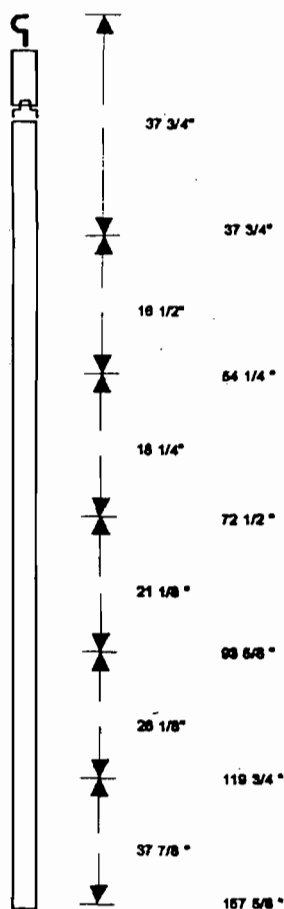
FOSSIL FUEL STEAM GENERATORS
UNITS 1 & 2

STACK SPECIFICATIONS

SAMPLING DIAMETER: 357.8 in.
SAMPLING AREA: 697.5 sq. ft.
SAMPLING PORT DEPTH: 30 1/4 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

STACK DIAGRAM

PARTICULATE SAMPLING
PROBE DIAGRAM



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

FILE: PMATTLV.PRE

Attachment PMRU1-6.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_x, SO₂ 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 PMRU1-11.txt

Alternative Methods of Operation

Operation at Various Capacities and Heat Input Rates

The Martin Unit 1 boiler may be operated up to 8760 hours per year at heat input rates from zero to 8,650 MMBtu per hour on No.#6 oil, and from zero to 9,040 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 unit may be fired with a variable combination of No. 6 residual fuel oil, natural gas, or No. 2 fuel oil. Current emissions limitations are as follows:

<u>Pollutant</u>	<u>Emission Limit</u>
Particulate matter : steady-state	0.1 lb/MMBtu
Particulate matter : sootblowing	0.3 lb/MMBtu
Sulfur Dioxide	0.8 lb/MMBtu
Nitrogen Oxides(oil)	0.3 lb/MMBtu (3-hour rolling average)
Nitrogen Oxides(gas)	0.2 lb/MMBtu (3-hour rolling average)

Soot Blowing

The unit may blow soot for up to 24 hours per day, so long as excess emissions are limited to 27% opacity for 6 minutes/hr.

Utilization of Additives

When residual oil is fired, various additives such as Magnesium hydroxide (MgOH) 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 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 Martin Unit 1, 2, 3, 4, & 8 are cleaned using a series of chemical solutions that remove deposited scale which adversely affects the efficiency and reliability of the generating units.

The solutions and rinsewaters are collected in large mobile tanks ("frac tanks") pursuant to guidance issued by the Department. Upon completion of the cleaning process and prior to disposal of the spent cleaning solution and rinses, representative sampling of the liquids collected in the "frac tanks" is conducted as per 40 CFR 261, Appendix I, to determine the hazardous waste status of the accumulated wastewater, using Toxicity Characteristic Leaching Procedure (TCLP) analysis. If the wastewater is determined to be hazardous, it will be managed as such in accordance with 40 CFR 262.34, 40 CFR 265 Subpart I, and 40 CFR 268 with respect to generators accumulating and treating waste in containers and tanks. An appropriate waste analysis plan will be developed to determine and document the pre- and post-treatment characteristics of the wastewater. Hazardous waste may also be transported to an approved hazardous waste facility for the appropriate disposal.

Attachment PMRU1-11.txt

Alternative Methods of Operation

If the spent cleaning solution and rises are determined to be non-hazardous, they are then disposal by evaporation in the unit's 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, 20 percent opacity).

Attachment PMRU1-13.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).

Air operation permit No. AO43-170568 contains the following conditions:

1. Heat input rate for Unit 1 is not to exceed 8,650 mmBtu/hour while burning No.6 residual fuel oil, and 9,040 mmbtu/hour when firing natural gas. *FPL tracks heat input using fuel sampling and analysis and fuel flow measurement.*
2. The boiler shall be fired with a variable combination of No.6 residual fuel oil, natural gas, No.2 fuel oil, propane gas or on-specification used oil from FPL operations. *FPL tracks the fuel usage on a daily basis.*
3. The maximum allowable emissions for Unit 1 are as follows:

Pollutant	Fuel	Emission Limit	Test Method
<u>Particulate Matter</u> - Steady-State	Oil	0.1 lb/mmBtu	EPA Method 5 or 17
Soot Blowing or Load Changing.	Oil	0.3 lb/mmBtu (3 hrs/24 hrs.)	EPA Method 5 or 17
<u>Sulfur Dioxide</u> -	Oil	0.8 lb/mmBtu	Monthly Fuel Analysis
<u>Nitrogen Oxides</u> -	Oil Gas	0.30 lb/mmBtu 0.20 lb/mmBtu 3 HR ROLLING AVERAGE	CEMS CEMS
<u>Visible Emissions</u> - Steady-State	Oil	20 percent opacity	DEP Method 9
Soot Blowing or Load Changing.	Oil	27 percent opacity (6 min/hr.)	DEP Method 9

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

Attachment PMRU1-15

Phase II Acid Rain Part Application

Phase II Acid Rain Part Application

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

This submission is: New Revised

STEP 1

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

Plant Name MARTIN Plant	State FL	ORIS Code 6043
--------------------------------	-----------------	-----------------------

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

Compliance Plan				
a	b	c	d	e
Unit ID#	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units Commence Operation Date	New Units Monitor Certification Deadline
PMR1	Yes	NO	N/A	N/A
PMR2	Yes	NO	N/A	N/A
HRSG3A	Yes	NO	N/A	N/A
HRSG3B	Yes	NO	N/A	N/A
HRSG4A	Yes	NO	N/A	N/A
HRSG4B	Yes	NO	N/A	N/A
PMR8A	Yes	NO	N/A	N/A
PMR8B	Yes	NO	N/A	N/A
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3

Check the box if the response in column c of Step 2 is "Yes" for any unit

For each unit that is being repowered, the Repowering Extension Plan form is included.

Plant Name (from Step 1)

MARTIN Plant**STEP 4**

Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard RequirementsAcid Rain Part Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Plant Name (from Step 1)
MARTIN Plant

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8 or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

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

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

Certification

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

Name: Nancy Kierspe

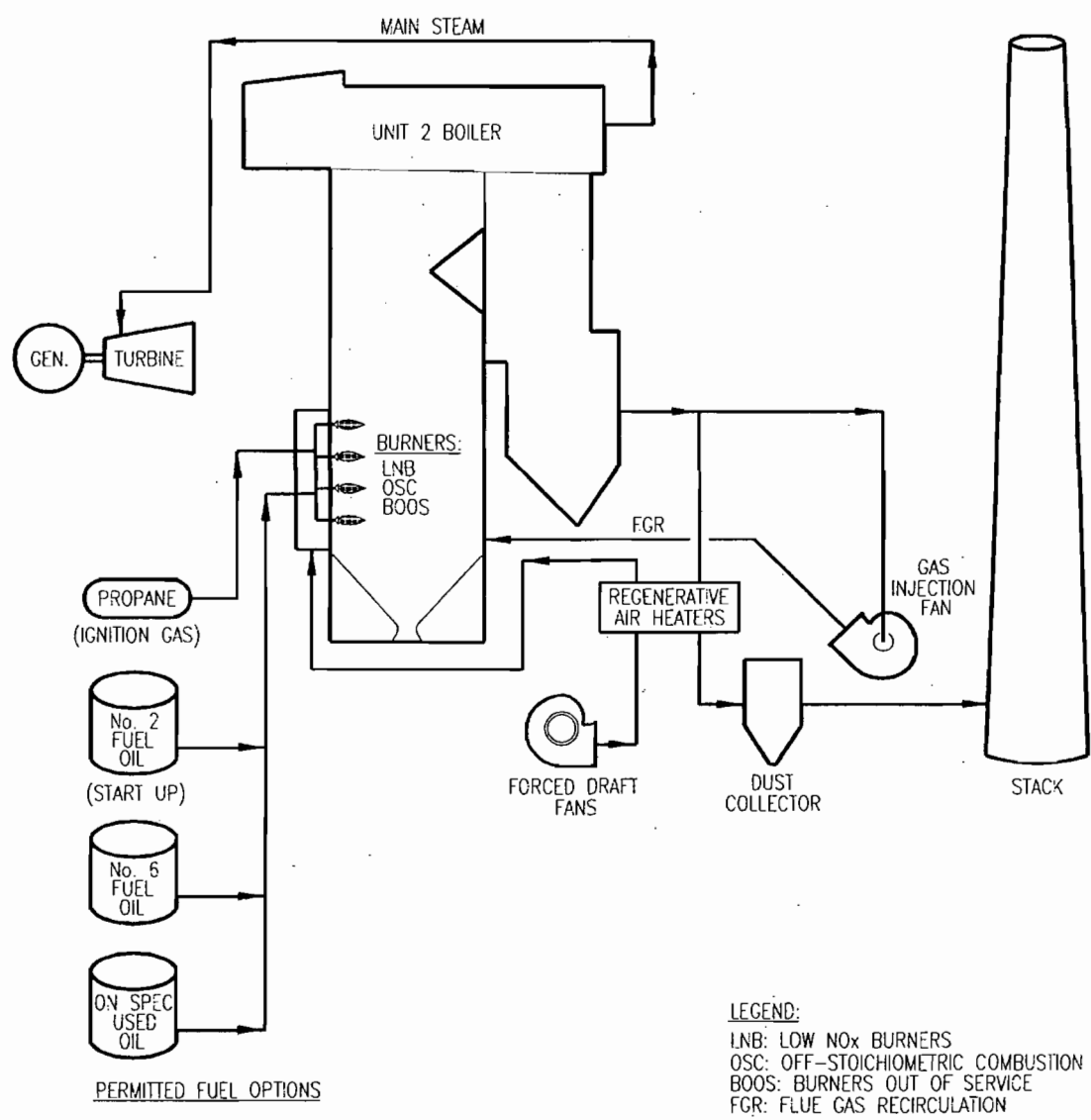
Signature

Nancy Kierspe

Date 4-7-05

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AS-BUILT INFORMATION	ORG BY DATE	ENGINEERING ORGANIZATION	ORG BY DATE

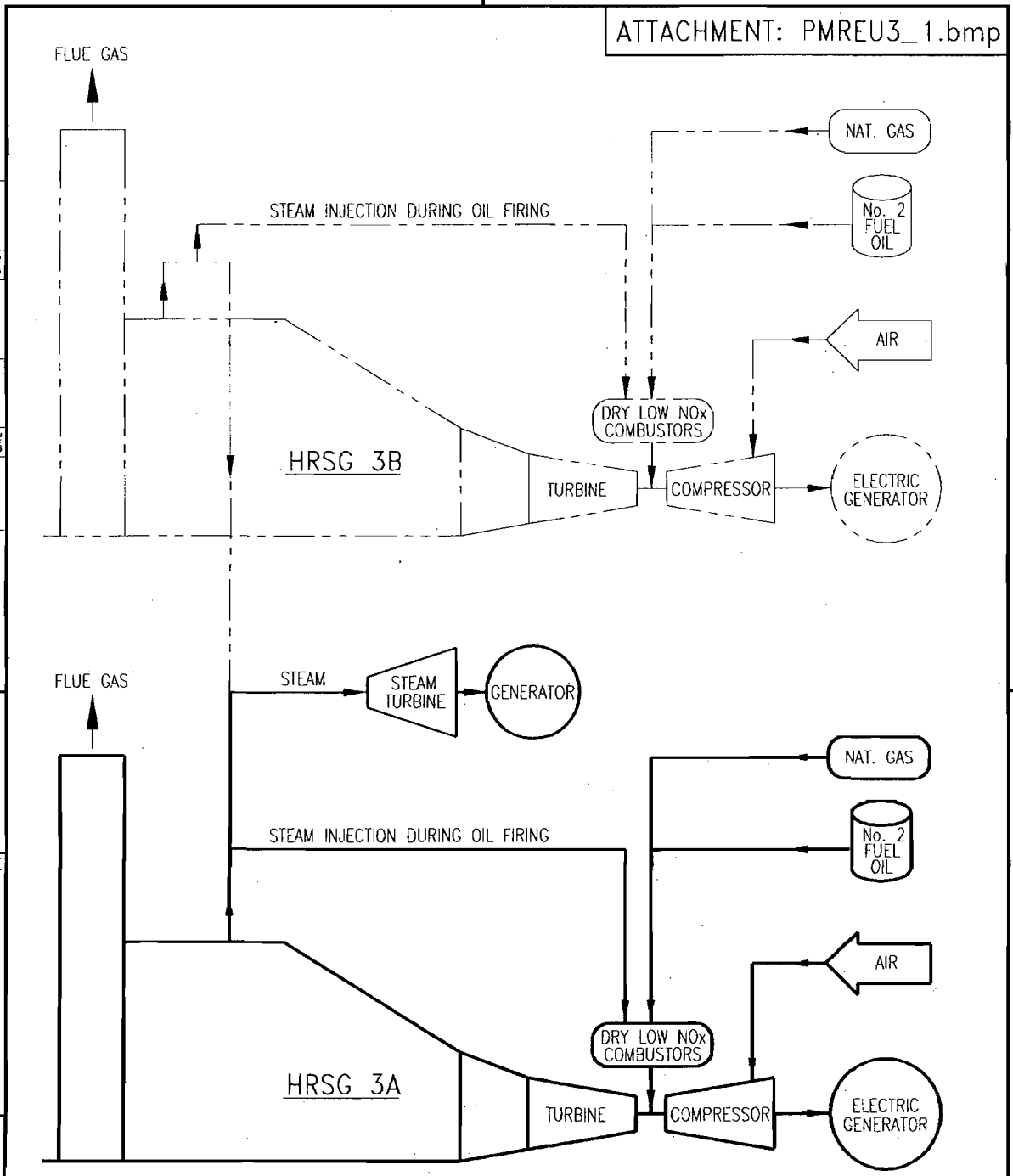
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LEGEND:
 LNB: LOW NOx BURNERS
 OSC: OFF-STOICHIOMETRIC COMBUSTION
 BOOS: BURNERS OUT OF SERVICE
 FGR: FLUE GAS RECIRCULATION

	SYSTEM	YY.	DISCIPLINE	M	PLANT/UNIT	MARTIN PLANT							
	SCALE	N/A	CAD FILE NAME	MR001738	TITLE	EMISSION UNIT PROCESS FLOW DIAGRAM							
	DRAWING SIZE	A (8.5X11)	FPL ARCHIVE NAME	MR001738		STEAM GENERATOR/BOILER							
						ATTACHMENT NO. EU2							
REV	DATE	ISSUED FOR TITLE V PERMIT	PNB BY	PNB CH	CSP COR	CSP APR	ETS ORG	DRAWING NUMBER	PMR1-M0103-YY	SHEET	1 OF 1	REV	0

ATTACHMENT: PMREU3_1.bmp



TECHNICAL ACCEPTANCE	
ORC	DATE
ENGINEERING ORGANIZATION	
ORC	DATE
WALKDOWN INFORMATION	
ORC	DATE
AS-BUILT INFORMATION	

BAR CODE

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DRAWING NUMBER PMR1-M0104-YY

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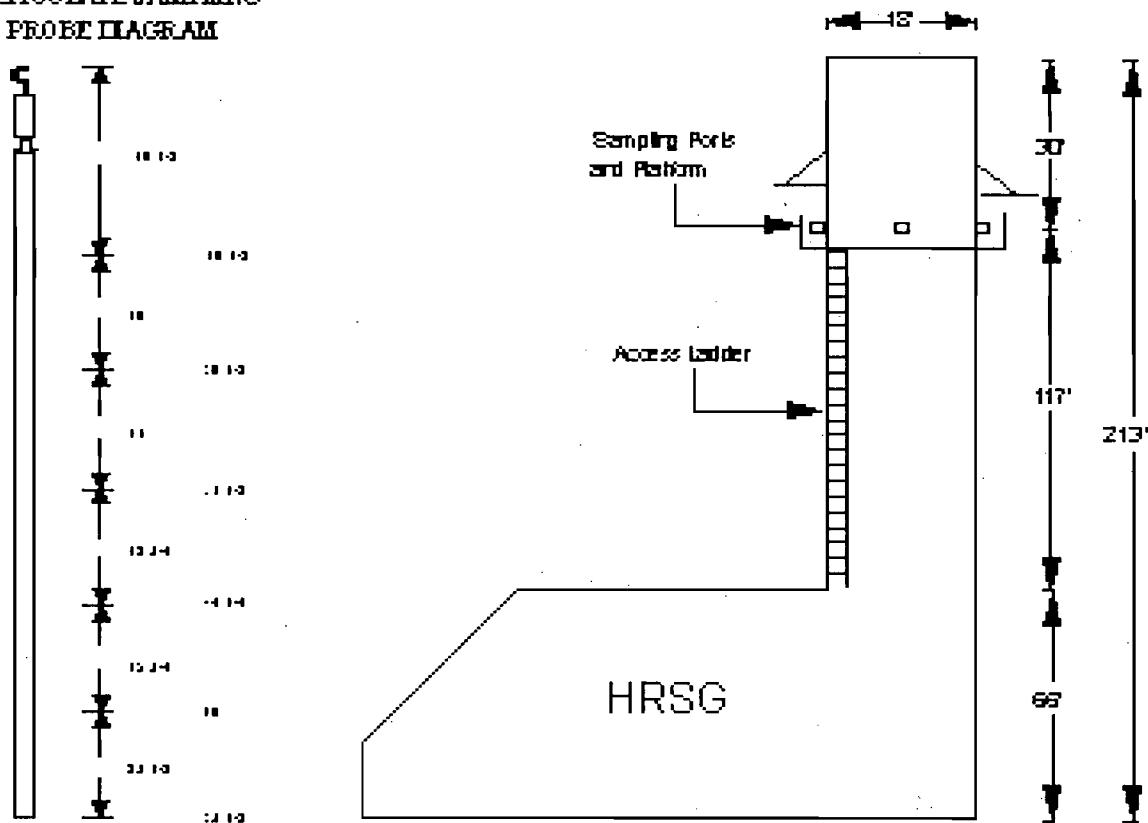
FPCSM/FPCBR-A 9/90

FLORIDA POWER & LIGHT CO.
STACK SAMPLING FACILITIES
MARTIN SITE
Gas & Distillate Oil Fired Combined Cycle
Units 3 & 4

STACKS SPECIFICATIONS

SAMPLING HEIGHT 24' 0"
SAMPLING AREA 34.1 sq. ft.
SAMPLING POINTS 10
No. OF POINTS 4, 4' diameter
No. OF POINTS PER EXHAUST 1
TOTAL No. OF POINTS 10
SAMPLING LEGS PER POINT 1
TOTAL SAMPLING LEGS 10
PILE DESIGNATION 103004

PARTICULATE SAMPLING
PROBE DIAGRAM



Probe support above each port is provided by a 15' channel iron beam with trolley system. Lighting and 15amp 110V standard plugs are provided on the platform. Additional power is available at the base of the stack.

FILED: PMRU3
6/12/02

Attachment PMRU3-6.txt

Procedures for Startup / Shutdown

Startup for the combustion turbines begins with "lighting off" of the machines on either natural gas or light distillate oil. A period of from two to several hours is required to allow metal temperatures in the heat recovery steam generator (HRSG) and in the steam turbine to equilibrate without undue metal stress, before putting the unit "on the line" and sending electrical power to the grid.

The combustion turbines (CTs) utilize dry-low-NO_x combustors for NO_x control. Emissions are continuously monitored by Continuous Emission Monitors (CEMs) for O₂ and NO_x. Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

[This emission unit is allowed up to four hours of excess emissions in a 24-hour period if it is the first combustion turbine (of the two in a unit) to start up when the steam turbine is cold. Otherwise, it is allowed up to 2 hours of excess emissions in 24 hours, pursuant to 62-210.700(1).]

Shutdown is performed by reducing the unit load (electrical production) to a minimum level, opening the breaker (which disconnects the unit from the system electrical grid), shutting off the fuel and coasting down to stop. The CT is then put "on turning gear" to prevent possible disfiguration of the turbine components.

Attachment PMRU3 11.txt**Alternative Methods of Operation - Combustion turbines**

This combustion turbine (CT) emission unit will operate primarily on natural gas fuel, with light distillate oil as a backup fuel. Each CT will be operated independently of each other, and can operate from 0 to 1966 MMBtu/hour on gas fuel, from 0 to 1846 MMBtu/hour on distillate oil, and from 1 to 2100 mmBtu/hour on coal gas fuel.

Emissions from the combustion turbines are affected by ambient temperature, type of fuel, and megawatt load on the unit. Ambient temperature is a factor because at cooler ambient temperatures the air is more dense; therefore more air can be forced through the unit, with a correspondingly higher fuel useage (and therefore higher emissions) than at higher ambient temperatures. Higher megawatt production is also possible at lower ambient temperatures.

The type of fuel combusted affects emissions due to the variability of contaminants contained in the fuel and differences in the combustion process for different fuels. Please refer to Emission Unit Supplemental Information Question #3 for fuel analytical information.

Megawatt load on the unit affects emissions primarily due to differences in combustion efficiency. With some parameters, megawatt load and emission rate are directly related; with others, an inverse relationship exists.

The combustion turbine may also be operated in "power augmentation" mode, which involves the introduction of steam into the combustion chamber, along with slightly higher fuel and air injection rates. Please note that the original PSD permitting and Site Certification permitting was undertaken in consideration of power augmentation; current permit limits are reflective of the power augmentation method of operation.

Following is a list of current emissions limitations which the combustion turbine must meet during operation:

Pollutant	Fuel	Basis	<u>Emissions Limitations^d</u>					
			Units 3&4			Units 5&6		
			lb/hr/CT		TPY ^a	lb/hr/CT		TPY ^a
NOx	Gas	25 ppmvd @ 15% O ₂	177	comb.	3,108	177	comb.	3,108
	Oil	65 ppmvd @ 15% O ₂	461	tot.				461 tot.
	CG	42 ppmvd @ 15% O ₂	392		6,868	392		6,868
VOC ^b	Gas	1.6 ppmvd	3	comb	57	3	comb.	57
	Oil	6 ppmvd	11	tot.				11 tot.
	CG	9 ppmvd	21.4		375	21.4		375
CO	Gas	30 ppmvd	94.3	comb.	871	94.3	comb.	871
	Oil	33 ppmvd			105.8	tot.		105.8 tot.
	CG	33 ppmvd	134		2,311	134		2,311

Attachment PMRU3-11.txt**Alternative Methods of Operation - Combustion turbines**

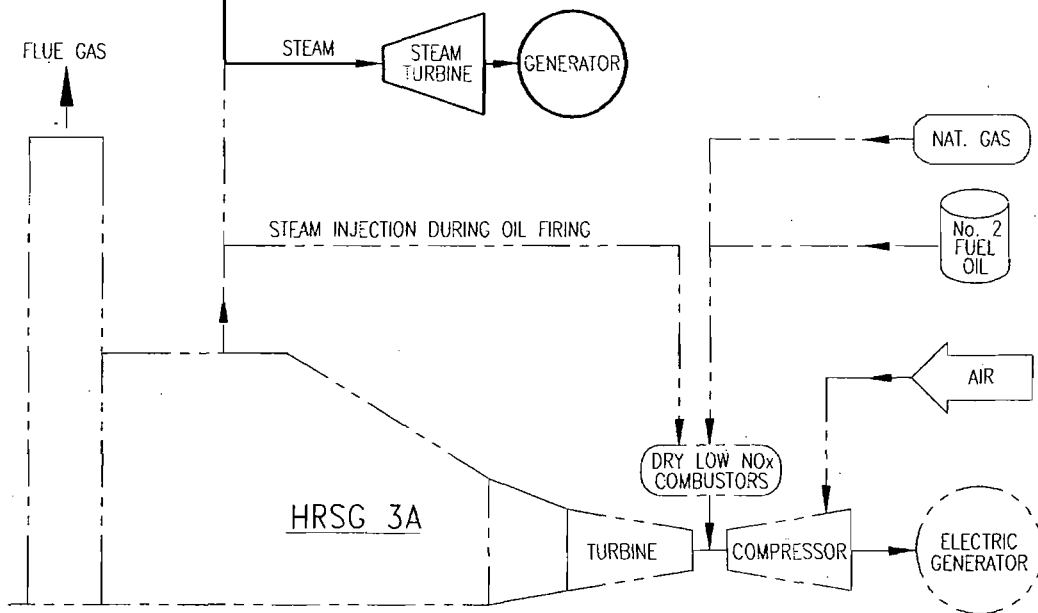
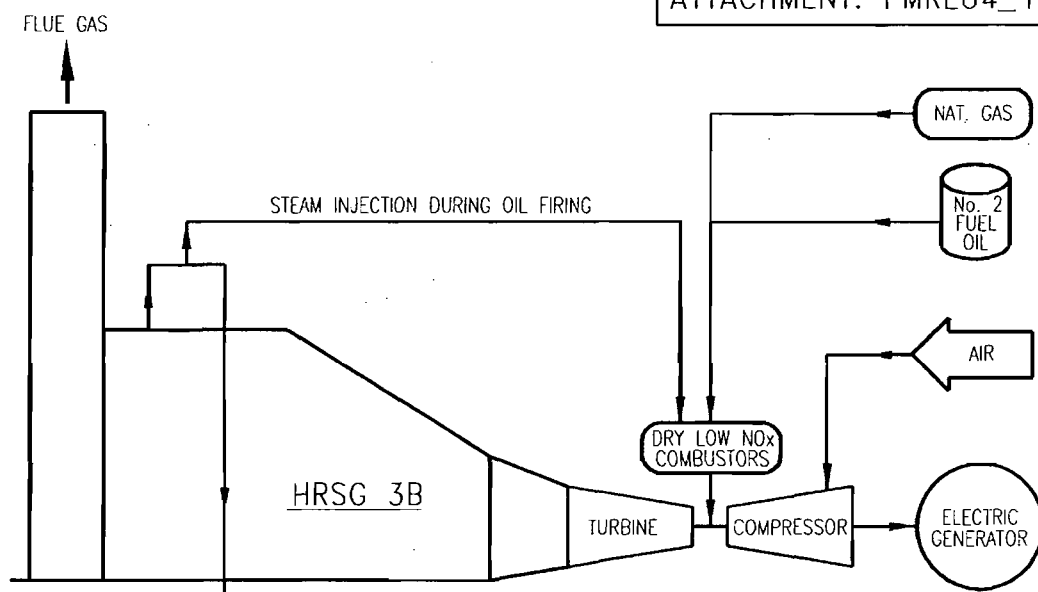
Pollutant	Fuel	Basis	Emissions Limitations ^d			
			Units 3&4		Units 5&6	
			lb/hr/CT	TPY ^a	lb/hr/CT	TPY ^a
PM/PM ₁₀	Gas		18	comb. 100	18	comb. 100
	Oil		60.6	tot.		60.6 tot.
	CG		19	333	19	333
Pb	Gas		neg.	comb. 0.015	neg. comb.	0.015
	Oil			0.015 tot.		0.015 tot.
	CG		0.3	5.3	0.3	5.3
SO ₂	Gas		91.5	comb. 568	91.5 comb.	568
	Oil ^c			920 tot.		920 tot.
	CG		834	14612	834	14612

- a Tons per year (TPY) emission limits listed for natural gas and oil combined apply as an emission cap based on limiting oil firing to an annual aggregate of 2,000 hours for the 4 CTs, with compliance to be demonstrated in annual operation reports.
- b Exclusive of background concentrations
- c Sulfur dioxide emissions based on a maximum of 0.5 percent sulfur in oil for hourly emissions and an average sulfur content of 0.3 percent for annual emissions.
- d These limitations for Units 5 and 6 and coal gasification shall not be binding for subsequent BACT determinations.

Note that in several cases, the annual emission limits are given in terms of a combined limit for 4 CT's. This allows FPL the flexibility to operate any of the combustion turbines on an as-needed basis, so long as both the hourly and annual emission limitations are complied with.

ATTACHMENT: PMREU4_1.bmp

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



BAR CODE

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	DRAWING SIZE	A (8.5x11)	FPL ARCHIVE NAME	MR001740		COMBUSTION TURBINES
						ATTACHMENT NO. EU4

0	7/14/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS
REV	DATE	REVISION DESCRIPTION	BY	CH	CDR	APR	ORC

PMR1-M0105-YY

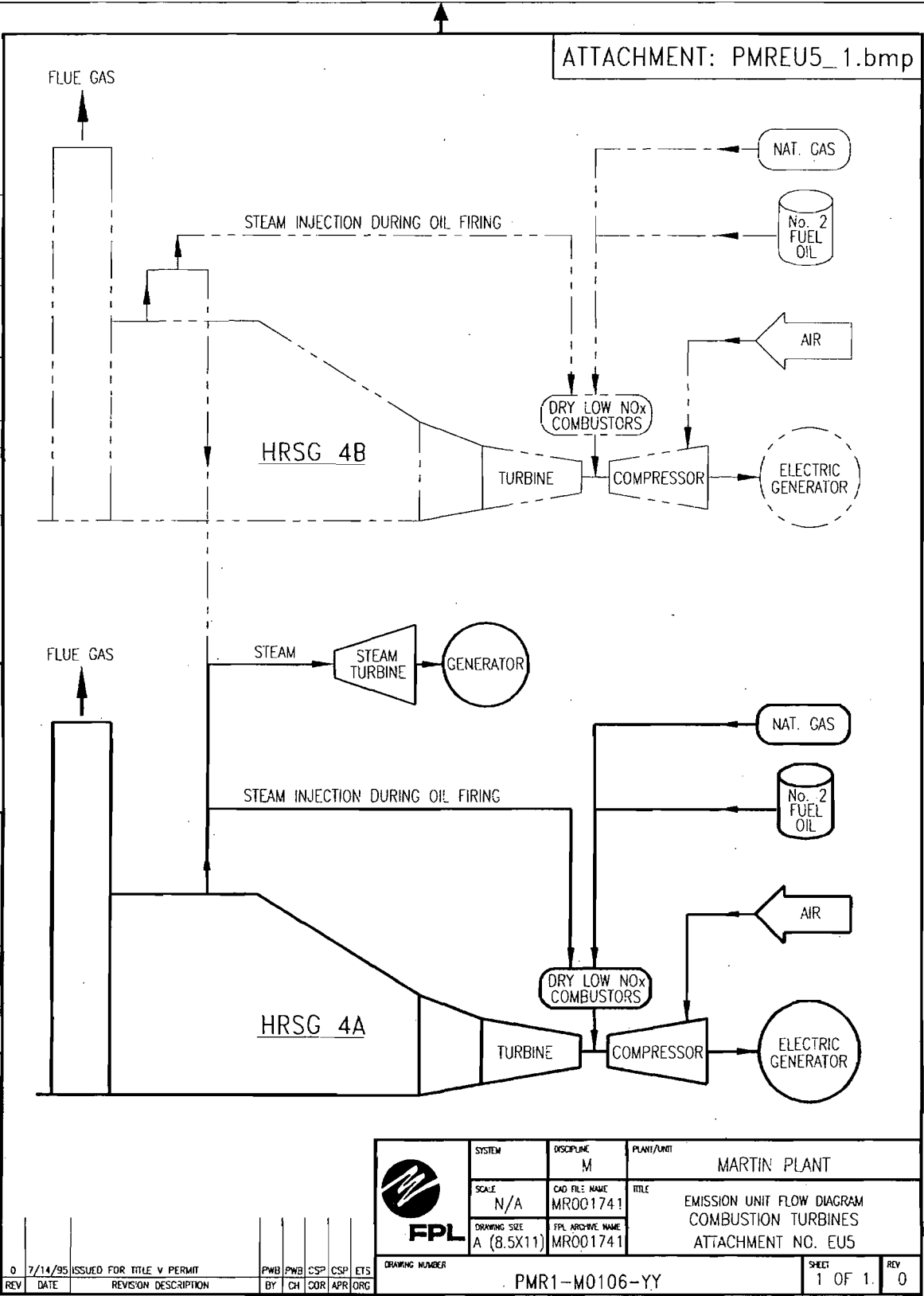
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11/25/90/TPGR-A 9/90

ATTACHMENT: PMREU5_1.bmp

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

BAR CODE



	SYSTEM	DISCIPLINE	PLANT/UNIT
	SCALE	CAD FILE NAME	TITLE
	DRAWING SIZE	FPL ARCHIVE NAME	
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	N/A	MRO01741	EMISSION UNIT FLOW DIAGRAM
A (8.5X11)	MRO01741		COMBUSTION TURBINES
			ATTACHMENT NO. EUS

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REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG

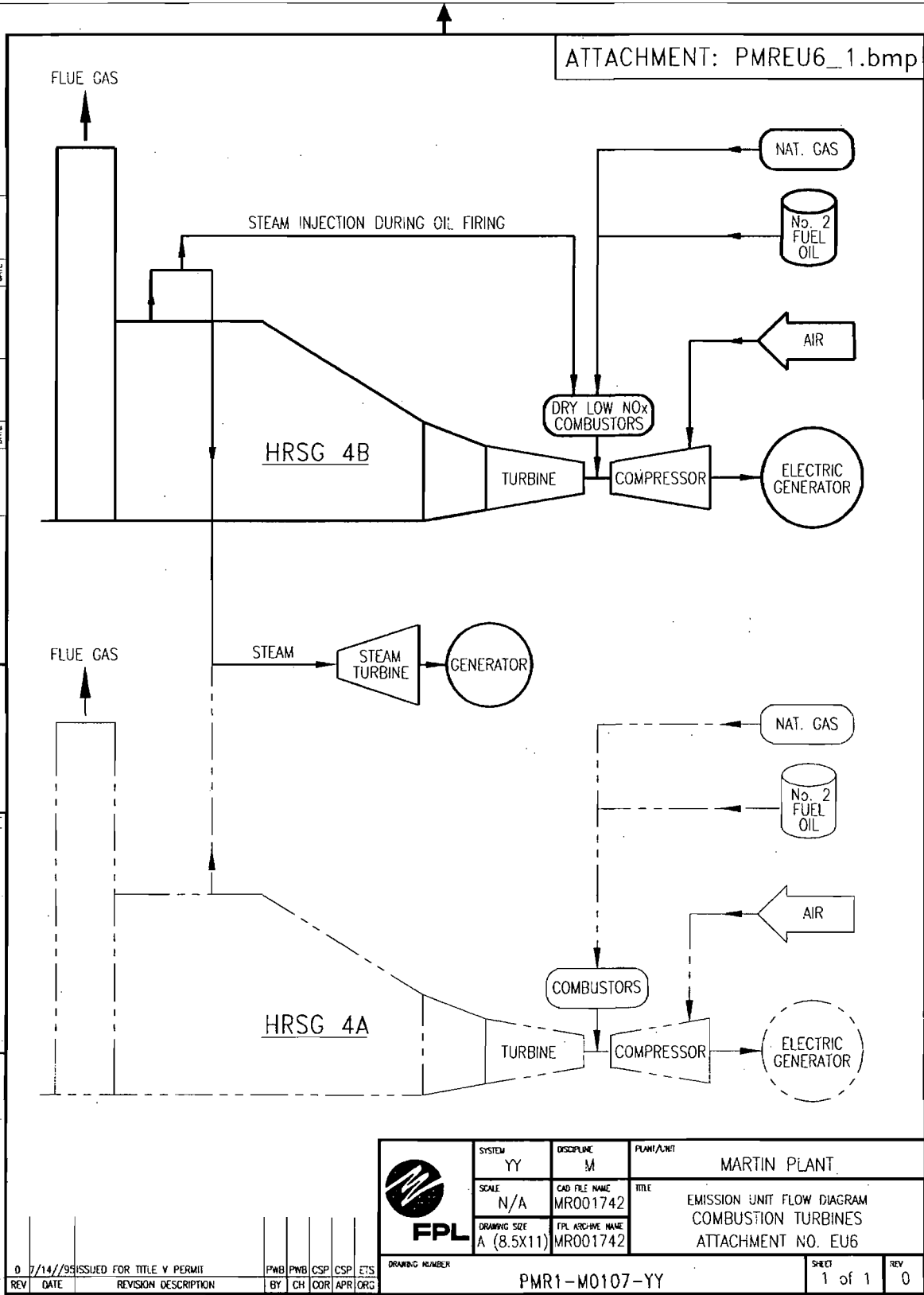
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FPGSM/TPGBDR-A 9/90

ATTACHMENT: PMREU6_1.bmp

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

BAR CODE



	SYSTEM	YY	DISCIPLINE	M	PLANT/NET	MARTIN PLANT
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REV	DATE	REVISION DESCRIPTION	BY	CH	ODR	APR	ORG

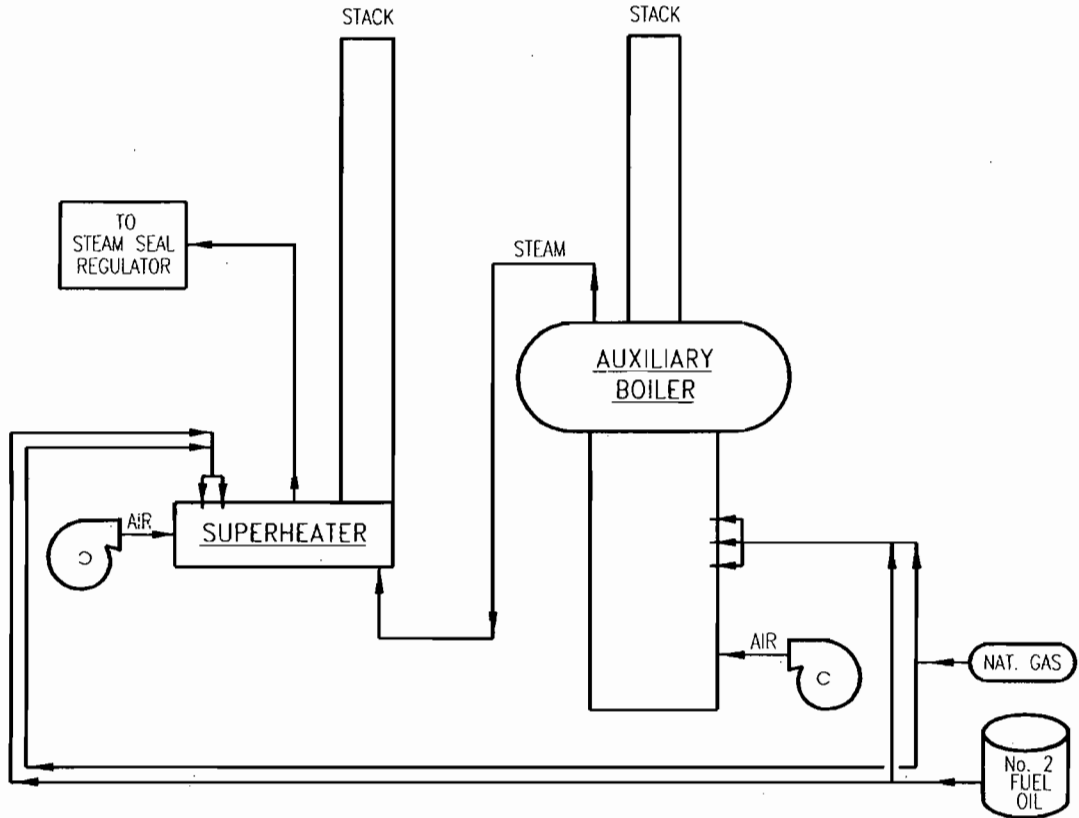
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FPGSM/TPGSDR-A 9/90

ATTACHMENT: PMREU7_1.bmp

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



BAR CODE

	SYSTEM YY	DISCIPLINE M	PLANT/LINE MARTIN SITE
	SCALE N/A	CAD FILE NAME MR001743	TITLE EMISSION UNIT FLOW DIAGRAM AUXILIARY BOILER ATTACHMENT NO. EU7
	DRAWING SIZE A (8.5X11)	FPL ARCHIVE NAME MR001743	

0	7-11-94	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS	DRAWING NUMBER	PMR1-M0108-YY	SHEET	1 OF 1	REV	0
REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG						

FPCSV/TPGRDR-A 9/90

Attachment PMRU7 2.txt

**Fuel Analysis
Natural Gas Analysis (typical)³**

<u>Parameter</u>	<u>Typical value</u>	<u>Max value</u>
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124 ²	none
% sulfur (grains/CCF)	0.43 ¹	1.00
% nitrogen (by volume)	0.8	none
% ash	negligible	none

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

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

No. 2 Distillate oil (typical)⁵

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60 F)	35.0 ²	30 - 40 ¹
Heat content (MBtu/bbl)	5,700 - 5,800 ²	none
% sulfur	0.2 ³	0.3 maximum ⁴
% nitrogen	no specification	none
% ash	<0.01 ²	0.01 ¹

Footnotes:

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

Attachment PMRU7 6.txt

Procedures for Startup / Shutdown

The auxiliary boiler is a primary component of the auxiliary steam system at the combined-cycle units. The function of the auxiliary steam system is to produce and convey steam to both steam turbine steam seal systems during startup and emergency situations.

Startup for the auxiliary boiler begins with "lighting off" of the machine on natural gas fuel. As the water heats up in the boiler tubes it will start to steam. After a time, the superheater is started, which adds additional heat to the steam being produced by the auxiliary boiler. When the steam pressure and temperature reach acceptable conditions, the steam is conveyed to the steam seal regulator of the steam turbine.

Shutdown is performed when the steam seals on the steam turbine become self-sealing. Shutdown is performed by shutting off the natural gas fuel supply to the auxiliary boiler.

Best Operating Practices include monitoring the visible emissions from the auxiliary boiler to ensure that the 10% opacity limitation is not exceeded. Built-in safeguards monitor the main flame and initiate shutdown in the event of loss of flame. All efforts to minimize both the level and duration of excess emissions are undertaken.

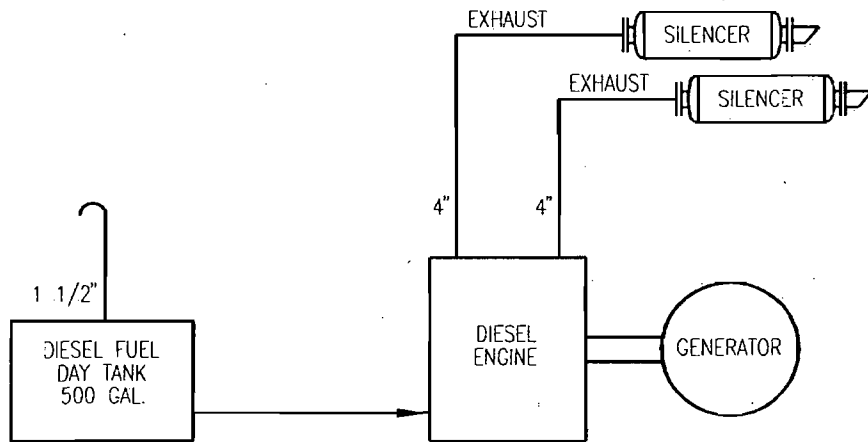
Attachment PMRU7 11.TXT

Alternative Methods of Operation

The auxiliary boiler superheater is only operated in conjunction with the auxiliary boiler. The auxiliary boiler superheater may be fired with either natural gas fuel or with light distillate oil fuel. Operating hours on the auxiliary boiler (and therefore by extension the aux. boiler superheater) are limited to during cold startups or whenever steam is otherwise unavailable for the steam seals on the steam turbine. The heat input rate on the auxiliary boiler superheater may range from 0 to 1.5 mmBtu/hour.

ATTACHMENT: PMREU8-1.jpg

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



BAR CODE

0	7/14/95	ISSUED FOR TITLE V PERMIT	PWB	PWB	CSP	CSP	ETS
REV	DATE	REVISION DESCRIPTION	BY	CH	COR	APR	ORG

	SYSTEM	YY	DISCIPLINE	M	PLANT/UNIT	MARTIN SITE/UNITS 3 & 4	
	SCALE	N/A	CAD FILE NAME	MR001745	TITLE	EMISSION UNIT FLOW DIAGRAM EMERGENCY DIESEL GENERATOR ATTACHMENT NO. EU-8	
	DRAWING SIZE	A (8.5X11)	FPL ARCHIVE NAME	MR001745			
	DRAWING NUMBER	PMR1-M0110-YY				SHEET	1 OF 1
						REV	0

FPCSVM/TP600R-A 9/90

Attachment PMRU8-2.txt

Fuel Analysis

No. 2 Distillate oil (typical)⁵

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60 F)	35.0 ²	30 - 40 ¹
Heat content (MBtu/bbl)	5,700 - 5,800 ²	none
% sulfur	0.2 ³	0.3 maximum ⁴
% nitrogen	no specification	none
% ash	<0.01 ²	0.01 ¹

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(3) Data from current air permit - max hourly concentration.

(4) Data from current air permit - max annual concentration.

(5) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

Attachment PMRU8-6.txt

Procedures for Startup / Shutdown

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

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

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

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

Attachment PMRU8-11.txt

Alternative Methods of Operation

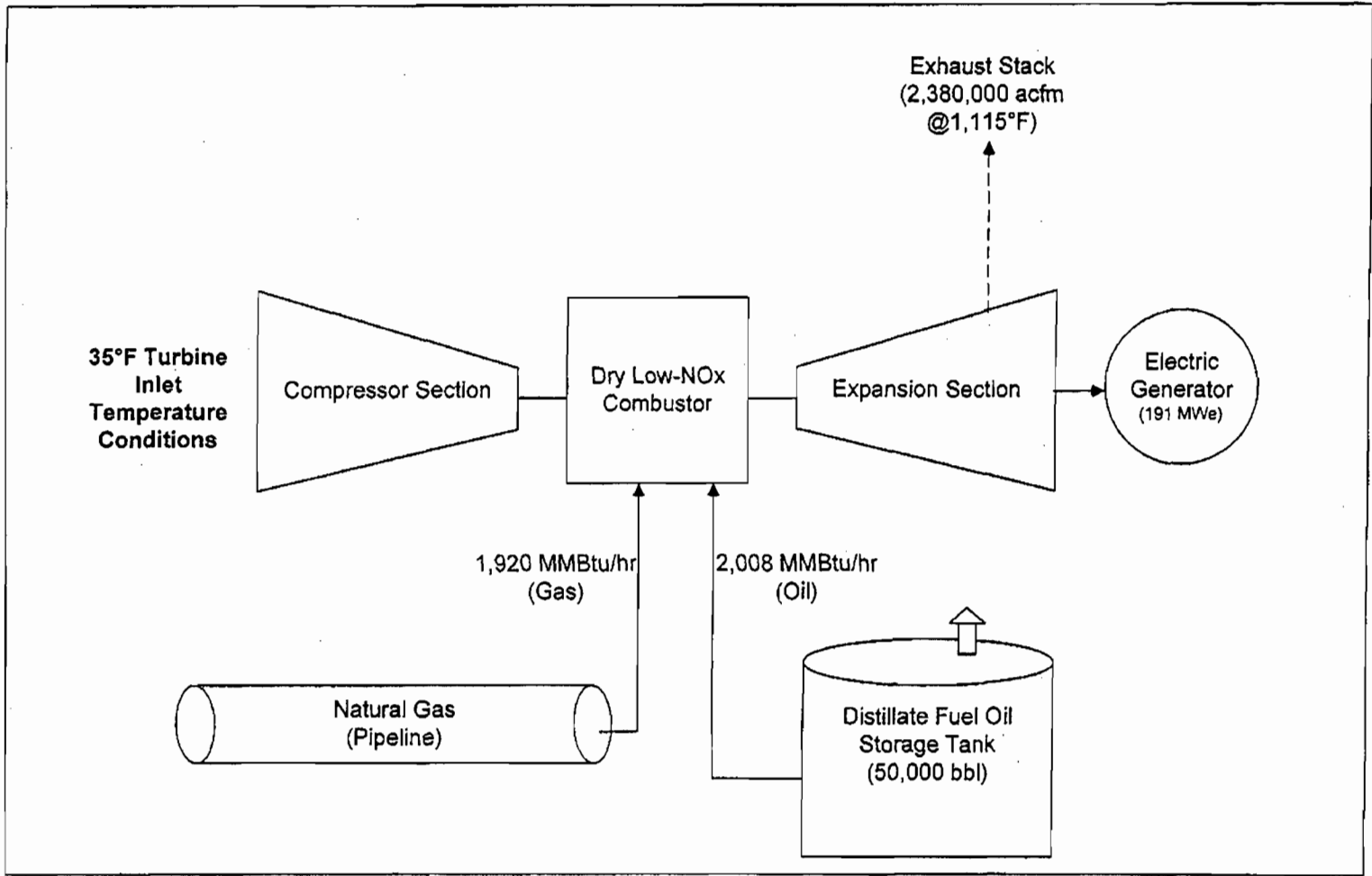
The emergency diesel generator will be fired with light distillate oil fuel. Operating hours on the diesel generator are unlimited; the generator may be operated up to 8760 hours per year. However, as a practical matter, the generator typically does not operate nearly that often; historically the emission unit has operated less than 400 hours per year.

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.

Attachment PMRU8-13.txt

Identification of Additional Applicable Requirements

Additional applicable requirements may be found in the facility's current PSD permit (PSD-FL-146) and Site Certification (PA - 89 - 27). Both of these documents may be found at the end of this Title V application, as attachments. The primary requirements for this emission unit are the limitations on NOx and SO2 of 15 gm/hp-hr and 0.3% sulfur fuel as an annual limit.



0237506/4/4.4/4.1 Martin/Attachments-txt.doc

Martin Peaking Units

Figure 2-1
Simplified Flow Diagram of GE Frame 7FA
Martin Peaking Units Project



Attachment PMRU9-1.bmp

Attachment PMRU9-2.txt

Fuel Analysis

Natural Gas Analysis (typical)³

<u>Parameter</u>	<u>Typical value</u>	<u>Max value</u>
Specific gravity(@ 60° F)	0.887	none
Heat content (Btu/cu ft)	950 - 1124 ²	none
% sulfur (grains/CCF)	0.43 ¹	1.00
% nitrogen (by volume)	0.8	none
% ash	negligible	none

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

(1) Data from laboratory analysis

(2) Data from FPL fuel purchasing specifications

(3) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

Fuel Analysis

No. 2 Distillate oil (typical)⁵

<u>Parameter</u>	<u>Typical value</u>	<u>Specifications</u>
API gravity (@ 60 F)	35.0 ²	30 - 40 ¹
Heat content (MBtu/bbl)	5,700 - 5,800 ²	none
% sulfur	0.2 ³	0.3 maximum ⁴
% nitrogen	no specification	none
% ash	<0.01 ²	0.01 ¹

Footnotes:

(1) Data taken from FPL fuel specifications.

(2) Data taken from laboratory analysis.

(3) Data from current air permit - max hourly concentration.

(4) Data from current air permit - max annual concentration.

(5) The values are "typical" based upon the following:

- Information gathered by FPL through laboratory analysis, and
- FPL's fuel purchasing specifications. It should be noted that the analytical results obtained from grab samples taken at any given time may vary from those listed.

Attachment PMRU9-3.txt

GER-3568F

DRY LOW NO_x COMBUSTION SYSTEMS FOR GE HEAVY-DUTY GAS TURBINES

L.B. Davis
GE Power Systems
Schenectady, NY

ABSTRACT

State-of-the-art emissions control technology for heavy-duty gas turbines is reviewed with emphasis on the operating characteristics and field experience of Dry Low NO_x (DLN) combustors for E- and F- technology machines. The lean premixed DLN systems for gas fuel have demonstrated their ability to meet the ever-lower emission levels required today. Lean premixed technology has also been demonstrated on oil fuel and is also discussed.

INTRODUCTION

The regulatory requirements for low emissions from gas turbine power plants have increased during the past 10 years. Environmental agencies throughout the world are now requiring even lower rates of emissions of NO_x and other pollutants from both new and existing gas turbines. Traditional methods of reducing NO_x emissions from combustion turbines (water and steam injection) are limited in their ability to reach the extremely low levels required in many localities. GE's involvement in the development of both the traditional methods (References 1 through 6) and the newer Dry Low NO_x (DLN) technology (References 7 and 8) has been well-documented. This paper focuses on DLN.

Since the commercial introduction of GE's DLN combustion systems for natural-gas-fired heavy-duty gas turbines in 1991, systems have been installed in more than 145 machines, from the most modern F technology (firing temperature class of 2400 F/1316 C) to field retrofits of older machines. As of August 1996, these machines have operated more than one million hours with DLN; more than 290,000 hours have been in the F technology. To meet marketplace demands, GE has developed DLN products broadly classified as either DLN-1, which was developed for E-technology (2000 F/1093 C firing temperature class) machines, or DLN-2, which was developed specifically for the F technology machines and is also being applied to the EC, G and H machines.

Development of these products has required an intensive engineering effort involving both GE Power Systems and GE Corporate Research and Development. This collaboration will continue as DLN is applied to the G and H machines and combustor development for Dry Low NO_x on oil ("dry oil") continues.

This paper presents the current status of DLN-1 technology and experience, including dry oil, and of DLN-2 technology and experience. Background information about gas turbine emissions and emissions control is contained in the Appendix.

DRY LOW NO_x SYSTEMS

Dry Low NO_x Product Plan

Figure 1 shows GE's Dry Low NO_x product offerings for its new and existing machines in three major groupings. The first group includes the MS3000, MS5000 and MS6001B products. The 6B DLN-1 is the technology flagship product for this group and, as can be noted, is available to meet 9 ppm NO_x requirements. Such low NO_x emissions are generally not attainable on lower firing temperature machines such as the MS3000s and MS5000s because carbon monoxide (CO) would be excessive.

The second major group includes the MS7000B/E, MS7001EA and MS9001E machines with the 9 ppm 7EA DLN-1 as the flagship product. The dry oil program focuses initially on this group.

The third group combines all of the DLN-2 products and includes the FA, EC, G and H machines, with the 7EA product as the flagship.

As shown in Figures 2 and 3, most of these products are capable of power augmentation and of peak firing with increased NO_x emissions. With gas fuel, power augmentation with steam is in the premixed mode for both DLN-1 and DLN-2 systems. Power augmentation with water is in the lean-lean mode for DLN-1 and in the premixed mode for DLN-2.

The GE DLN systems integrate a staged pre-

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Turbine Model	Gas			Distillate		
	NO _x (ppmvd)	CO (ppmvd)	Diluent	NO _x (ppmvd)	CO (ppmvd)	Diluent
MS3002 (J) - RC	33	25	Dry	Not Available		
MS3002 (J) - SC	42	50	Dry	Not Available		
MS5001F	42	50	Dry	65	20	Water
MS5001R	42	50	Dry	65	20	Water
MS5002C	42	50	Dry	65	20	Water
MS6001 B	25	15	Dry	42	20	Water
	9	25	Dry	42	30	Water/Steam
MS6001 FA	25	15	Dry	42/65	20	Water/Steam
MS7001 B/E Conv	25	25	Dry	42	30	Water
MS7001 EA	25	15	Dry	42	20	Water
	15	25	Dry	42	30	Water/Steam
	9	25	Dry	42	30	Water/Steam
MS7001 EC	25	15	Dry	42/65	20	Water/Steam
MS7001 FA	25	15	Dry	42/65	20	Water/Steam
	9	9	Dry	42/65	30	Water/Steam
MS9001 E	35	15	Dry	42	20	Water
	25	25	Dry	42	20	Water
	25	25	Dry	90	20	Dry
MS7001 H	25	15	Dry	42/65	20	Water/Steam
	9	9	Dry	42/65	30	Water/Steam
MS9001 EC	25	15	Dry	42/65	20	Water/Steam
MS9001 FA	25	15	Dry	42/65	20	Water/Steam
MS9001 H	25	15	Dry	42/65	20	Water/Steam

Notes: 1. NO_x levels are at 15% oxygen. Ambient range 30 F/-1 C to 100 F/38 C

Figure 1. Dry Low NO_x product plan

GT27170

mixed combustor, the gas turbine's SPEEDTRONIC™ controls and the fuel and associated systems. There are two principal measures of performance. The first is meeting the emission levels required at base load on both gas and oil fuel and controlling the variation of these levels across the load range of the gas turbine.

The second measure is system operability, with emphasis placed on the smoothness and reliability of combustor mode changes, ability to load and unload the machine without restriction, capability to switch from one fuel to another

and back again, and system response to rapid transients (e.g., generator breaker open events or rapid swings in load). GE's design goal is to make the DLN system operate so the gas turbine operator does not know whether a DLN or conventional combustion system is installed (i.e., "transparent to the user"). As of August 1996, a significant portion of the DLN design and development effort has focused on system operability.

Design of a successful DLN combustor for a heavy-duty gas turbine also requires the designer to develop hardware features and operational

Turbine Model	NO _x @ 15% O ₂ (ppmvd)	Operating Mode	Diluent	Maximum Diluent/Fuel	NO _x at Max D/F (ppmvd)	CO Max D/F (ppmvd)
MS6001(B)	9	Premix	Steam	2.5/1	9	25
		Lean-Lean	Steam	2.5/1	25	15
	25	Premix	Steam	2.5/1	25	15
		Lean-Lean	Water	1.5/1	25	15
MS7001(EA)	9	Premix	Steam	2.5/1	9	25
		Lean-Lean	Water	1.5/1	25	15
		Lean-Lean	Steam	2.5/1	25	15
	25	Premix	Steam	2.5/1	25	15
		Lean-Lean	Water	1.5/1	25	15
		Lean-Lean	Steam	2.5/1	25	15
MS7001(FA)	25	Premix	Steam	2.1/1	25	15

Figure 2. DLN power augmentation summary — gas fuel

GT24556

Attachment PMRU9-3.txt

GER-3568F

	NO _x -Base (ppmvd)	NO _x -Peak (ppmvd)	CO-Base (ppmvd)	CO-Peak (ppmvd)
MS6001(B)	9	18	25	6
	25	50	15	4
MS7001(EA)	9	18	25	6
	25	50	15	4
MS7001(FA)	25	35	15	6
MS9001(E)	25	40	15	6

Figure 3. DLN peak firing summary — gas fuel

GT24557

methods that simultaneously allow the equivalence ratio and residence time in the flame zone to be low enough to achieve low NO_x, but with acceptable levels of combustion noise (dynamics), stability at part load operation and sufficient residence time for CO burn-out, hence the designation of DLN combustion design as "four-sided box" (Figure 4).

A scientific and engineering development program by GE's Corporate Research and Development Center, Power Systems business and Aircraft Engine business has focused on understanding and controlling dynamics in lean premixed flows. The objectives have been to:

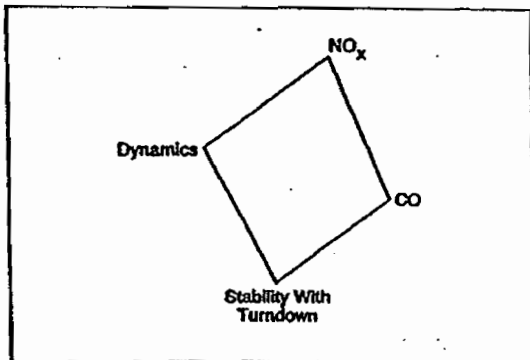
- Gather and analyze machine and laboratory data to create a comprehensive dynamics data base
- Create analytical models of gas turbine combustion systems that can be used to understand dynamics behavior

- Use the analytical models and experimental methods to develop methods to control dynamics

As of August 1996, these efforts have resulted in a large number of hardware and control features that limit dynamics, plus analytical tools that are used to predict system behavior. The latter are particularly useful in correlating laboratory test data from full scale combustors with actual gas turbine data.

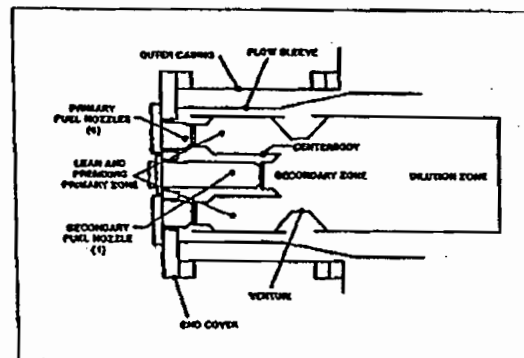
DLN-1 System

DLN-1 development began in the 1970s with the goal of producing a dry oil system to meet the United States Environmental Protection Agency's New Source Performance Standards of 75 ppmvd NO_x at 15% O₂. As noted in Reference 7, this system was tested on both oil and gas fuel at Houston Lighting & Power in



GT23812A

Figure 4. DLN technology — a four-sided box



GT15050A

Figure 5. DLN-1 combustor schematic

Attachment PMRU9-3.txt

GER-3568F

1980 and met its emission goals. Subsequent to this, DLN program goals changed in response to stricter environmental regulations and the pace of the program accelerated in the late 1980s.

DLN-1 Combustor

The GE DLN-1 combustor (shown in cross section in Figure 5 and described in Reference 8) is a two-stage premixed combustor designed for use with natural gas fuel and capable of operation on liquid fuel. As shown, the combustion system includes four major components: fuel injection system, liner, venturi and cap/centerbody assembly.

These components form two stages in the combustor. In the premixed mode, the first stage thoroughly mixes the fuel and air and delivers a uniform, lean, unburned fuel-air mixture to the second stage.

The GE DLN-1 combustion system operates in four distinct modes, illustrated in Figure 6, during pre-mixed natural gas or oil fuel operation:

Mode	Operating Range
Primary	Fuel only to the primary nozzles. Flame is in the primary stage only. This mode of operation is used to ignite, accelerate and operate the machine over low- to mid-loads, up to a preselected combustion reference temperature.
Lean-Lean	Fuel to both the primary and secondary nozzles. Flame is in both the primary and secondary stages. This mode of operation is

used for intermediate loads between two pre-selected combustion reference temperatures.

Secondary Fuel to the secondary nozzle only. Flame is in the secondary zone only. This mode is a transition state between lean-lean and premix modes. This mode is necessary to extinguish the flame in the primary zone, before fuel is reintroduced into what becomes the primary premixing zone.

Premix Fuel to both primary and secondary nozzles. Flame is in the secondary stage only. This mode of operation is achieved at and near the combustion reference temperature design point. Optimum emissions are generated in premix mode.

The load range associated with these modes varies with the degree of inlet guide vane modulation and, to a smaller extent, with the ambient temperature. At ISO ambient, the premix operating range is 50% to 100% load with IGV modulation down to 42°, and 75% to 100% load with IGV modulation down to 57°. The 42° IGV minimum requires an inlet bleed heat system.

If required, both the primary and secondary fuel nozzles can be dual-fuel nozzles, thus allowing automatic transfer from gas to oil throughout the load range. When burning either natural gas or distillate oil, the system can operate to full load in the lean-lean mode (Figure 6) and in the pre-mixed. Power augmentation with water is the most common reason.

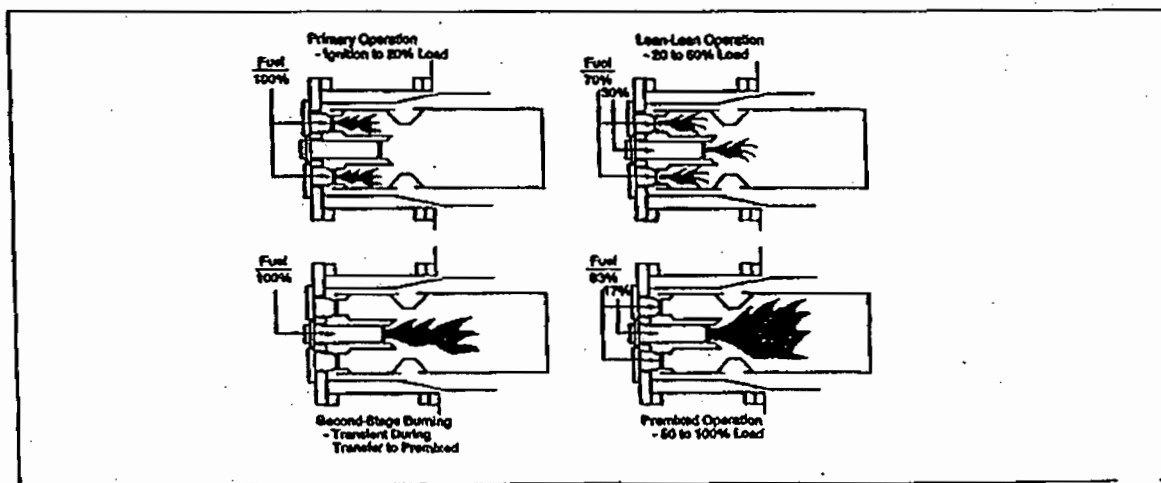
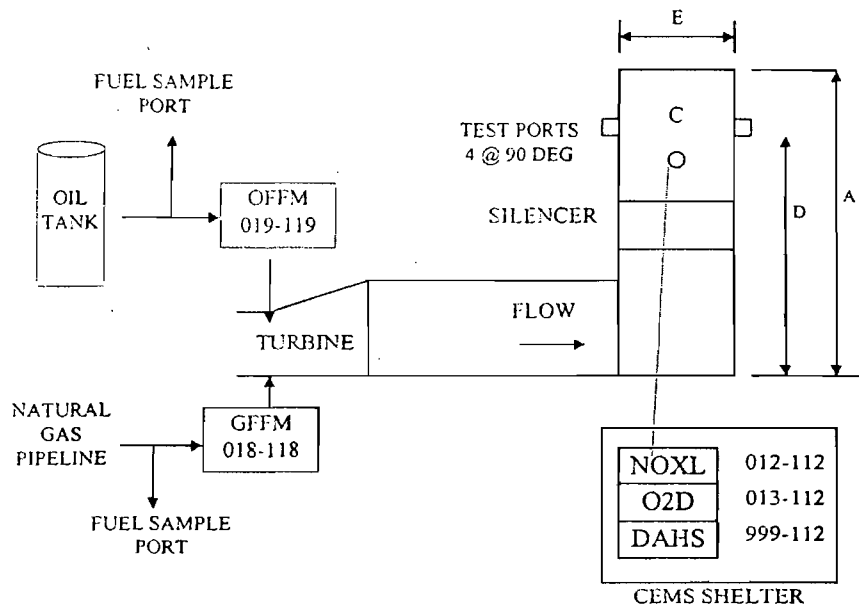


Figure 6. Fuel-staged Dry Low NO_x operating modes

Attachment PMREU9-4

**MARTIN PLANT UNIT PMR8A & 8B ORIS CODE: 6043
SCHEMATIC DIAGRAM/CEMS SAMPLE LOCATION**



MONITOR LOCATION INFORMATION

A -STACK HEIGHT ABOVE GRADE -81 FEET

B -STACK INSIDE DIAMETER AT TEST PORT -20 FEET, 6 INCHES

C -INSIDE CROSS-SECTIONAL AREA AT TEST PORT -330 SQ. FT.


D -CEMS SAMPLE PROBE

1. ABOVE GRADE -69.9 FEET
2. ABOVE LAST DISTURBANCE (SILENCER)
 - A. FEET -18 FEET, 9 INCHES
 - B. STACK DIAMETERS -0.91
3. PRIOR TO STACK EXIT
 - A. FEET -11 FEET, 3 INCHES
 - B. STACK DIAMETERS -0.55 EPA TEST PORT
 1. ABOVE GRADE -70.9 FEET
 2. ABOVE LAST DISTURBANCE (SILENCER)
 - A. FEET -19 FEET, 9 INCHES
 - B. STACK DIAMETERS -0.96
 3. PRIOR TO STACK EXIT
 - A. FEET -10 FEET, 3 INCHES
 - B. STACK DIAMETERS -0.5

E -INSIDE CROSS-SECTIONAL AREA AT FLUE EXIT -330 SQ. FT.

F -STACK BASE ELEVATION -31.5 FEET ABOVE MEAN SEA LEVEL

Attachment PMREU9-6a

 FPL	LOCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 1
	Inside Operator	DATE 06/05/01
	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Fuel Oil	Page 2 of 14

OBJECTIVE

Perform normal start-up of Combustion Turbine for Simple Cycle operation.

This procedure contains the following:

- Startup
- How to go on & off load control
- Shutdown
- Start check definitions
- How to soft boot screen should it freeze up

SAFETY AND ENVIRONMENTAL

ALL safety rules should be followed when starting the unit.

PREREQUISITES

The Combustion Turbine is on Turning Gear. (2100)

The Closed Cooling Water System is in service with fans running. (2105)

The Compressed Air system is in service. (2007)

NOTE: Time needed to start the unit with pre-arranged notification places having the Inside Operator "PUSH" the "START" button 1 hour before RFC time. The operator must prepare the unit to have it "Ready to Start" within that timeline.
If the Dispatcher calls for the Unit WITHOUT proper notification, the operator must be able to RFC the unit with 85 minutes of time notified that unit is needed.


The unit is considered Ready for Control when the Combustion Turbine has reached firing mode 6Q, NOx is below limits, and unit is stable.

Perform shift tailboard to review the activities of start up. _____

Review clearance book to verify that nothing has been taken out of service that will prevent the starting of the unit. _____

Review Mark VI points that are **FORCED**. To scan for forced points go to Programs\Ovation NT\Ovation Applications\Review. At this point go to Review

located on PGBU DOC SERVER //bxsw65/pgen/pmr/pmr_eakers/procedures/draft

	LOCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 1
	Inside Operator	DATE 06/05/01
	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Fuel Oil	Page 3 of 14

on the top menu & hit "Set Review Filters." On the bottom menu hit "clear all".
 On Drops & Record Types hit "set all." Now check "Alarm check removed"
 & "Limit check removed" under Checking/Cutout Items. Under Other Reasons hit
 "Scan removed." After hitting OK then hit Go to review list.

Check **Drop Status** to be normal

Select **Mode Select** box, then select **AUTO** on Startup Screen (2100) _____

Verify **Generator Mode** box, to be indicating **OFF** _____

Select **Master Reset** from the Ovation screen & a **Diagnostic Reset** from
 the Mark VI. _____

Check Status Box for a **Ready to Start**

If you do not get a "Ready to Start" Check the START CHECKS graphic. (2113)

(2113)

Select (**START CHECKS**), graphic from the DCS & investigate any checks
 still in red. (Go to end of this procedure to review Problem areas) _____

(2105)


Select (**PUMP/FAN/MOTOR CTRL**), graphic from the DCS.
 Assure that the lead motor is actually running. _____

START UP THE COMBUSTION TURBINE

Start a fuel oil forwarding pump. Start a second pump if both units will be operated on oil.
 Start a demin. forwarding pump. Again, start a second pump if both units will be operated on
 oil.

Verify with the Outside Operator that the Combustion Turbine has been walked down and is
 ready to be started.

located on PGBU DOC SERVER //jbxsw65/pgen/pmr/pmr_eakers/procedures/draft

	LOCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 1
	Inside Operator	DATE 06/05/01
	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Fuel Oil	Page 4 of 14

Verify with the Outside Operator that the Generator Disconnects are closed and reported to the Dispatcher.

When you are ready to start the CT make an announcement that you are going to start the CT.

(2100)

From the (**STARTUP**), graphic on the DCS.

Select **FUEL....** Fuel oil for the purpose of this procedure _____

Select **MASTER CONTROL** _____

From **sub window** Select **START** _____

Write down time the CT Starts. _____:_____ **AM PM**

Verify that the Status box indicates [**CRANKING**] _____

(2114)

Select (**STATIC START**), graphic from the DCS.

Check that 89ND is indicating **OPEN** _____

Check that 89SS is indicating **CLOSED** _____


Check Static Start reference out to be indicating **14.5 %** _____

Turbine Speed should be increasing.

Check LCI Ref to be indicating **14.5%** _____

Check TNH to be increasing _____

The CT will accelerate to **14.5%** speed approx. 525 RPM.
 When speed is reached the CT will hold at 525 RPM for 5 Minutes
 This is to allow for a purge of the CT.
 After 5 minute purge the LCI will lower the speed of the CT.

	LOCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 1
	Inside Operator	DATE 06/05/01
	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Fuel Oil	Page 5 of 14

The CT will coast down in speed to below 14.5% approx. 478 RPM.
 The LCI will then bring the speed back up to firing speed 504 RPMs.

CT Status will indicate **[FIRING]** on *start up graphic* _____

Write down the time that FIRES were established in the CT. ____:____ **AM PM**

Select **(STARTUP)**, graphic from the DCS.

Check that the **FSR** is set at **14** _____
 The CT Status Box will indicate **[WARMING UP]** _____

The CT will set at 14.5% speed (525) for 1 Minute to allow for warm up.

(2114)
 Select **(STATIC START)**, graphic from the DCS.
 Check that the LCI reference goes to 100% _____


Select **(STARTUP)**, graphic from the DCS.
 Check that the **FSR** is increasing _____
 Check that CT speed is increasing _____
 CT Status will indicate **[ACCELERATING]** _____
 The **IGV's** will begin to move from 34% to 57% degrees _____

Select **(STATIC START)**, graphic from the DCS.
 At 91% speed (3276 RPM) the LCI will de-energize.
 Check that 89SS has **OPENED** _____
 Check 89ND has **CLOSED** _____

The CT will continue to increase in speed. Due to increased fuel flow.
 When the CT reaches 95% speed (3420 RPM) the EX2000 flashes the field.

(2103)
 Select **(GEN/EXCITER)**, graphic from the DCS.

located on PGBU DOC SERVER //jbxsw65/pgen/pmr/pmr eakers/procedures/draft

	LOCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 1
	Inside Operator	DATE 06/05/01
	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Fuel Oil	Page 6 of 14

Check Gen. Voltages & exciter volts and amps _____

(2005)

Select **(Main Fuel System)**, graphic from the DCS.
 Check that the fuel oil supply pressure is steady _____

When you are ready to place the unit on line after achieving FSNL.

(2118)

Select **(SYNCHRONIZING)**, graphic from the DCS.
 Select (Speed/Load Control) to adjust speed to 3606 RPM's
 Select (KV/KVAR Control) to adjust voltage to 1 KV above line voltage.
 Select (Synch) screen from the GE HMI to monitor synch scope.

Select **SYNCH MODE** from Synchronizing screen (2118)
 From **sub window** Select **AUTO**

Check that Generator Breaker closes.
 Check that Watts and Vars are indicated.

Write down the time that the Generator Breaker closed. _____:_____ AM PM


Select **(STARTUP)**, graphic from the DCS.
 The CT Status Box will indicate **[SPINNING RESERVE]**
 The load should indicate 16 mws
 Adjust voltage as necessary
 Load the unit to 40 MW's by selecting the MW Setpoint box & type in 40. Hit preselect to load unit.

After achieving 40 MW's the Operator will need to assure the water injection skid is ready for service.

(2225)

Select **(Water Injection)** graphic
 Select water injection on. Valve & water injection pump will not come on until load is increased to approx 50MW's or 11.5 lbs/sec fuel flow.
 Increase load.

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Monitor decrease in NOx, exhaust temperature spread & turbine vibration as load is increased.

At this time the CT Load can be moved by way of three means.

1) Manually from the Speed/Load Control Box by pressing the RAISE or LOWER buttons from the sub window.

2) By selecting BASE Load from the Load Select Box. When you select this mode the CT will load to the max output of the machine under current conditions.

3) By selecting PRE-SELECT from the Load Select Box Before selecting this option you should enter the desired MW setpoint that you would like the CT Load to go to.

The Operator should check and monitor CEMS equipment and NOX readings. The Operator must use Best Management Practices to minimize emissions during start up and shutdown. Excess emissions shall not exceed 2 hours during any 24 hour period.

At this time the Operator should set the generator voltage control.

Select **(Start-up)**, graphic from the DCS
Select **Generator Mode** Box _____

The Operator has the option of placing the generator voltage controls in one of three modes. VAR Control, PF Control, or Off Mode. If VAR Control or PF Control is selected the Operator will have to input the desired set point for the desired conditions needed. Currently the preferred method to run the generator is in the OFF mode.


Select Generator Mode Box _____
Select OFF, PF or VAR

If PF or VAR is selected the Operator must input a set point as per desired curve.

Input set point _____

The unit can be loaded as needed at this time. The following table shows when the firing modes change on the CT during loading and un-loading.

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LOADING		
FIRING MODE	FIRING TEMPERATURE	APPROX. LOAD
PM-MODE 3	Ignition to 16% speed	576 RM
PM-MODE 2	16% speed to 95% speed	576-3420 RPM
PM-MODE 1	95% speed to TTRFI=1630	3420 RP25MW
PM-MODE 3	TTRFI >1630	25MW-50MW
PM-MODE 4	TTRFI >2000	50MW-109MW
PM-MODE 5	TTRFI >2280, brief duration	Approx. 109 MW
PM-MODE 5Q	TTRFI > 2280 + A Time Delay to 6Q109 MW	Approx Load
PM MODE 6Q	TTRFI > 2280 to base Load	109MW-Base

UNLOADING		
FIRING MODE	FIRING TEMPERATURE	APPROX. LOAD
PM-MODE 6Q	TTRFI = 2220F=time delay	78MW
PM-MODE 5Q	TTRFI = 2220F	78MW
PM-MODE 4	TTRFI = 1940 F	40MW
PM-MODE 3	TTRFI = 1570F	20mw
PM-MODE 1	FSNL OPERATING MODE	FSNL

To Go on Load Control:

1. After achieving base load operation, select "Preselect Load" from from load select box on Startup graphic. Unit will not respond to load control demands if "Base Load " is selected.
2. From "Station Load Control" graphic 2209, assure low limit is set at 80 to maintain 6Q operation. Click on the white lettered "Preselect Load". Next click on "Unit Master"

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To Go Off Load Control:

1. To take unit off load control, click on "Preselect Load" white lettering on the "Station Load Control" graphic 2209. Next click on "Local".

To Shutdown CT:

The CT can be shut down by two methods. One method used to shut down the CT will be to have the Operator push the Emergency Stop Button located at the Operator Station in the Control Room or the Emergency Stop Button in the PEECC. Using this method should be limited to emergency conditions only. This will trip the unit. The other method is to shut the unit down on a controlled shut down. This will be the preferred method of operation. This is accomplished by selecting STOP and then selecting OFF.

It should be noted that when this option is selected that the CT will ramp down at a 13.6% MW ramp per minute. The Operator and the Load Dispatcher must be prepared for the unit to ramp off line at that rate. The operator can Pre-Select Load to a desired lower set point where the load rate can be controlled and then select STOP and OFF. The operator can use the Speed/Load Control Box and select Lower to reduce load on the CT to a point where STOP and OFF can be selected.

SHUT DOWN (Controlled Shut Down)

Inform the Outside Operator that the unit will be shutting down. _____

Notify MLD that the unit will be shut down. _____


Lower load on CT

To use the Pre-Select Mode of reducing load follow the following steps.

(2100)

Select (**STARTUP**), from the DCS.

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Select **LOAD SELECT** box
 Select **Pre-Select Ld** _____

The following steps take the Operator through the steps to lower load on the CT. The Operator can step down the load by reducing the set point. At this time the Operator would want to hold the load at 45 mw's. The reason for this is to allow the Operator to take the Gas Heater out of service, before the CT transfers from Mode 4 to Mode 3.

Select **MW CONTROL**

Enter value of the desired MW that you want the CT to go to. (Hold at 45mw's) _____
 Select enter _____

When the CT load is at 45 mw's

(2005)
 Select (*main fuel gas system*), from the DCS

Select **FG HTR** box _____

Select **STOP** _____

Select **Direct fired HTR STPT** box _____

Check gas temperature to be decreasing _____


Enter 20 mw's in the set point box (preselect load point) _____

The CT load is at 20 MW's and you are ready for the unit to come off line.

(2100)
 From the (*Start-up*), graphic.
 Select **Master Control** Box
 Select **STOP** _____

Select **Mode Select**

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Select OFF _____

The CT will ramp down to 0 mw's and the generator breaker will **OPEN**. _____

The CT will start to lower in speed. _____

At approx. % speed the flame will be stopped. Approx. 750 rpm's _____

The CT will coast down. _____

At 40 RPM the Turning Gear Motor will start. _____

COOLDOWN ON will be indicated **ON**. _____

Check the CT to be rotating at 6 rpm _____

Write down the time that the CT started rotating at 6 rpm _____ : _____ AM PM

The following is a list of Start Check Permissives and actions to correct the problem.

Start Check 0


Bus Undervoltage L27BN or L27BZ

L27BN Bus Undervoltage this means that the Bus synchronizing potential is not available. Check Bus PT Fuses and wiring. **DO NOT ATTEMPT** to sync unit until problem is corrected.

L27BZ

Compressor Inlet Thermocouples Disagree L86TCI

L86TCI means that you have a bad thermocouple signal. Thermocouples in the Inlet have failed or opened. Check Thermocouples and wiring and replace as needed.

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IGV Control Valve Fault L3IGVFLT

L3IGVFLT this means that you have Inlet Guide Vane Servo Trouble. Check Servos for the Inlet Guide Vanes.

Customer Permissive to Start L3CP

L3CP indicates that a trip signal is being sent to the MARK-VI Controls from an outside source that is not controlled by the MARK-VI. Those alarms that send a signal are as follows:

XXXXXX
XXXXXX

Start Check 1

Lube Oil Tank Temperature Normal L26QN


L26QN this indicates that the Lube Oil temperature is LOW. Check the operation of the Lube Oil Tank Heaters. The Lube Oil Temperature must be 60 degrees before the turbine is allowed to start. You can check graphic 2506 BEARING TEMPERATURES for Bearing Header Temperature, there is no temperature indication for the Lube Oil Tank. If this temperature is Low check graphic 2505 MOTOR CONTROL, the Lube Oil Tank Heater should be ON.

Flame Detector Trouble L28FDSCK

L28FDSCK indicates that you have a flame established. Check graphic 2512, check Flame References to see what flame scanners is indicating a flame. You could open breaker XXXX to the flame scanners to see if this would clear the indication. Close the breaker back and check that flame does not reappear.

Control Mode-Off L430

L430 this indicates that OFF is selected. Select graphic 2500, START-UP, then select MODE SELECT. Select AUTO from sub window.

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Hydraulic Protective Trouble L86HD

L86HD this means that one second after the hydraulic oil trip is initiated the hydraulic trip pressure has not decreased (63HG, 63 HL). Check the operation of 20FL and 20HD servos.

Generator Breaker not Closed L52GX

L52GX indicates that the Generator Breaker is closed.
Check generator breaker to be OPEN on graphic 2518, SYNCHRONIZING.

EX2000 Exciter Alarm L30EX_ALM

Start Check 2

Compressor Bleed Valve or IGV Position Lockout L86CBA
Loss of Master Protective L4Y
Master Protective Startup Trip L86MP
Hydrogen Start Check L3STCK_HGEN
Static Starter Shutdown L94SSX

Start Check 3


Loss of Master Protective L4T
HP Speed-Minimum Firing Speed L14HM

Vibration Start Inhibit L39VD3

L39VD3 this means that you have trouble with the vibration protection system.
Check system for problems.

Loss of CDP Bias L3TFLT

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L3TFLT this means that you are receiving a bad signal from the compressor discharge transmitter. Check the transmitter and connections for proper bias signal.

How to clear a CRT screen should it freeze up:

If the CRT you are monitoring should freeze up, meaning you can't move the mouse, a soft boot is required to clear the problem. There is one computer for each of the two stacked screens in the back of the panel. At the appropriate computer you will find two buttons. The top button is used to power the computer while the one underneath is used for the soft boot. Hit this button once to reset the computer. Screens will go black & then require a cntrl/alt/del to restart. You will then need to enter the password "wdpf." Go to Programs/OvationNT/Ovation Applications/Graphics &/or Alarms. Drag screen where desired.

Attachment PMREU96b

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	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Natural Gas	Page 2 of 13

OBJECTIVE

Perform normal start-up of Combustion Turbine for Simple Cycle operation on natural gas. This procedure contains the following:

- Startup
- How to go on & off load control
- Shutdown
- Start check definitions
- How to soft boot screen should it freeze up

SAFETY AND ENVIRONMENTAL

ALL safety rules should be followed when starting the unit.

PREREQUISITES

- The Combustion Turbine is on Turning Gear. (2100)
- The Closed Cooling Water System is in service with fans running. (2105)
- The Compressed Air system is in service. (2007)

NOTE: Time needed to start the unit with pre-arranged notification places having the Inside Operator "PUSH" the "START" button 1 hour before RFC time. The operator must prepare the unit to have it "Ready to Start" within that timeline. If the Dispatcher calls for the Unit WITHOUT proper notification, the operator must be able to RFC the unit with 85 minutes of time notified that unit is needed.

The unit is considered Ready for Control when the Combustion Turbine has reached firing mode 6Q, NOx is below limits, and unit is stable.

Perform shift tailboard to review the activities of start up. _____

Review clearance book to verify that nothing has been taken out of service that will prevent the starting of the unit. _____

Review Mark VI points that are **FORCED**. To scan for forced points go to Programs\Ovation NT\Ovation Applications\Review. At this point go to Review on the top menu & hit "Set Review Filters." On the bottom menu hit "clear all". On Drops & Record Types hit "set all." Now check "Alarm check removed" & "Limit check removed" under Checking/Cutout Items. Under Other Reasons hit "Scan removed." After hitting OK then hit Go to review list.

Check **Drop Status** to be normal

Select **Mode Select** box, then select **AUTO** on Startup Screen (2100) _____

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Verify Generator Mode box, to be indicating OFF _____

Select Master Reset & reset _____

Check Status Box for a **Ready to Start**

If you do not get a "Ready to Start" Check the START CHECKS graphic. (2113)

(2113)
Select (**START CHECKS**), graphic from the DCS & investigate any checks still in red. (Go to end of this procedure to review Problem areas) _____

(2105)
Select (**PUMP/FAN/MOTOR CTRL**), graphic from the DCS. Assure that the lead motor is actually running. _____

START UP THE COMBUSTION TURBINE

Verify with the Outside Operator that the Combustion Turbine has been walked down and is ready to be started.
Verify with the Outside Operator that the Generator Disconnects are closed and reported to the Dispatcher.

When you are ready to start the CT make an announcement that you are going to start the CT.

(2100)
From the (**STARTUP**), graphic on the DCS.

Select FUEL.... gas for the purpose of this procedure _____

Select MASTER CONTROL _____

From *sub window* Select START _____

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Write down time the CT Starts. _____:_____ AM PM

Verify that the Status box indicates [CRANKING]

(2114)

Select (STATIC START), graphic from the DCS.

Check that 89ND is indicating OPEN _____

Check that 89SS is indicating CLOSED _____

Check Static Start reference out to be indicating 14.5 % _____

Turbine Speed should be increasing.

Check LCI Ref to be indicating 14.5% _____

Check TNH to be increasing _____

The CT will accelerate to 14.5% speed approx. 525 RPM.
When speed is reached the CT will hold at 525 RPM for 5 Minutes
This is to allow for a purge of the CT.
After 5 minute purge the LCI will lower the speed of the CT.

The CT will coast down in speed to below 14.5% approx. 478 RPM.
The LCI will then bring the speed back up to firing speed 504 RPMs.

CT Status will indicate [FIRING] on start up graphic _____

(2101)

Select (Gas Valve Operation), graphic from the DCS.

Check that FSR is set at 21.1% _____

Check that the Gas Vent Valve has CLOSED _____

Check that the SRV Valve is OPEN _____

Check Gas Fuel Interstage Pressure to be 35-37 psig _____

Check that you have FLAME established on ALL four scanners _____

Check DLN Mode to be MODE 3

SRV and PM1,2,3, Quat REF and Fbk numbers

Write down the time that FIRES were established in the CT. _____:_____ AM PM

Select (STARTUP), graphic from the DCS.

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Check that the **FSR** is set at **14** _____
 The CT Status Box will indicate **[WARMING UP]** _____

The CT will set at 14.5% speed (525) for 1 Minute to allow for warm up.

(2114)

Select **(STATIC START)**, graphic from the DCS.
 Check that the LCI reference goes to 100% _____

Select **(STARTUP)**, graphic from the DCS.
 Check that the FSR is increasing _____
 Check that CT speed is increasing _____
 CT Status will indicate **[ACCELLERATING]** _____
 The IGV's will begin to move from 34% to 57% degrees _____

Select **(STATIC START)**, graphic from the DCS.
 At 91% speed (3276 RPM) the LCI will de-energize.
 Check that 89SS has **OPENED** _____
 Check 89ND has **CLOSED** _____

The CT will continue to increase in speed. Due to increased fuel flow.
 When the CT reaches 95% speed (3420 RPM) the EX2000 flashes the field.

(2103)

Select **(GEN/EXCITER)**, graphic from the DCS.
 Check Gen. Voltages & exciter volts and amps _____

(2005)

Select **(Main Fuel System)**, graphic from the DCS.
 Check that the gas supply pressure is steady _____

When you are ready to place the unit on line after achieving FSNL.

(2118)

Select **(SYNCHRONIZING)**, graphic from the DCS.
 Select (Speed/Load Control) to adjust speed to 3606 RPM's
 Select (KV/KVAR Control) to adjust voltage to 1 KV above line voltage.
 Select (Synch) screen from the GE HMI to monitor synch scope.

Select **SYNCH MODE** from Synchronizing screen (2118)

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From *sub window* Select AUTO

Check that Generator Breaker closes.
Check that Watts and Vars are indicated.

Write down the time that the Generator Breaker closed. _____:_____ AM PM

Select (**STARTUP**), graphic from the DCS.
The CT Status Box will indicate [**SPINNING RESERVE**]
The load should indicate 16 mws
Adjust voltage as necessary
Load the unit to 30 MW's by selecting the MW Setpoint box & type in 30. Hit preselect to load unit.

After achieving 30 MW's the Operator will need to place the Gas Heating System in service.

Notify the Outside Operator to check out the Gas Heater for service.

NOTE: The Outside Operator will need to at the local panel select "**LOCAL**" then "**RESET**" then place the controls back to "**REMOTE**". The heater can only be reset after gas flow has been established & the heater inlet valve is open with the bypass closed.

(2005)

Select (**Main fuel System**), from the DCS to adjust heater output.
Verify that the Set point entry pop up (enter 350 F) has a setpoint of 330 F _____

Select FG HTR Box _____

Select **START** Should indicate "enable on"
At this point a 4 & ½ minute purge timer will activate before any further action can take place.
The setpoint window will display "Ready for Op SP"
Enter 330 deg F _____

Check temperature set point to be 330 degrees. _____
Check gas temperature to be increasing. Once gas temperature reaches 310 Deg F, the unit can be loaded. _____

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After the 330 deg. set point is reached it will be necessary to move the load of the CT up to a point that the machine is firing in firing mode 6Q. **This must be done in order to operate the unit within NOX limitations of 9ppm.** At this time the CT Load can be moved by way of three means.

- 1) Manually from the Speed/Load Control Box by pressing the RAISE or LOWER buttons from the sub window.
- 2) By selecting BASE Load from the Load Select Box. When you select this mode the CT will load to the max output of the machine under current conditions.
- 3) By selecting PRE-SELECT from the Load Select Box
Before selecting this option you should enter the desired MW setpoint that you would like the CT Load to go to.

The Operator should check and monitor CEMS equipment and NOX readings. The Operator must use Best Management Practices to minimize emissions during start up and shutdown. Excess emissions shall not exceed 2 hours during any 24 hour period.

At this time the Operator should set the generator voltage control.

Select (**Start-up**), graphic from the DCS
Select **Generator Mode Box**

The Operator has the option of placing the generator voltage controls in one of three modes. VAR Control, PF Control, or Off Mode. If VAR Control or PF Control is selected the Operator will have to input the desired set point for the desired conditions needed. Currently the preferred method to run the generator is in the OFF mode.

Select Generator Mode Box
Select OFF, PF or VAR

If PF or VAR is selected the Operator must input a set point as per desired curve.

Input set point

The unit can be loaded as needed at this time. The following table shows when the firing modes change on the CT during loading and un-loading.

LOADING		
FIRING MODE	FIRING TEMPERTURE	APPROX. LOAD
PM-MODE 3	Ignition to 16% speed	576 RM

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PM-MODE 2	16% speed to 95% speed	576-3420 RPM
PM-MODE 1	95% speed to TTRFI=1630	3420 RP25MW
PM-MODE 3	TTRFI >1630	25MW-50MW
PM-MODE 4	TTRFI >2000	50MW-109MW
PM-MODE 5	TTRFI >2280, brief duration	Approx. 109 MW
PM-MODE 5Q	TTRFI > 2280 + A Time Delay to 6Q109 MW	Approx Load
PM MODE 6Q	TTRFI > 2280 to base Load	109MW-Base

UNLOADING		
FIRING MODE	FIRING TEMPERATURE	APPROX. LOAD
PM-MODE 6Q	TTRFI = 2220F=time delay	78MW
PM-MODE 5Q	TTRFI = 2220F	78MW
PM-MODE 4	TTRFI = 1940 F	40MW
PM-MODE 3	TTRFI = 1570F	20mw
PM-MODE 1	FSNL OPERATING MODE	FSNL

To Go on Load Control:

1. After achieving base load operation, select "Preselect Load" from from load select box on Startup graphic. Unit will not respond to load control demands if "Base Load " is selected.
2. From "Station Load Control" graphic 2209, assure low limit is set at 80 to maintain 6Q operation. Click on the white lettered "Preselect Load". Next click on "Unit Master"

To Go Off Load Control:

1. To take unit off load control, click on "Preselect Load" white lettering on the "Station Load Control" graphic 2209. Next click on "Local".

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To Shutdown CT:

The CT can be shut down by two methods. One method used to shut down the CT will be to have the Operator push the Emergency Stop Button located at the Operator Station in the Control Room or the Emergency Stop Button in the PEECC. Using this method should be limited to emergency conditions only. This will trip the unit. The other method is to shut the unit down on a controlled shut down. This will be the preferred method of operation. This is accomplished by selecting STOP and then selecting OFF. It should be noted that when this option is selected that the CT will ramp down at a 13.6% MW ramp per minute. The Operator and the Load Dispatcher must be prepared for the unit to ramp off line at that rate. The operator can Pre-Select Load to a desired lower set point where the load rate can be controlled and then select STOP and OFF. The operator can use the Speed/Load Control Box and select Lower to reduce load on the CT to a point where STOP and OFF can be selected.

SHUT DOWN (Controlled Shut Down)

Inform the Outside Operator that the unit will be shutting down. _____

Notify MLD that the unit will be shut down. _____

Lower load on CT

To use the Pre-Select Mode of reducing load follow the following steps.

(2100)

Select (**STARTUP**), from the DCS.

Select **LOAD SELECT** box

Select **Pre-Select Ld** _____

1010	L100CATION Martin Unit 8	PROCEDURE NUMBER
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The following steps take the Operator through the steps to lower load on the CT. The Operator can step down the load by reducing the set point. At this time the Operator would want to hold the load at 45 mw's. The reason for this is to allow the Operator to take the Gas Heater out of service, before the CT transfers from Mode 4 to Mode 3.

Select **MW CONTROL**

Enter value of the desired MW that you want the CT to go to. (Hold at 30mw's) _____
 Select enter _____

When the CT load is at 30 mw's & the gas temperature has dropped below 150 deg F, the heater can be taken out of service.

(2005)

Select (*main fuel gas system*), from the DCS

Select **FG HTR** box _____

Select **STOP** _____

Select **Direct fired HTR STPT** box _____

Check gas temperature to be decreasing _____

Enter 20 mw's in the set point box (preselect load point) _____

The CT load is at 20 MW's and you are ready for the unit to come off line.

(2100)

From the (*Start-up*), graphic.

Select **Master Control** Box

Select **STOP** _____

Select **Mode Select**

Select **OFF** _____

The CT will ramp down to 0 mw's and the generator breaker will **OPEN**. _____

The CT will start to lower in speed. _____

1111	L1 LOCATION Martin Unit 8	PROCEDURE NUMBER
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At approx. % speed the flame will be stopped. Approx. 750 rpm's _____

The CT will coast down. _____

At 40 RPM the Turning Gear Motor will start. _____

COOLDOWN ON will be indicated ON. _____

Check the CT to be rotating at 6 rpm _____

Write down the time that the CT started rotating at 6 rpm _____ : _____ AM PM

The following is a list of Start Check Permissives and actions to correct the problem.

Start Check 0

Bus Undervoltage L27BN or L27BZ

L27BN Bus Undervoltage this means that the Bus synchronizing potential is not available. Check Bus PT Fuses and wiring. DO NOT ATTEMPT to sync unit until problem is corrected.
L27BZ

Compressor Inlet Thermocouples Disagree L86TCI

L86TCI means that you have a bad thermocouple signal. Thermocouples in the Inlet have failed or opened. Check Thermocouples and wiring and replace as needed.

IGV Control Valve Fault L3IGVFLT

L3IGVFLT this means that you have Inlet Guide Vane Servo Trouble. Check Servos for the Inlet Guide Vanes.

Customer Permissive to Start L3CP

L3CP indicates that a trip signal is being sent to the MARK-VI Controls from an outside source that is not controlled by the MARK-VI. Those alarms that send a signal are as follows:
XXXXXX

1212	L12OCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 0
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XXXXXX

Start Check 1

Lube Oil Tank Temperature Normal L26QN

L26QN this indicates that the Lube Oil temperature is LOW. Check the operation of the Lube Oil Tank Heaters. The Lube Oil Temperature must be 60 degrees before the turbine is allowed to start. You can check graphic 2506 BEARING TEMPERATURES for Bearing Header Temperature, there is no temperature indication for the Lube Oil Tank. If this temperature is Low check graphic 2505 MOTOR CONTROL, the Lube Oil Tank Heater should be ON.

Flame Detector Trouble L28FDSCK

L28FDSCK indicates that you have a flame established. Check graphic 2512, check Flame References to see what flame scanners is indicating a flame. You could open breaker XXXX to the flame scanners to see if this would clear the indication. Close the breaker back and check that flame does not reappear.

Control Mode-Off L430

L430 this indicates that OFF is selected. Select graphic 2500, START-UP, then select MODE SELECT. Select AUTO from sub window.

Hydraulic Protective Trouble L86HD

L86HD this means that one second after the hydraulic oil trip is initiated the hydraulic trip pressure has not decreased (63HG, 63 HL). Check the operation of 20FL and 20HD servos.

Generator Breaker not Closed L52GX

L52GX indicates that the Generator Breaker is closed. Check generator breaker to be OPEN on graphic 2518, SYNCHRONIZING.

1313	L13OCATION Martin Unit 8	PROCEDURE NUMBER
	Combustion Turbine	REV 0
	Inside Operator	DATE 06/05/01
	Normal Start-Up of Combustion Turbine to Simple Cycle Operation on Natural Gas	Page 13 of 13

EX2000 Exciter Alarm L30EX_ALM

Start Check 2

**Compressor Bleed Valve or IGV Position Lockout L86CBA
Loss of Master Protective L4Y
Master Protective Startup Trip L86MP
Hydrogen Start Check L3STCK_HGEN
Static Starter Shutdown L94SSX**

Start Check 3

**Loss of Master Protective L4T
HP Speed-Minimum Firing Speed L14HM**

Vibration Start Inhibit L39VD3

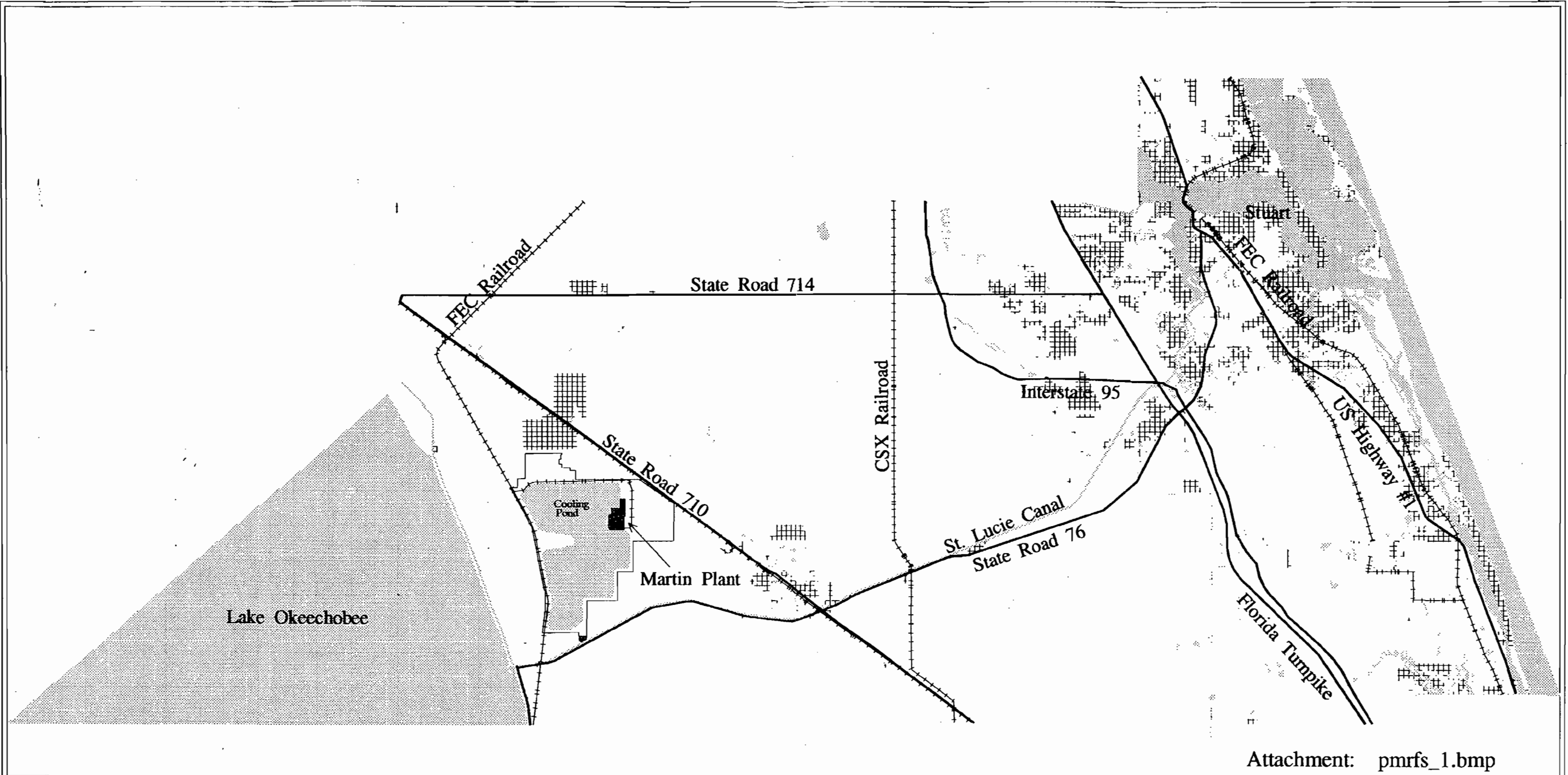
L39VD3 this means that you have trouble with the vibration protection system. Check system for problems.

Loss of CDP Bias L3TFLT

L3TFLT this means that you are receiving a bad signal from the compressor discharge transmitter. Check the transmitter and connections for proper bias signal.

How to clear a CRT screen should it freeze up:

If the CRT you are monitoring should freeze up, meaning you can't move the mouse, a soft boot is required to clear the problem. There is one computer for each of the two stacked screens in the back of the panel. At the appropriate computer you will find two buttons. The top button is used to power the computer while the one underneath is used for the soft boot. Hit this button once to reset the computer. Screens will go black & then require a cntrl/alt/del to restart. You will then need to enter the password "wdpf." Go to Programs/OvationNT/Ovation Applications/Graphics &/or Alarms. Drag screen where desired.



Attachment: pmrfs_1.bmp

Martin Plant Area Map

Martin County

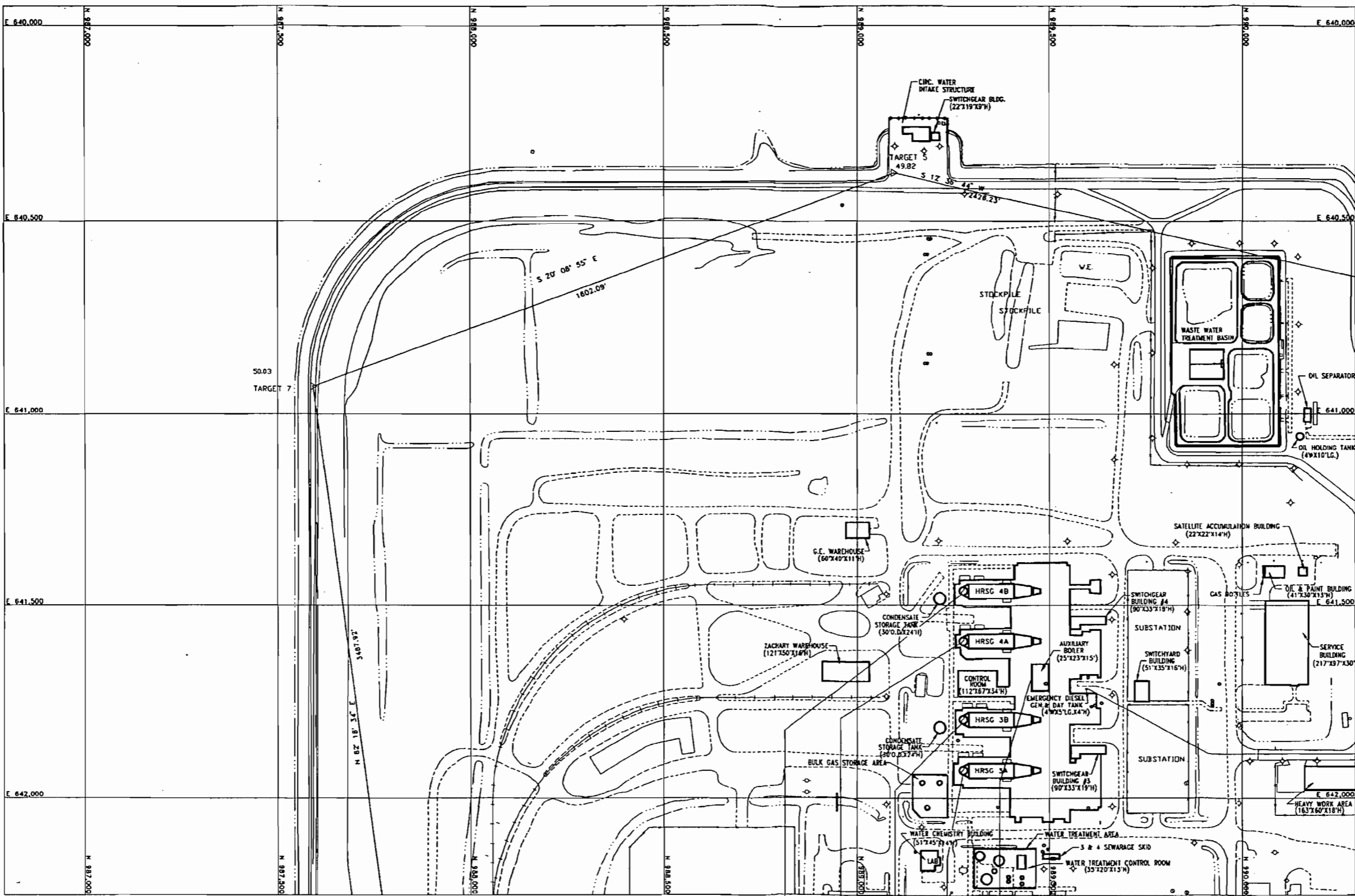


Environmental
FPL Affairs



- Water
- Electrical Power Facility
- Residential Area
- Major Roads
- Railroads

VALUATION INFORMATION	DATE	BY	ORG.
AS-BUILT INFORMATION	DATE	BY	ORG.
TECHNICAL ACCEPTANCE	DATE	BY	ORG.

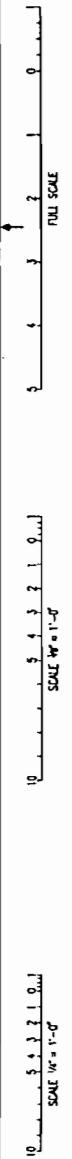


50.03
TARGET 7

MATCH LINE SEE SHT 3

MATCH LINE SEE SHT 2

EUS
UTM COORD.
E.543,202
N.2,992,707

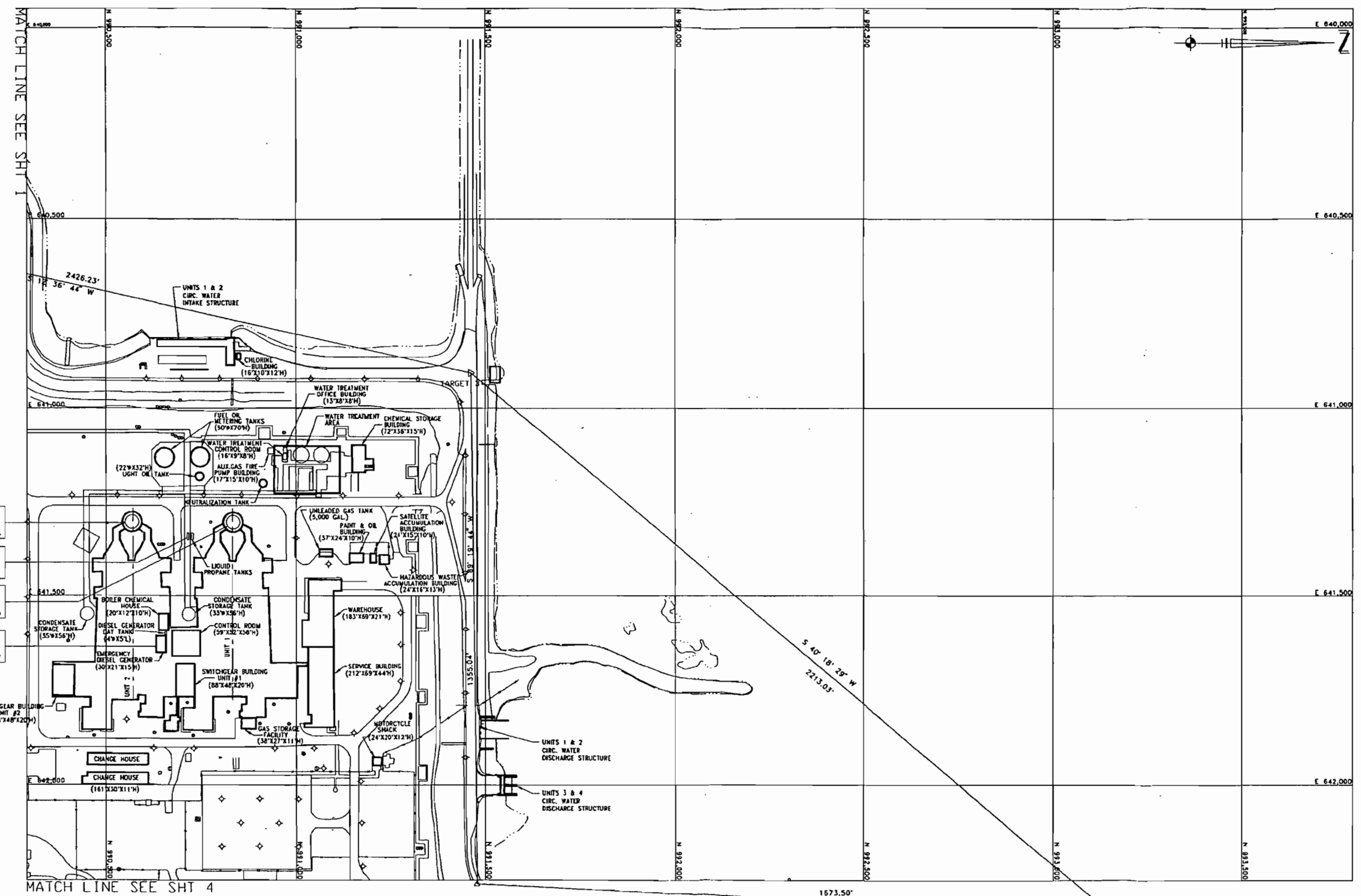


EUS UTM COORD. E.543,174 N.2,992,610	EUS UTM COORD. E.543,164 N.2,992,610	EUS UTM COORD. E.543,278 N.2,992,610	EUS UTM COORD. E.543,288 N.2,992,610	EUS UTM COORD. E.543,193 N.2,992,671
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Q	7/14/95	ISSUED FOR TITLE Y PERMIT
REV	DATE	REVISION DESCRIPTION

	SYMBOL	YY	DESCRIPTION	M	PLANT AREA	MARTIN PLANT FACILITY PLOT PLAN ATTACHMENT FS-2	SHEET 1 OF 4 REV 0
	SCALE	N/A	CD FILE NAME	MR001567			
	DRAWING SET	E(30' X 42')	PL ARCHIT NAME	MR001567			
	DRAWING NUMBER	PMR1-SK-M-001/COM-J-013-94					

TECHNICAL ACCEPTANCE	
DESIGNED BY	DATE
CHECKED BY	DATE
WALDOBY INFORMATION	
AS-BUILT INFORMATION	DATE



- E02-2 UTM COORD. E.543,075 N.2,993,004
- E011-1A&B UTM COORD. E.543,087 N.2,993,051
- E011-1 UTM COORD. E.543,075 N.2,993,085
- E08-1 UTM COORD. E.543,173 N.2,993,027

MATCH LINE SEE SHT 4

TARGET 2

1673.50' S 2 37' 31" W

TARGET 1

	SYSTEM	YY	DISCIPLINE	M	PLM/AMT	MARTIN PLANT
	SCALE	N/A	CDP FILE NAME	MR001358	FILE	FACILITY PLOT PLAN
	DRAWING SIZE	E(30'x42')	PL ARCHIT NAME	MR001358		ATTACHMENT FS-2
	DRAWING NUMBER	PMR1-SK-001/COM-J-013-94			SHEET	2
						0

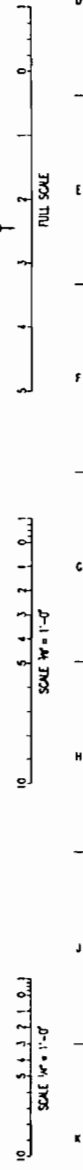
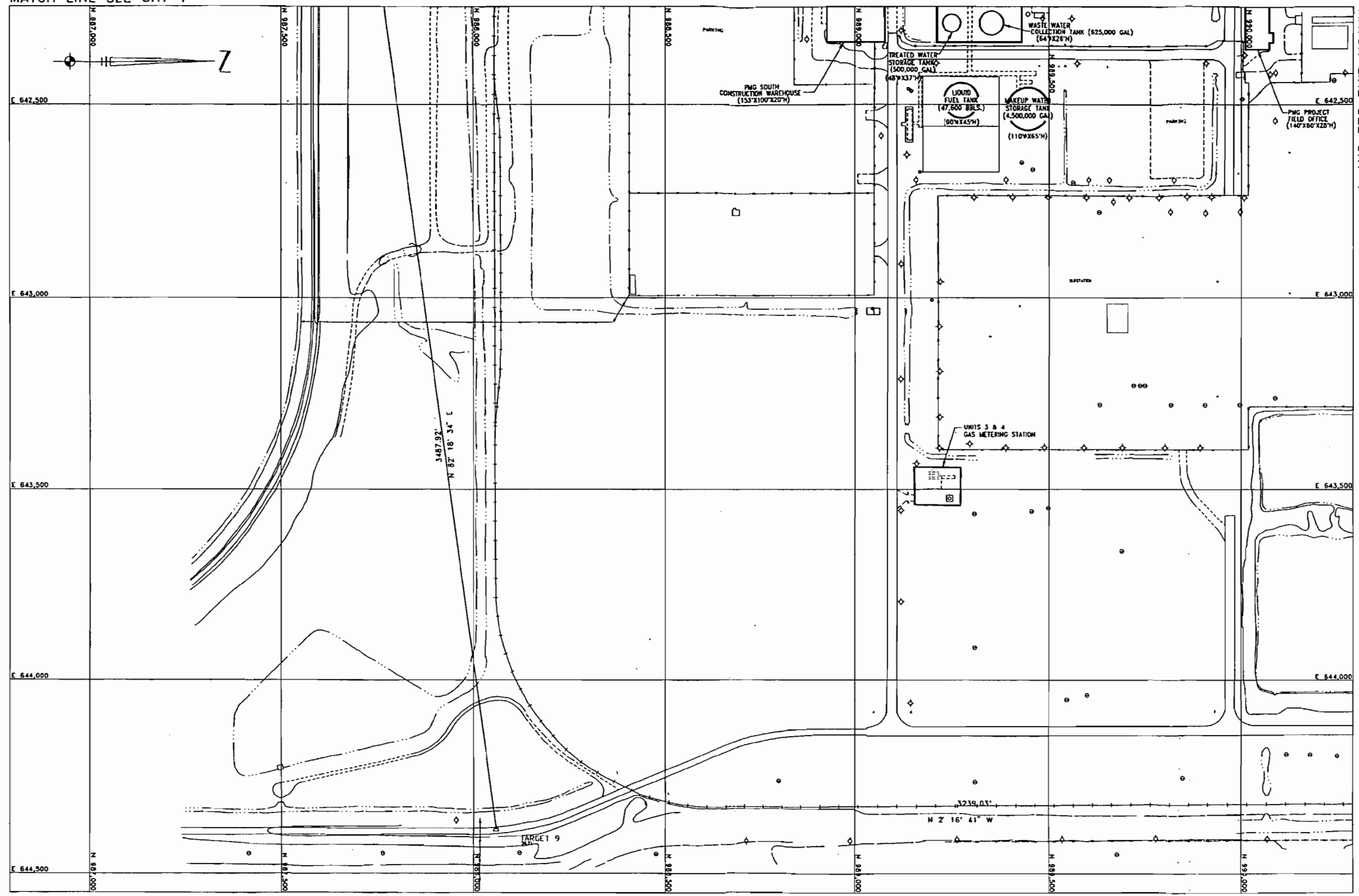
REV	DATE	ISSUED FOR TITLE Y. PERM	REVISION DESCRIPTION

PL	PMR	CSP	CSP	ETS
BY	DA	COO	APR	ORC

WALKDOWN INFORMATION	TECHNICAL ACCEPTANCE
AS-BUILT INFORMATION	DATE
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

MATCH LINE SEE SHT 1

MATCH LINE SEE SHT 4

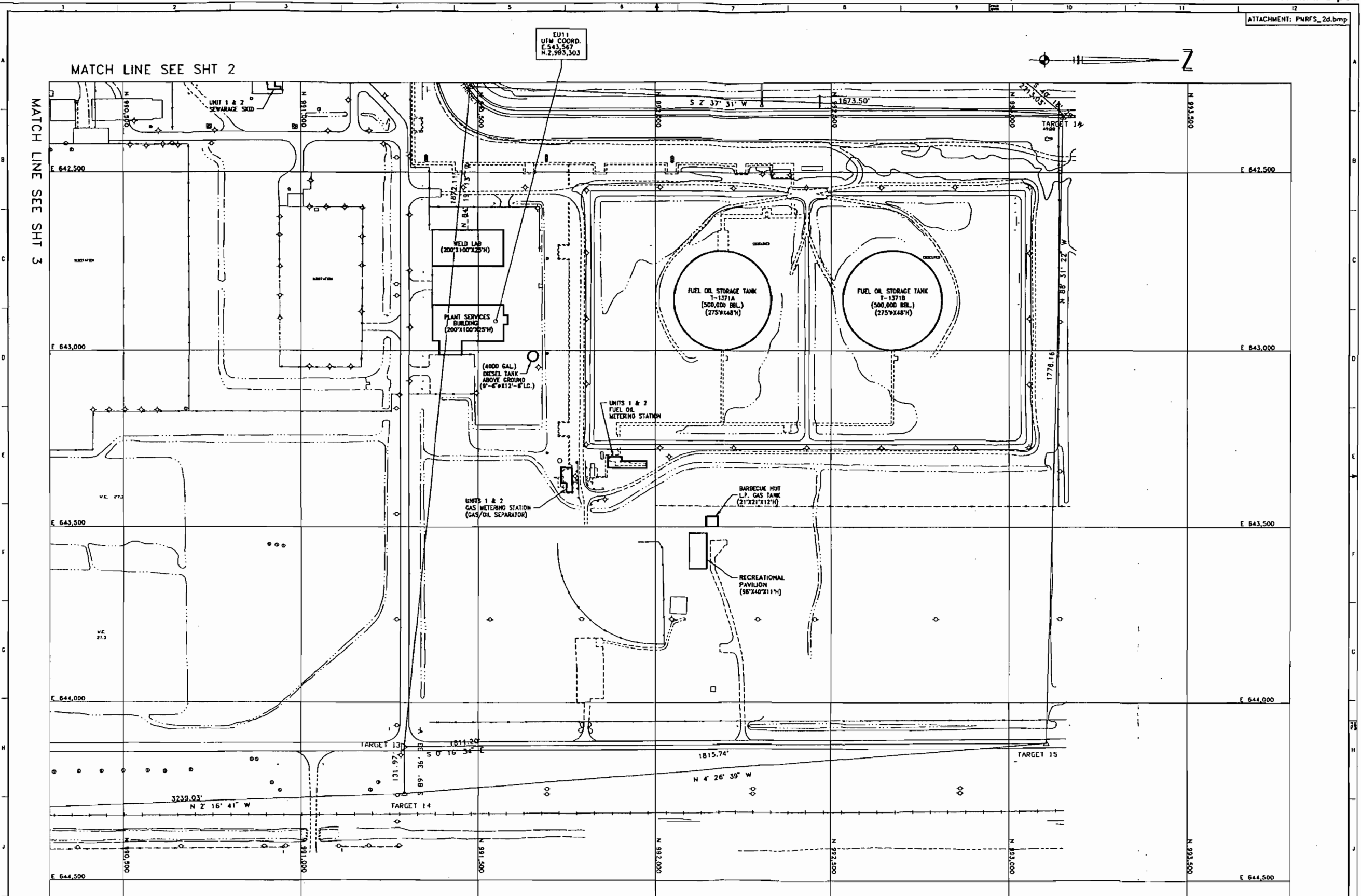
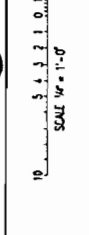
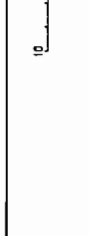
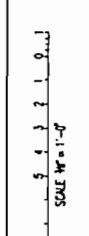
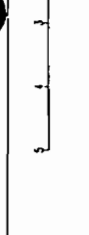


REV	DATE	DESCRIPTION
1	7/14/94	ISSUED FOR TITLE & PERMIT
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

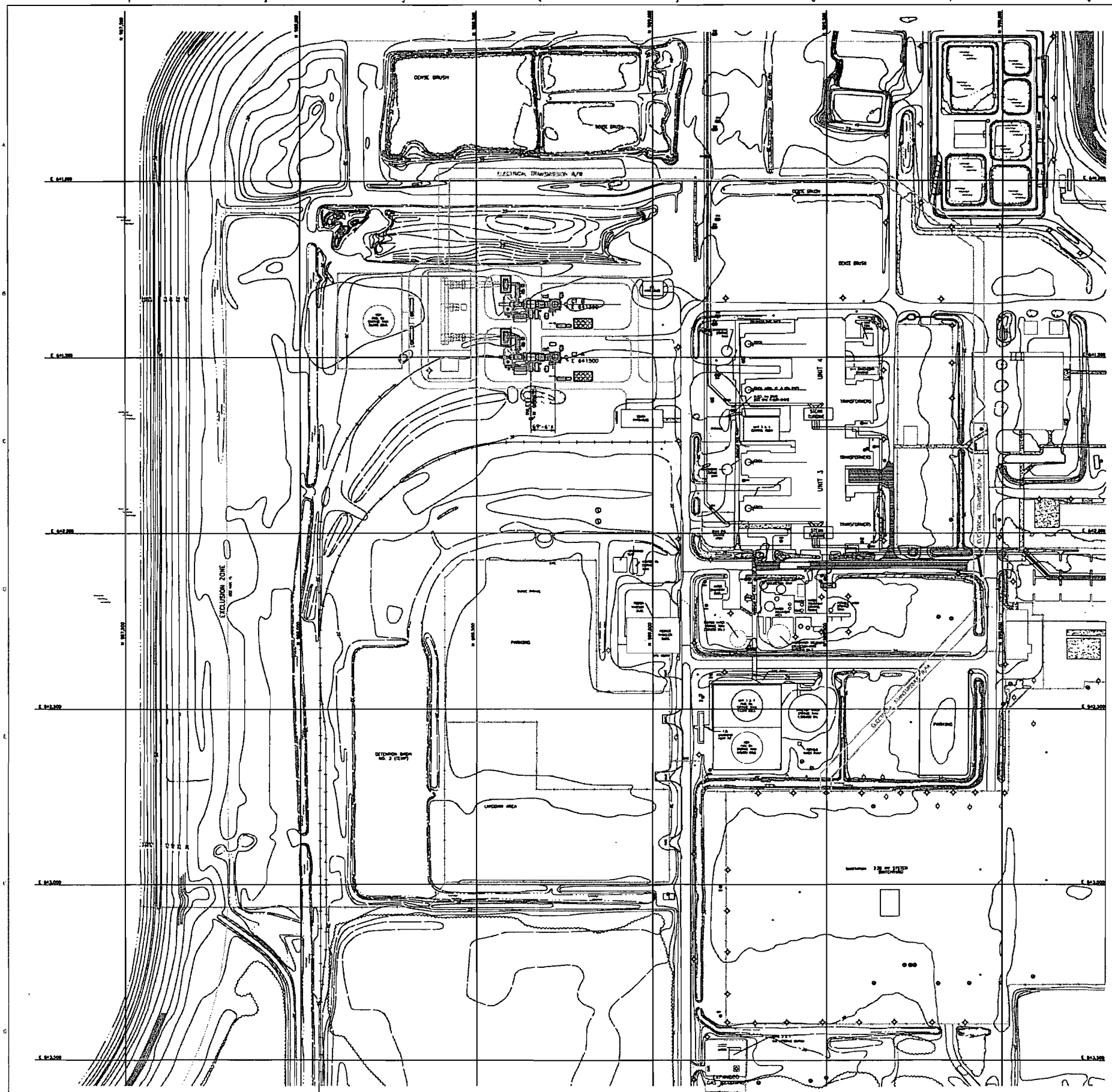
	SYSTEM	YY	MM	PLANT/UNIT	MARTIN PLANT
	SCALE	N/A		TITLE	FACILITY PLOT PLAN ATTACHMENT FS-2
	DRAWING SIZE	E(30" X 42")			
	DRAWING NUMBER	PMR1-SK-M-001/COM-J-013-94			
DATE					3
BY					0

TECHNICAL ACCEPTANCE	
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
DATE	DATE

VALUATION INFORMATION	
AS-BUILT	DATE
REVISION	DATE



0 1/16/98 ISSUED FOR TITLE & PERMIT REV DATE REVISION DESCRIPTION	CDR PMR CSP CSP ETS BY CH COR APR ORC	SYSTEM YY DISCIPLINE M PLANT/AREA N/A GO FILE NAME MR001570 DRAWING SIZE E(30' X 42') PL. ARCHIT. NAME MR001570 DRAWING NUMBER PMR1-SK-M-001/COM-J-013-94	MARTIN PLANT FACILITY PLOT PLAN ATTACHMENT FS-2	SHEET 4 REV 0
		FPL		FROM/TO: 1-5/98
		DATE: 1/16/98		DRAWING NUMBER: PMR1-SK-M-001/COM-J-013-94
		TITLE: FACILITY PLOT PLAN ATTACHMENT FS-2		SHEET: 4 REV: 0



SYMBOL LEGEND

BUILDING	[Symbol]	WIRE	[Symbol]
ROAD	[Symbol]	UTILITY POLE	[Symbol]
ROADWAY	[Symbol]	LIGHT POLE	[Symbol]
EXCLUSION ZONE	[Symbol]	COOLING LIGHT POLE	[Symbol]
CHIMNEY, STACK, & NEARBY STRUCTURE	[Symbol]	INDUSTRIAL LIGHT POLE	[Symbol]
WALL	[Symbol]	TRANSMISSION POWER POLE	[Symbol]
SHED	[Symbol]	NETTING	[Symbol]
STREAM OR SHORE LINE	[Symbol]	WINDMILL	[Symbol]
LINE OF POND	[Symbol]	C&G SIGN BOARD	[Symbol]
WOODED AREA	[Symbol]	FIRE COMPARTMENT BOX	[Symbol]
ROAD	[Symbol]	UTILITY OBJECT	[Symbol]
STAKE	[Symbol]	FIRE HYDRANT	[Symbol]
		POLE	[Symbol]
		BOX	[Symbol]

1. A COOLING POND CONSTRUCTION EXCLUSION ZONE 200' FROM THE C OF THE DNE SHALL BE MAINTAINED. ANY ENCROACHMENT MUST BE APPROVED BY THE CHL ENGINEERING AND TECHNICAL SERVICES MANAGER.

NOT TO BE USED FOR CONSTRUCTION

ATTACHMENT PMRFS_2e.bmp

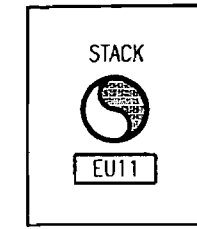
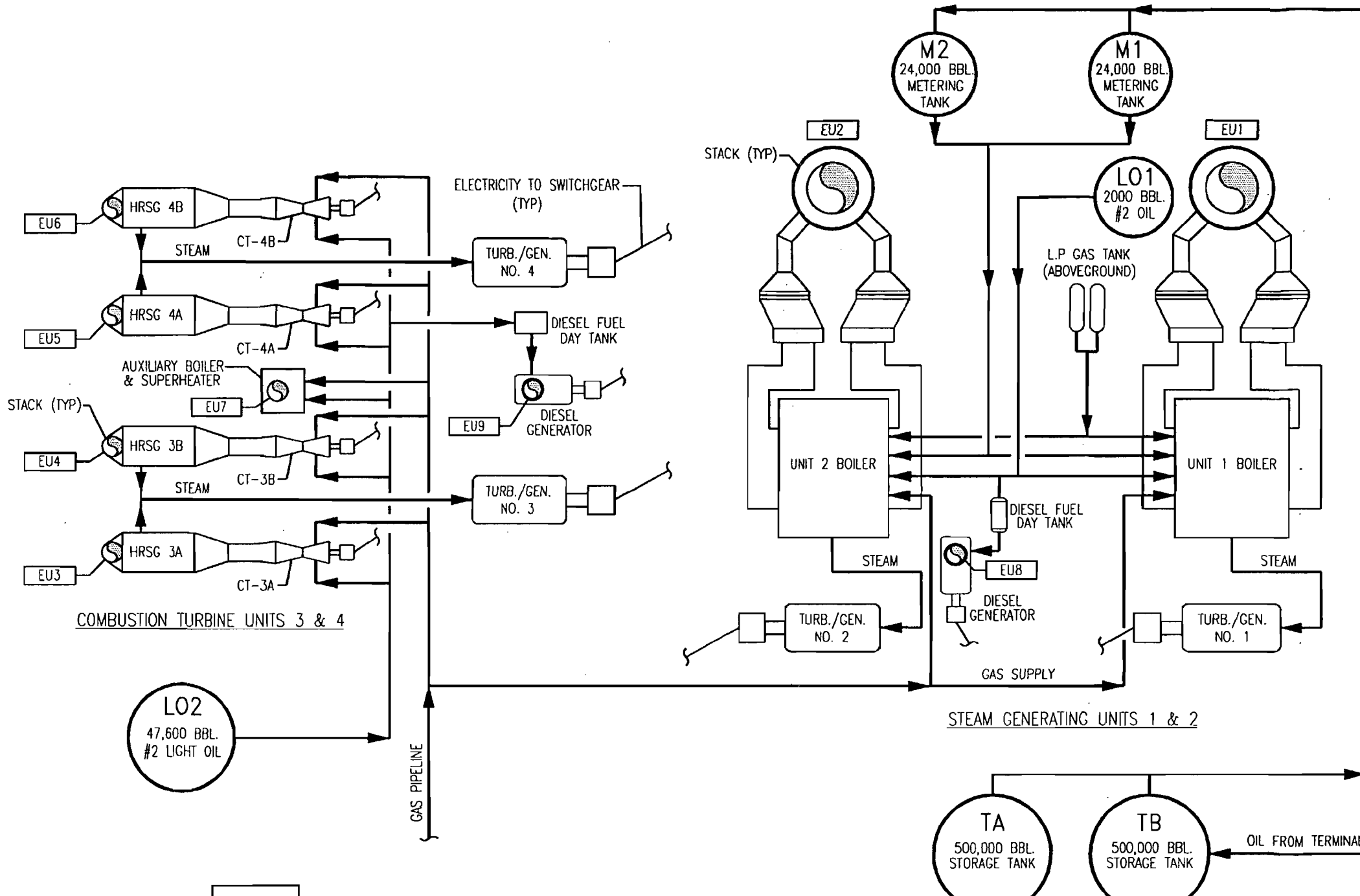
<p>DATE: 10/20/00 DRAWN BY: [Name] CHECKED BY: [Name] REVISIONS AND RECORD CH: [Name]</p>	<p>REVISIONS AND RECORD CH: [Name]</p>	<p>SCALE: 1" = 100'</p>	<p>BLACK & VEATCH</p>	<p>FLORIDA POWER & LIGHT MARTIN PEAKING UNITS SITE ARRANGEMENT UNITS BA AND BD</p>	<p>PROJECT: 89633-CBSA-M1000 SHEET: [Number] DATE: 10/20/00</p>
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ATTACHMENT: PMRFS_3.bmp

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

SCALE 3/8" = 1' - 0"

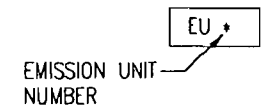
SCALE 1/4" = 1' - 0"



PLANT SERVICES
PAINT SPRAY BOOTH

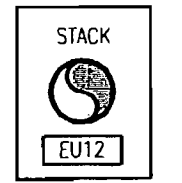
NOTES:

- ACRONYMS:
 EU-EMISSION UNIT
 FO-FUEL OIL
 CT-COMBUSTION TURBINE
 LP-LIQUID PROPANE
 HRSG-HEAT RECOVERY
 STEAM GENERATOR
 AB-AUXILIARY BOILER
 DG-DIESEL GENERATOR
- FOR BOILER POLLUTION CONTROL DEVICES, SEE EMISSION UNIT FLOW SHEETS.
- EMISSION UNITS ARE IDENTIFIED WITH A RECTANGULAR BOX:



TANK LEGEND:

- T - STORAGE TANK (TA&B)
- M - METERING TANK (M1&2)
- LO - LIGHT OIL TANK (LO1&2)



LAND UTILIZATION
PAINT SPRAY BOOTH

	SYSTEM	N/A	DISCIPLINE	M	PLANT/UNIT	MARTIN PLANT-UNIT 1,2,3 & 4		BAR CODE
	SCALE	N/A	CAD FILE NAME	MR001736	TITLE	FACILITY SOURCE FLOW DIAGRAM TITLE V ATTACHMENT FS-3 TITLE V		
	DRAWING SIZE	B(11"X17")	FPL ARCHIVE NAME	MR001736				
	DRAWING NUMBER	PMR1-M0101-YY			SHEET	1 OF 1	REV	

0	8/15/95	ISSUED FOR TITLE V PERMIT							
REV	DATE	REVISION DESCRIPTION	PWB	PWB	CSP	CSP	ETS		
			BY	CH	COR	APR	ORG		